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India: Capacity Development of the Assam Power Sector Utilities

Prepared by

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Madrid, Spain

in association with North Delhi Power Limited (NDPL)

New Delhi, India

For Assam State Electricity Board (ASEB)

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Asian Development Bank

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ENERGY MARKETS INTERNATIONAL

NDPL

ASSAM: CAPACITY DEVELOPMENT OF THE ASSAM POWER SECTOR UTILITIES – TA NO. 7378 – IND

FINAL REPORT: VOLUME V
TRAINING NEEDS ASSESSMENT

ADB **ASIAN DEVELOPMENT BANK**

ASSAM STATE ELECTRICITY BOARD

Prepared by:

MERCADOS – ENERGY MARKETS INTERNATIONAL

Together with:

NORTH DELHI POWER LIMITED (NDPL)

March 2012

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FINAL REPORT

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NOTES ON THE TEAM

The consultant team is led by Mercados Energy Markets International, working in collaboration with the North Delhi Power Limited.

In addition the following firms have provided experts for various components:

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Evonik Energy India Pvt. Ltd.

Power Research and Development Consultants Pvt. Ltd

I INTRODUCTION

One of the key requisites for sustaining the reforms that have been initiated in ASEB is to ensure that the unbundled entities are staffed appropriately and have the necessary capacity and skill base.

There are several challenges currently being faced by the power utilities–creation of adequate capacity (the forecasted Assam's peak power demand of 1,883MW is to be met by 2014); reduction of distribution losses; meeting the rising expectations by stakeholders; developing business practices of a modern utility; building capacities of the companies in several areas (relatively non -existent so far) such as finance, regulatory & commercial, human resources and IT.

Further, as the unbundled entities migrate to functioning as independent business Companies- there will be an increasing emphasis on *the bottom-line and financial results, performance efficiency and customer satisfaction.* Training in this context, is envisaged as one of most important vehicles for bringing about improved performance and change- be it developing new capacities, competencies, orientations or leadership styles; or supporting new structures, processes and systems.

1. OBJECTIVES

It is in the above context, that the Training Needs Assessment (TNA) is undertaken. Its key objectives are:

1. To determine the organizational capacities that are required (for each of the Utilities) to meet their *current demands* for performance and the needs arising from the *anticipated changes*
2. To ensure that the capacity building interventions are focused specifically on the *most relevant issues and opportunities*. The needs have been prioritized into Short, Medium & Long Term (ST, MT and LT).
3. Strategic framework & Plan for implementation
4. Description of Quality Assurance process for the capacity building

2. SCOPE OF TNA

The focus of TNA will be on the **organizational/Institutional level needs**. This will cover:

1. *Higher level needs arising from Programs and Mandate of DoP (Department of Power) Assam, & external challenges* such as - capacity addition projections on the one hand (forecasted Assam's peak power demand of 1,883MW are met by 2014) and the gap in the capacity of the utilities to implement the growth projections on the other; security of fuel supply; challenges such as competition in Generation (average tariff of the state-owned plants is much higher than that of the power sourced from the Central Generating Stations); meeting demand in dispersed/rural areas thorough options such as installation of renewable based distributed generation and community based approaches; autonomous functioning of the Utilities by 2014 etc.
2. Needs and development imperatives arising from *Transformative requirements of the three entities* AEGCL, APGCL & APDCL (internal factors - changes in structure, technology, processes & systems, skills and mindsets). Some of the internal requirements are: *Renovation & Modernization of old power plants; upgrading technology such as GIS-supported Network Planning and IT based solutions especially in Distribution; improving operational and commercial processes; financial restructuring for autonomous and sustainable performance; reducing Distribution commercial losses; meeting the challenges arising from large-scale retirements at all levels; developing strategic plans in order to meet independent targets & the performance standards that comply with the regulatory requirements of AERC and ensuring the sustainability & financial viability of each company.*

   The *specific* transformative needs that flow from 'Gaps Identification and Analysis & the Action plans', under the Project have been provided **a greater focus** in the Report. This has been based on the experience that rather than discrete training activities to meet a wide & varied range of training needs, the needs arising from action plans will be both- more focussed & directed, and have greater impact.

   Further, it is proposed that some capacity-building activities will be linked to and proceed *in conjunction with the progress of the overall Project*.

Table 1 - Some Transitions Required

From	to
Departmental functioning	**Separate business entity with greater autonomy and accountability for results**
Diffused responsibility	**Clear cut responsibility**
Maintaining supply	**Commercial orientation**
Control and command	**Decentralized**
Risk- averse	**Entrepreneurial**

Gaps in Generation, Transmission, Distribution, Finance, HR & IT, have been captured in Interim Report 1 and the Action plans with practical & feasible recommendations to be implemented, have been highlighted in Interim Report 2. Several of the action plans & recommendations directly require corresponding training; some examples of such training are: Distribution Loss reduction for the APDCL; Project Management & Contracts Management Skills for adding new capacity, new technologies and services for customer care (metering and computerized billing); etc.

The gap analysis & action plans have been based on interactions with various stakeholders such as Assam Electricity Regulatory Commission, State Government Authority, Financing Agency, Local Consumer Representatives, and Companies' Worker Unions, Contractor Representatives.

3. The TNA will in addition, also examine the *issues at the Interface levels* -such as between generation and transmission; transmission and distribution; distribution and customers etc. For instance managing relationships between the three Companies will be based on market rules by means of bilateral or trilateral transparent agreements, need for ring fencing of accounts etc.

4. *Needs of stakeholders*: It has now been widely established, that for the Utilities to be effective there is a need to strengthen and support the important constituents such as the ERC, Consumers, potential franchisees for Distribution business etc. So the capacity requirements of these constituents, to a limited extent, were also determined.

As regards the **needs at individual level** are concerned, the TNA has proposed a commonly used system of integrating training needs with the Performance Management System-and key performance areas/indicators. While the TNA covers the *specific* capacities & skills that are required at the Executive level; the training needs of technicians/operators are *more broad-based & generic* in nature. Annex VII 2 provides a sample of the form for the assessment of the training needs in the company.

II APPROACH AND METHODOLOGY

The approach adopted in assessing the needs has been as follows:

- To understand the gaps perceived by the key stakeholders, interviews were held with the State Government Authority; Assam Electricity Regulatory Commission, Local Consumer Representatives, Companies' Unions, and Executives across levels representing various functions at the Utilities.
- Apart from the above, the consultant team members assigned to different areas of Generation, Transmission, Distribution, Finance, IT etc. under the Project, provided significant inputs for the Study. Based on intensive study on *Gaps Identification and Analysis* (in Generation, Transmission, Distribution, Finance, and HR & IT) captured in Interim Report 1 and the *Action plans* with practical & feasible recommendations highlighted in Interim Report 2, various training needs and skill gaps have been identified and the corresponding training courses recommended.

More specifically, the following *3-pronged approach* was adopted:

1. Training needs Assessment

   The Consultant Team Members, in the first instance, defined the lack of skills (conceptual and/or practical) in their respective areas (IT, Generation, Finance etc.) within the Utilities, that were needed to successfully implement the action plans identified in Interim Report 2. It was also

indicated, where the gap in capacity could be met only by acquiring the necessary skills from external sources – such as recruitment, consultants, or through outsourcing.

2. Training Course /interventions to meet the corresponding need

   The team members thereafter defined the **training activities** which would meet the gap/need for skills required, and facilitate in implementation of the action plans.

3. Training Course Description:

   A brief description of the course synopsis, target audience, duration, potential resources for delivery, is provided for each training course. It also indicates where training will be delivered by the consultants for the Project (AF-Mercados EMI/NDPL) and where it would be through external agencies. The three formats used for the Approach are at Annex VII 3.

   The Study also addresses needs in areas and issues that do not necessarily constitute the action plans but are nevertheless important - such as stakeholder needs, needs at interface levels of the three utilities etc.

The Report has *two Core Sections*:

1. Key Findings: Training needs and skill-gaps in each of the main segments-Generation; Transmission etc. especially with reference to implementing the action plans proposed in Interim Report 2.

   Further, the priority of the needs has been categorized as follows[1]:

   - Short Term (0-6 months)
   - Medium Term (6 months to 2 years)
   - Long Term (2 years and above)

2. Recommendations for meeting the corresponding skill gap/capacity. While the list of training courses are in the main body of the Report, the specific training course description has been detailed in Annex VII 6 Training Sessions Detailed Description (**TSDD** in the text), along with details of potential resource institutions.

   The format recommended for the training interventions in the Report is varied and covers:

   - Training Courses (in-house; on- the- job; and off-site)
   - Career- Linked Training such as General Management at DGM level.

     (To be extended over time to other levels)
   - Long duration induction level training schemes (in the long term)
   - Distance Learning package for Distribution developed by IGNOU, under the DRUM Program of USAID and MoP/GoI
   - Study Tours
   - On- the- Job hand on Training, especially for operators

   The courses recommended have suggested use of pedagogical tools such as cases, exercises; field visit etc., as appropriate. It is suggested that training be conducted through a judicious mix of different learning approaches and methods, depending on the subject matter and objectives.

The Study also addresses needs in areas and issues that do not necessarily constitute the action plans but are nevertheless important -such as stakeholder needs, needs at interface levels of the three utilities etc.

The Training Needs and corresponding recommendation for training courses have been grouped into the following categories:

1. Generation
2. Transmission
3. Distribution
4. Finance
5. Human Resources

[1] Please note that priority can be also quoted as: ST for Short Term, MT for Medium Term, and LT for Long Term.

6. IT
7. Corporate Aspects
    - Regulatory Affairs Group in the Utilities
    - Needs At Interface LEVELS OF THE Three utilities
    - Higher Level Needs (capacity addition; meeting demand in rural areas etc.)
    - General Management, Functional Mgmt & Cross functional
    - Corresponding Stakeholder needs

1.1. As-Is Analysis Training Management Processes and Policies

Table 2 - Training management processes and policies As-Is analysis

Training Component/	"As- is analysis"	"To-be" Suggested Considerations
Training function: Training organization	• There is no organized training function in any of the three organizations • For Distribution function, a small training facility exists to cover Non executives categories('C' & 'D' category of employees) At this facility, Lineman training (under the R-APDRP- Restructured Accelerated Power Development and Reforms Program, GoI) and for the Distribution Franchisees is being imparted. The training facility is headed by Director Training, former Head of Distribution in ASEB. The Director, is supported by one Sr. Manager	There is a need to create a separate training function for Generation, Transmission and Distribution. The function to be manned suitably. The organization required will be determined by the training strategy for implementation that is adopted by the organization (however, a core group of 3 executives including one at a sr. Level should be considered as the basic requirement for each of the three entities) Reporting to Heads of Personnel/CEO Training to extend to all levels of employees–executives, supervisory and technicians IMP: It is critical that a core group dedicated to training is available In each of the utilities, before any sustainable changes can be implemented in the training function
Training agenda (Training themes: nature of courses; focus (technical skills, functional management etc.)	There is currently NO training Agenda Targets only w.r.t. Lineman training, under R-APDRP (Restructured Accelerated Power Development and Reforms Program, GoI)	There is a need to draw up a need-based annual training plan for in-house training Priority needs to be addressed, at functional, managerial and technical levels of the Organizations Each of the training courses in the plan, to include clear cut objectives, outline; duration /dates and participant levels A Plan to be widely disseminated within the organization Depending on the nature of needs, partnerships with suitable training institutions may be considered for developing and delivering the courses: e.g. PMI (Power Management Institute); CENPIED

Training Component/	"As- is analysis"	"To-be" Suggested Considerations
		(Centre for Power Efficiency in Distribution, North Delhi Power Ltd.), etc. for delivery of training. Also consider drawing up a list of standard external courses at established Institutes in advance, to which employees can be nominated
Induction level Training Schemes	Currently there is No induction level training schemes	To consider introduction of intensive induction level training schemes to build cadres for HR (and other functions).
Training Policy-training norms	No Training Policy or norms. Some external nominations are made on 'case to case' basis, by the Director Personnel ASEB	There is a need for a statement of training policy; and training norms. (For instance, the transmission company in Haryana, HVPN has a training policy which specifies training norms to be achieved: 'one week of training/each year/per employee' and training budget as one percent of the overall wage bill)
Training Resources-budgets, infrastructure faculty resource	Nothing allocated so far in terms of budgets, also no other resources.	Annual training budget needs to be provided, to fulfil the stipulated training norms and requirements Related system for training budgets, to be developed Based on agreed training strategy, consider Identifying a pool of potential internal resource persons/ faculty, in the various functions and equip them with training management/trainer skills
Linking training to career growth /promotion	No linkage exists currently with any component of HR.	To link training with career growth within the organization Some skill sets are missing and there is a need for developing role-related career-linked interventions. For example there could be mandatory training for all promotions from Manager to Sr. Manager level and from GM to CGM level.
Training data base & information system	Currently one ledger with Director Personnel, where all entries of deputation to training are manually entered. No other data base or information system	Training data with respect to each employee (including training needs) to be integrated with overall HR Information system. Information system for monitoring training norms; budgets etc. need to be developed
<u>Training Implementation systems</u> • System of	There is no process to analyze training	All training to be need –based,

Training Component/	"As- is analysis"	"To-be" Suggested Considerations
assessing training needs	needs	linked to real issues and skill sets required Consider setting up a system, to carry out gap analysis between the existing skills and required competencies and capacities; both at the individual and organization level As a starting point, the TNA will address the organization level needs , new competencies/skill groups to be created such as in IT; system operation etc.
• System of nominating to external courses	Currently no streamlined system ;done on 'case to case basis'	To consider System to evaluate external courses to w.r.t. relevance; quality and applicability ,and Consider assessing Institutions to which employees will be deputed.
• System for measuring training effectiveness including feedback on utilization of training	Currently there is no system to measure effectiveness	Consider establishing Tools for course evaluation • Programme feedback • Post programme review
Integration of Training with HR (Linkage of training with promotions; transfers etc)	Currently no linkages	Integrating with annual performance appraisal system Guidelines on employees after training, to be deployed in relevant positions Career linked training as part of promotion policy
Knowledge management practices if any;	Currently No practices	Consider setting up a training resource centre: with course material; open learning packages etc.
Strategic role of Training	Training in transactional mode	Training to be considered as a key vehicle to change and play a transformational role. To suggest mechanisms to enable training function to play a strategic role.

III TRAINING NEEDS AND CAPACITY BUILDING PLAN

There is **currently virtually no organized training function in any of the three organizations**, except for a small training facility for Distribution which is about a year old.

The facility was set up under a MoU between REC and Govt of India (under the RAPDRP), to essentially support training of Linemen and Distribution Franchisees. For training of Lineman, CIRE (Central Institute for Rural Electrification) of REC has trained a core team of trainers from APDCL. So far there is a pool of about 55 trainers who are trained for course delivery in the field. CIRE issues a certificate at the end of the three day course.

The curriculum on Management of Distribution Franchising Business is the same as developed under DRUM Program of the USAID. The curriculum developed under DRUM has been translated into Assamese language and modified to the local needs.

There is currently no training Agenda Targets other than the above for APDCL.

It would be somewhat simplistic to assume that training can address all the gaps-such as structural issues, technology related problems etc., hence and the findings described in the following sections are primarily a summary of the areas where training can have an impact.

In the sections below, the training needs as well as the corresponding recommendations for each one of the areas are described.

1. GENERATION

1.1. KEY FINDINGS: NEEDS AND PRIORITIES

The performance of the two gas based power units of Lakwa TPS and Namrup TPS, **when reviewed against the** Central Electricity Regulatory Commission (CERC) approved operational norms for generating stations***, on performance parameters such as Availability, PLF, Auxiliary Power Consumption,*** *Unit Heat Rate* -shows considerable scope for operational improvement of the plants. For instance, against norm for auxiliary power consumption of '3', the two plants performance is 8.05 & 5.17 respectively.

Currently there are important gaps in the performance of the following activities: maintenance plan; procurement procedures (which seem to be lengthy and cause delay); efficiency monitoring and control system (which ultimately causes the defects in operation and in equipment not being detected/corrected in time and leading to loss of generation). Fuel supply agreements have a poor risk sharing mechanism; RLA & Renovation & Modernization of old plants needs to be fostered.

All this reflects in the average tariff of the state-owned plants being much higher than that of the power sourced from the Central Generating Stations.

Therefore, the training needs in the table below have been concluded as necessary for the Generation company in the operational area.

Figure 1 - Generation Training Needs Assessment

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1	Planning	1. Preparation of annual and five year plans for the organization (APGCL) 2. Preparation of annual maintenance plans including special repairs, rehabilitation and modernization.	Available	CGM GM/DGM/SM	HQ
2	Financial Management	1. Assessment of techno-economic feasibility of proposed new projects 2. Assessment of economic viability of proposed R&M measure	Available	CGM, GM /DGM	HQ
3	Performance Monitoring /MIS	1. Development of progress reports for performance monitoring - daily, weekly, monthly, and annual at plant and HQ level. 2. Completion of performance monitoring reports.	Available	CGM GM/DGM/SM	HQ/Plant
4	Monitoring Tools	Training in operation of monitoring tools like Primevera.	Available	Managers/ Computer Operators	HQ
5	Latest advances in construction and operation techniques	Knowledge and development of capacity to take advantage of latest advances in construction and operation techniques.	Available	CGM GM/DGM/SM	HQ
6	Maintenance planning and management; Enhancing operational efficiency; Improving auxiliary consumption, plant availability and PLF	1. Understanding critical issues in the operation of thermal and hydro -electric plants. 2. Improving capacity of managers to take on-the-spot decisions to resolve critical issues. 3. Improving capacity of managers to initiate measures (including innovative measures) to enhance efficiency 4. Understanding and implementing measures to improve efficiency and economy in operation. 5. Learning to be vigilant to prevent accidents / damage to	Available	1. GM/DGM/SM 2. Operators / Technicians	HQ Plant

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
		equipment.			
7	Inventory Management; Spare Parts Management;	Understanding and implementing policies for inventory and spare parts management	Available	SM/Managers, Store Keepers	Plant
8	Procurement	1. Understanding and implementing procurement procedures.	Available	GM/DGM	Plant
9	Vendor Development	1. Encourage procurement from list of approved vendors maintained at HQ 2. Judicially assess performance of vendors to record in vendor register.	Available	SM/Managers, Store Keepers	Plant
10	Dispute resolution	1. Understand laws relating to industrial disputes 2. Ability to understand, sympathize with and take action to remove workers grievances. 3. Ability to take corrective action to resolve disputes in initial stages.	Recruit: 1. Labour Officer (experienced) - One2. Labour Inspectors - Three	GM/DGM/SM/Manager/Workers union representatives	HQ/Plant
11	Fuel Procurement	1. Understanding gas production, transportation, compression, supply, quality, composition, heat value, measurement etc. 2. Understanding agreement of supply and transportation of gas	Available	GM/DGM	HQ
12	Environment, health and safety	1. Understanding environment / pollution control guidelines and take steps for their implementation and monitoring. 2. Understanding health and safety requirements and taka steps for implementation and monitoring.	Available	DGM/SM/Managers	Plant

1.2. TRAINING RECOMMENDATIONS

Figure 2 - Generation Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1.	Planning	Seminar in-house	In house training with guest speakers from State Planning/Finance Departments	40	MT	G.4
2.	Financial Management	Seminar in-house	Capacity Building Project Team (Finance Experts)	40	MT	G.5
3.	Performance Monitoring	Seminar in-house	1. In house training 2. Capacity Building Project Team	40	ST	G.1
4.	Monitoring Tools	Seminar Away	Software suppliers	80	ST	G.2
5.	Advances in construction and operation techniques	Seminar Away	External Institution NTPC / BHEL / Consultancy organizations	40	MT	G.6
6.	Maintenance Planning and Management	1. Training for Trainers (Seminar Away)	External Institution NTPC / BHEL / Consultancy organizations	40	ST	G.3
		2. Seminar in-house	Training delivered by Trained Trainers	80	MT	G.3
7.	Inventory Management	Seminar in-house	1. In house training 2. Capacity Building Project Team	40	MT	G.7
8.	Procurement	Seminar in-house	In-house training / Capacity Building Project Team	24	MT	G.8
9.	Vendor development	Seminar in-house	In-house training	24	LT	G.10
10.	Dispute Resolution	Seminar in-house	In-house training with guest speakers from State Labour Department	40	LT	G.11
11.	Fuel Procurement	Seminar in-house	In-house training with guest speakers from Gas Supplying Companies	16	LT	G.12
12.	Environment health and safety	Seminar in-house	In-house training with guest speakers from State Pollution Control Board/Department of Health	40	MT	G.9

2. TRANSMISSION

2.1. *Key Findings: Needs and Priorities*

Execution & commissioning of the capital investment projects is an area that requires substantial improvement-against a national average standard for completing the projects up to 220 kV is 18 months; the time specified by AEGCL for the execution & completion of projects is 24 Months from the date of issue of work award; and most of the projects have not been completed in the specified scheduled period.

Routine maintenance of Transmission lines & substations, condition monitoring of substation equipments needs to be strengthened-this is very important as it will enhance the Transmission system availability.

Also, there is need for Hotline maintenance, wherein all the insulators in the Transmission lines can be checked for its health and replaced without line shut downs.

Figure 3 - Transmission Training Needs Assessment

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1(a)	Planning of System strengthening & system expansion	1. Long term load forecasting & Annual load forecasting 2. System studies. 3. Substation & Transmission line designs. 4. Assessment of techno-economic feasibility of proposed new projects both for system strengthening and system expansion 5. Assessment of economic viability of R&M Proposals	External Entry	1. C.G.M. 2. G.M. 3. D.G.M. 4. S.M. & MANAGER	HQ
1 (b)	Annual & Five Year Plan	Preparation of annual and five year plans for the AEGCL	In-House Training	1. G.M. 2. D.G.M. 3. S.M. & MANAGER	HQ
2	System protection & protection co-ordination	1. Power system protection. 2. Testing & commissioning of substations. 3. Failure analysis of the Equipment. 4. Condition Monitoring & RLA	External Entry	1. DGM 2. S.M. 3. Manager. 4. A.M.	HQ
3	Procurement	1. Process Improvement in Procurement including **"E-Tendering".** 2. Vender development	External Entry	1. DGM. 2. S.M. 3. Manager	HQ
4	Construction /	1. Project management.	External Entry	1. DGM	HQ and Field

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
	Execution	2. Latest Techniques in construction/Execution. 3. Environmental & social impact assessment practices. 4. Inventory & spares Management. 5. Project Execution & commissioning.6.Health and safety of execution staff		2. S.M. 3. Manager 4. A.M.	staff
5(a)	O&M of Transmission system	1. Substations maintenance. 2. Transmission lines maintenance including Hot Line Techniques. 3. Enhancing the Transmission system Availability. 4. Safety Procedures. 5. Improving capacity of managers to take on-the-spot decisions to resolve critical issues during emergencies	External Entry	1. DGM. 2. S.M.	HQ
5(b)			Seminar in-house by Trainers who obtained Training as per 5(a)	1. Manager 2. A.M. 3. Technicians 4. Mechanics	Field staff
5(c)		Hot Line maintenance	External Entry	1. Manager 2. A.M. 3. Technicians. 4. Mechanics	Field staff
6	SLD operations	Power System Operations	External Entry	1. DGM 2. S.M. 3. Manager. 4. A.M.	SLD Guwahathi
7	Regulatory Affairs	All Matters pertaining to Regulatory Affairs	External Entry	All Regulatory affairs staff of AEGCL	HQ

Note: 1.0. It is proposed to impart training to the required staff at all levels from External Entry except for item No-1 (b) and 4(b) as all the courses are short term and expenditure for such Training are minimum.
2.0. Most of the Trainings can be at National Power Training Institute (NPTI /PSTI) at Guwahathi.
3.0. Hot line Training(Item No-5(c) will be available only at Hot Line Training centre of CEA at Bangalore

2.2. TRAINING RECOMMENDATIONS

Figure 4 - Transmission Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	Long Time Load fore casting	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad. c) PRDC Bangalore	3-Days 21 Hrs @ 7 Hrs per day	ST	T.1
2	POWER SYSTEM STUDIES "Hands on" using soft ware	a) Seminar-in-House as in House Talent is available. b) Provision is available for such Free Training programmes by Soft ware supplier under AMC @ soft ware supplier's Place	a) Capacity Building Project Team. b) PRDC Bangalore - The supplier of Mi-power soft ware. Free annual Training as per AMC	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.2
3	Substation Design & Engineering	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.3
4	Transmission line design & Engineering	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.4
5	DPR preparation & Budget proposal preparation	Seminar-in-house	In-house training with guest speakers from State Planning/Finance Departments	3-Days21 Hrs @ 7 Hrs per day	ST	T.5
6	System protection & Protection coordination.	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad. c) PRDC Bangalore	One Week- 6 days - 42 Hrs @ 7Hrs per day	ST	T.6
7	Testing & Commissioning of New substations.	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	3-Days 21 Hrs @ 7 Hrs per day	ST	T.7
8	CONDITION MONITORING & RLA	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	One Week- 6 days - 42 Hrs @ 7Hrs per	ST	T.8

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
			c) PRDC Bangalore	day		
9	New Type of Relays	Seminar Away	Relay manufacturer's / Relay suppliers Units	3-Days 21 Hrs @ 7 Hrs per day	ST	T.9
10	Procurement	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	3-Days 21 Hrs @ 7 Hrs per day	ST	T.10
11	Project Management & Monitoring	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	2-Days 14 Hrs @ 7 Hrs per day	ST	T.11
12	Project's detailed execution procedures (Substations & Transmission Lines)	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	ST	T.12
13(a)	Operation & Maintenance of Transmission lines & substations	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	ST	T.13
13(b)	Operation & Maintenance of Transmission lines & substations	Seminar-in-house	By the trainers as per Sl No-13(a)	One Week- 6 days - 42 Hrs @ 7Hrs per day	ST	T.14
14	Hot Line Training programme	Seminar Away	Hot Line Training Institute of CEA Bangalore	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	ST	T.15
15	Power system Operations of State Load dispatch Centre	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.16
16	Regulatory Affairs	Seminar Away	a) NPTI /PSTI Guwahati & Bangalore b) ESCI Hyderabad.	One Week- 6 days - 42Hrs @ 7Hrs per day	ST	T.17

3. DISTRIBUTION

3.1. KEY FINDINGS: NEEDS AND PRIORITIES

Network in many areas requires strengthening; new substations are required in a number of areas as the 11 KV lines are too long.

There is currently no monitoring & control system; no well defined parameters for measuring-operational performance; customer service and costs, nor is there a focused approach for performance improvement. Even where there are specific guidelines from the Regulator on consumer services parameters (like new connection cycle time, complaint redressal cycle time etc.) there is no monitoring of the same at any level.

Business Process Automation of processes like new connection & meter replacement need to be put in place, across the Utility.

New developments in technologies & business process automation to improve distribution efficiency need to be suitably incorporated-especially in metering, billing, consumer indexing & asset mapping.

IT (for building a strong data base) & Automation has contributed to a large extent in plugging the gaps, ineffectiveness and inefficiencies in the reforming Utilities. Although the nature of IT training will largely be driven by the selection of the software (for commercial processes-Metering, Billing & collection; complaints Management); but basics like MS Word and MS Excel training can be provided across the board.

There are no processes (like Network Planning, Demand Forecasting) except fault repairing process. Even here there is no MIS on Fault Repairing process (performance and cycle time).

The preventive maintenance/replacement schedule for distribution equipments is absent.

Customer Care & Service are areas that have received little attention and there is a need to strengthen this area. Quality of service provided to the customers and the operational activities on the field is considered of low quality. It was felt that the grievances are not very high, largely on account of the apathy on the part of the customers, since the Company takes unduly long time for responding to the same.

Improving Rural Power Supply and Participatory Models need greater attention.

Figure 5 - Distribution Training Needs Assessment

TRAINING NEEDS ASSESSMENT[2]					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1	Focus on AT&C Loss Reduction	Understanding significance of various Loss Reduction Methods	Available	CGM (Zones)/ DGM (Circles)	Headquarter
2	Data Analysis for bulk consumer meters	Data Analysis for downloaded data against bulk consumer meters	Available	Managers/ Asstt Managers/ Junior Engineers	Headquarters/Division/Testing Department
3	Focus on Network Planning	Understanding significance of Analysis of Network and Network Planning	Available	CGM (Zones)/ DGM (Circles)/ SM(Divisions)	Headquarters/Division/Sub-Divisions
4	Focus on Revenue Cycle Management	Meter Reading and Billing System Improvement	Available	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Headquarters/Division/Sub-Divisions
5	Focus on Energy Accounting	Understanding significance of Energy Accounting	Available	CGM (Zones)/ DGM (Circles)	Headquarter
6	Change Management	Management of changes in Distribution Process Improvement	Available	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Circle Office/Division Office
7	Application of GIS in Power Distribution	Understanding GIS based initiatives in Commercial, Network Planning and Asset Mapping for RAPDRP	Available	DGM (Circles)/ SM (Divisions)/ Manager (Sub-Division)	Circle Office/Division Office/ Sub-Division
8	Distribution System O&M, SCADA, DMS, OMS	Understanding best practices in Distribution System O&M including SCADA, DMS, OMS etc for RAPDRP part A and B	Available	SM (Divisions)/ Manager (Sub-Division)	Division Office/ Sub-Division

TRAINING NEEDS ASSESSMENT[2]					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
		distribution best practices		Joinees)	
10	Distribution Metering	Understanding best practices in metering for power distribution	Available	Junior Engineers/ Technicians	Circle Office/Division Office/ Sub-Division
11	Induction Programme for Technician Trainees	Induction Programme for Technician Trainees to power distribution best practices	Available	Graduate Engineers Trainees (new Joinees)	Headquarters/Division/Sub-Divisions
12	Safety, Fire Fighting & Disaster Management	Preparedness for disaster management and safety awareness	Available	Graduate Engineers / Technicians	Headquarters/Division/Sub-Divisions

3.2. TRAINING RECOMMENDATIONS

Figure 6 - Distribution Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	Programme on AT&C Loss Reduction Best Practices	Seminar In-House	Capacity Building Project Team	8 hrs	Short Term	D.1
2	Workshop on Meter Data Analysis	Seminar Away: Best Practicing Distribution Utilities	External Institutions like SEMS, NDPL etc	2 X 8 hrs	Short Term	D.2
3	Programme on Network Planning	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NDPL etc	2 X 8 hrs	Short Term	D.3
4	Programme on Revenue Cycle Management	Seminar In-House	Capacity Building Project Team	4 hrs	Short Term	D.4
5	Programme on Energy Accounting	Seminar In-House	Capacity Building Project Team	4 hrs	Short Term	D.5
6	DRUM (Distribution Reform under US Aid) Programme on Change Management	Seminar Away: Training Program advised by Ministry of Power	External Institutions like NPTI, NDPL etc	5 X 8 hrs	Medium Term	D.6
7	Programme on GIS	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	Medium Term	D.7
8	Programme on best practices on Distribution System O&M	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	3 X 8 hrs	Medium Term	D.8
9	Induction Programme for new joinees (Graduate Engineers)	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	20 X 8 hrs	Medium Term and Long Term	D.9
10	Programme on best practices on Distribution Metering	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	1 X 8 hrs	Medium Term and Long Term	D.10
11	Induction Programme for new joinees (Technician Trainees)	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	20 X 8 hrs	Medium Term and Long Term	D.11
12	Workshop on Safety, Fire Fighting & Disaster Management	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	Medium Term and Long Term	D.12

4. FINANCE

4.1. KEY FINDINGS: NEEDS AND PRIORITIES

There are several gaps in accounting systems:

- In the area of Funds Management, there is centralized cash management system which inhibits financial autonomy and does not insulate financial performance of APGCL and AEGCL from APDCL's.
- Several accounting systems do not comply with the requirements of the Companies Act-such as Schedule VI of Companies Act; Sections on Separate Audit Committees, Cost Audit etc.
- Fixed Asset Register is not maintained. AERC Recommendations/Audit Observations are rarely complied with.

Procurement Management & inventory management need to be strengthened. In Procurement Management, there is need for introduction of rate contract mechanism with decentralized delivery for procurement by field/zones;

'Bill Inward Software' for vendor management and payments and SAP Material Management Module for integration of various stores, maintaining centralized records of inventory and utilization are required.

Financial planning and management processes need to be strengthened, specifically: *Working Capital Management, Cash collection, Debtors Management, Fund Management, Bank Management & Procurement Management.*

4.1.1. Capacity Investment and Business Plan

Figure 7 - Capacity Investment and Business Plan Training Needs Assessment

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1	Capital Investment Planning	Data Gathering & Updating Load Forecasting; Performance Assessment/Audit of Plant, Distribution & Transmission Systems vs. Standards; Project Formulation or Generation of Alternative Solutions to Problems; Identification of Best Solutions to Problems	Available @APDCL,APGCL Unclear @ AEGCL	Engineering and Select Key Finance Staff of 3 utilities	HQ, Plant Substations
2	Business Planning	Environment mapping (SWOT, market and policy/regulatory environment assessment); formulation of business goals & objectives; operations planning; financial planning; development of performance monitoring systems	Available	Senior Executives & Top Management of 3 utilities	HQ, Plant Substations, Regions

4.1.2. FINANCE

Figure 8 - Finance Training Needs Assessment

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1	Financial Risk Management	Identification of Risks	Available	DGM, GM, CGM of Finance Deptt	Headquarters
		Analysis of Risks	Available	DGM, GM, CGM of Finance Deptt	Headquarters
		Strategy and Action Plan to mitigate risks	Available	DGM, GM, CGM of Finance Deptt	Headquarters
2	Budget Management System	Zero based budgeting; Budget Variance Analysis	Available	DGM, Sr Manager	Headquarters
3	Working Capital Management	Management of Cash and Other Current Assets; Debt Management; Bank management Understanding and complying with AERC norms	Available	CGM (Finance) and other Senior Finance Officials in Divisions, Circles, Zones	Headquarters
4	Inventory Management	Basics of Inventory Management; Inventory Management Techniques including ERP	Available	All employees in Subdivisions (APDCL), Stores (All three Utilities) and Finance	Headquarters

4.1.3. ACCOUNTING

Figure 9 - Accounting Training Needs Assessment

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1	Legal Compliances	Compliance with Schedule VI of the 1956 Companies Act	Available	GM, DGM, AGM, Senior AO & AO Accounts Dept; GM & DGM Technical (total 35)	In-house
2	Seminar on Convergence to IFRS	Compliance with IFRS	Available	GM and AO from each utility. Must be Chartered Accountants	Seminar away
3	Control and Monitoring System	Internal Audit, Internal Control and Internal Audit Committee	Available	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house
4	Accounting Documents	Development and maintenance of accounting manuals, chart of account, monthly reporting systems, subsidiary and control books among others	Available	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house
5	Work and Accounting Classifications	Control of capital work in progress and accounting for capital and deferred revenue expenditures	Available	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house
6	Costing	Maintenance of Costing Records and Cost Audit	Available	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house
7	Inventory Control	Accounting & Control of Inventory	Available	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house
8	Internal Audit and Reviews and Proprietary Audit	Internal Audit and Reviews and Proprietary Audit	Available	2 Executive Officers from each of the accounts department of the zones, circles and divisions of the 3 utilities	Zones

4.2. *Training Recommendations*

4.2.1. Capacity Investment and Business Plan

Figure 10 - Capacity Investment and Business Plan Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	Seminar-Workshop on Capital Investment Planning	Practical assistance - Trainees to be guided in the preparation of their capital investment plans through lectures and laboratory exercises. Training for Trainers & Seminar-Away	External experts	At least 3 man-months for each utility or 396 hours	Medium-Term	CI&BP.1
2	Seminar-Workshop on Business Planning	Practical assistance - Trainees to be guided in improving their business plans through lectures and laboratory exercises.	External Experts	At least 1 man-month for each utility or 66 hours	Medium-Term	CI&BP.2

4.2.2. Finance

Figure 11 - Finance Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	Training on Risk Management	Seminar-in-House	External Institutions like NDPL, NPTI etc.	3 hours per day @ 6 days or 18 hours	Medium-Term	F.1
2	Workshop on Budget Management	Seminar-in-House	External Experts	3 hours per day @2 days or 6 hours	Medium Term	F.2
3	Workshop on Working Capital Management	Seminar-in-House	External Finance Experts	3 hours per day @2 days or 6 hours	Short Term	F.3
4	Programme on Inventory Management	Seminar-in-House	External Experts	3 hours per day @ 6 days or 18 hours	Long Term	F.4

4.2.3. ACCOUNTING

Figure 12 - Accounting Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	Seminar-Workshop on Legal Compliances	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	Short-term	A.1
2	Seminar on Convergence to IFRS	Seminar away	Institute of Chartered Accountants of India and Institute of Cost and Works Accountants of India	40 hours	Medium term	A.2
3	Seminar-Workshop on Control and Monitoring Systems	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	Short-term	A.3
4	Seminar-Workshop on Accounting Documents	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	Short-term	A.4
5	Seminar-Workshop on CWIP and Accounting Classifications	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	Short-term	A.5
6	Seminar-Workshop on Cost Audit and Maintenance of Costing Records	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	Short-term	A.6
7	Seminar-Workshop on Inventory Accounting & Control	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	Short-term	A.7
8	Training on Internal Audit and Reviews and Proprietary Audit	Zones	Training Institute of the Principal Accountant-General of Assam	9 hours@ days or 18 hours at each zone (tentative)	Medium term	A.8

5. HUMAN RESOURCES

5.1. KEY FINDINGS: NEEDS AND PRIORITIES

HR Function in the three utilities needs to be strengthened and reoriented to play a transformational role as opposed to a transactional role. There is a need to develop policies, processes & systems that are aligned to running the utilities as business entities, with enhanced accountability.

One of the areas of concern is to address the demographic data, wherein 30% will retire by 2012, 60% of staff is over 50 years and gaps in staffing of sanctioned posts are reflected in dual charge of posts at senior level-although how much it lends itself directly to training is doubtful.

Any formal training of Executives is virtually nonexistent.

There is need to develop HR functionaries at the field level, who have no formal training in HR.

"Unmotivated staff"-especially at the field level, can be a result of various reasons, however developing 'people management skills' for line managers, such as building a culture of commitment & performance, etc., can alleviate this apathy amongst employees to some extent.

Also there is currently no training for upgrading skill-sets linked to career change or promotion.

Figure 13 - HR Training Needs Assessment

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1	Develop and establish 'Human Resources Steering Committee (HRSC)'	• To inculcate an appreciation of key HR issues & priorities in the 3 utilities & action Plans needed • to understand the approach & road map to Implementation of action plans • Effective functioning of HRSC	Available	Team members constituted by the Mgmt. (Chairperson, CGM HR, HR from the three Utilities)	Corp Office/PMU
2	Enhancing Capacity of HR Functionaries at the Field level	Greater understanding of HR of HR & Relations, as applicable at field/ Plant level	Available	**Engrs. in the Field working in HR. with no prior HR training** (20-25 participants)	From 3 utilities. Working at Power stations, APDCL-Circles/Divisions
3	'Pipeline of HR talent/HR Resource Pool'- As part of building HR function- HR professionals to be recruited at induction levels and trained for the 3 utilities	Providing a perspective of power sector, & HR challenges in the context of the utilities, so that they can contribute as 'HR resource pool'	NIL	Newly recruited HR Professionals for the 3 utilities	From 3 utilities
4	Developing internal training resources for: a. Managing Training courses b. Developing internal training resources for Training Delivery	To build necessary skill sets for effectively managing the training courses and delivery of training	Available but to be identified	To be identified from Generation, Tran., Distribution, Finance	Corporate Functions & Field
5	Study Visit(s) to other Utilities: Focussed interactions on *specific processes* and *practices* linked to performance Improvement, along with classroom	To develop a firsthand appreciation of and learn about improved processes and practices in other utilities and to inspire exploring/ initiating Improvements on return from study visit.	Available	Multi-level Team(s) from Circles of APDCL to well performing Utility, say NDPL	NDPL

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
	sessions& field visits				
6	General Management Course (for transition points in career –Sr. Manager to DGM)	To develop relevant competencies related to enhanced role, linked to promotions	Available	Senior Managers with more than one year experience in their current position and who are eligible to be considered for next level-DGM.	All three Utilities

5.2. TRAINING RECOMMENDATIONS

Towards augmenting the HR capacity, the recommendations include interventions to- strengthen the existing HR functionaries at the field and plant level and to develop a *continuous pipeline of HR talent/HR Resource Pool*-by recruiting fresh professionals and familiarizing them to the needs and the context of power sector in general and the Assam power utilities in particular. Apart from class room training, on-the job training and Project work will form an integral part of the training.

In the absence of training function and the fact that it will take considerable time to induct faculty, it is proposed to identify internal resources that have competencies of trainers and provide them the necessary skills through *courses on Training the Trainers* for both effective implementation of courses and delivery training sessions.

There is currently no training for upgrading skill-sets linked to career change or promotion. A *course on General Management* addressing needs of operating as a corporate entity with a business orientation, covering competencies such as strategic management; leadership; change management, planning and effective delegation; effective communication; etc. has been proposed at Dy. General Manger level. Further, this course will also provide a multi- disciplinary orientation required at senior management levels, because of interdependence of tasks and skills.

To address the needs, following 6 training themes have been recommended:

1. HRSC HR Orientation
2. Enhancing Capacity of HR Functionaries (at field level)
3. Induction Level Training Scheme for HR Professionals
4. Training of Internal Resources (as Trainers & Mgrs. of Courses)
5. Study Visit to Distribution Utility
6. General Management Course (for transition points in career)

Figure 14 - HR Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration	Priority	TSDD
1	HRSC HR Orientation	In – house Seminar	CB Project Team	1 day	ST	HR.1
2	Enhancing Capacity of HR Functionaries	In-house Course	External: Power Mgmt Inst. or HR & Trg Consultants 'Shrica Excellence'	3- 4 days	ST	HR.2
3	Induction Level Training Scheme for HR	In-house cum External	Power Mgmt Inst.	4 weeks	ST	HR.3
4	Training of Internal Resources (as Trainers & Mgrs of Courses)	In-house	*Shrica Excellence* Consultants	5 days	MT	HR.4
5	Study Visit(s) to Distribution Utility	External	CB Project Team	5 days	ST	HR.5

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration	Priority	TSDD
6	General Management Course (Career Linked Training Intervention)	External	ASCI /Power Mgmt Inst/Reliance Mgmt Inst; CENPIED	6 days	MT	HR.6

6. INFORMATION TECHNOLOGY

6.1. *Key Findings: Needs and Priorities*

Figure 15 - IT Training Needs Assessment

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1	Role of IT for Power Sector	Awareness on the importance of IT for empowering the Power Utilities	Available	CGM (Zones)/ DGM (Circles)	Headquarter
2	Role of R-APDRP (Part-A)	Importance of R-APDRP Part-A Scheme for APDCL	Available	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Headquarters/Division/Sub-Divisions
3	MS - Office and Messaging System basics	Improvement of IT Usage	Available	Graduate Engineers Trainees (new Joinees)	Headquarters/Division/Sub-Divisions
4	Importance of System Security and Business Continuity Planning	Preparation of controls for System Security and Business Continuity	Available	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Circle Office/Division Office
5	Automatic Metering System Advantages	Understanding the AMR System Advantages	Available	DGM (Circles)/ SM (Divisions)/ Manager (Sub-Division)	Circle Office/Division Office/ Sub-Division
6	Importance and components of ERP for a Power Utility	Understanding the ERP Components for support processes of a Utility	Available	CGM (Zones)/ DGM (Circles)	Headquarter

6.2. TRAINING RECOMMENDATIONS

Figure 16 - IT Capacity Building Plan

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	Workshop on IT Best Practices in Power Utilities	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NDPL etc	2 X 8 hrs	Short Term	I.1
2	Workshop on expectations from R-APDRP (Part-A) Scheme	Seminar In-House	Capacity Building Project Team	4 hrs	Short Term	I.2
3	Training on MS - Office and Mail Messaging System	Seminar - Away	External Institutions like NDPL etc	3 X 8 hrs	Short Term	I.3
4	System Security and BCP Planning	Seminar - Away	Capacity Building Project Team	8 hrs	Long Term	I.4
5	Program on Meter Data Acquisition and Meter data Analysis processes	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	Short Term	I.5
6	Program on Enterprise Resource Planning System	Seminar - Away	External Institutions like NPTI, NDPL etc	8 hrs	Short Term	I.6

7. CORPORATE ASPECTS

7.1. REGULATORY AFFAIRS GROUP IN THE UTILITIES

7.1.1. KEY FINDINGS: NEEDS AND PRIORITIES

Regulatory Groups need to be strengthened w.r.t. their understanding of Tariff methodologies and tariff filing; understanding of regulatory processes; regulatory accounting; compliance with regulations; development of internal systems to monitor the performance indices and reporting.

7.1.2. TRAINING RECOMMENDATIONS

Figure 17 - Regulatory Affairs Group Training Needs Assessment

Training Needs						
Sl. No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
7.1	Course on Regulatory Requirements & Regulatory Interface	• Understanding of Regulatory requirements & Processes; • Regulatory Accounting, • Tariff methodology, ARR filings • Compliance with regulation for performance standards • Development of internal systems to monitor the performance indices and reporting.	Regulatory Affairs Wing	3 days	MT	ASCI, Hyderabad/ Forum of Indian Regulators (external nominations could be considered)

Providing the Regulatory Affairs Group of the Utilities with an understanding of compliances and relating internal systems to monitor the performance indices and reporting, to meeting the regulatory requirements and regulatory interface ARR filings; compliances internal systems to monitor the performance indices and reporting.

7.2. *Needs at Interface Levels of the Three Utilities*

7.2.1. Key Findings: Needs and Priorities

The relationships between the companies are to be performed based on the market rules by means of bilateral or trilateral transparent agreements. There is a need for strengthening of Commercial function at the boundaries of exchange such as BPSAs between the APDCL and Generating Companies; Transmission Service Agreements (Bilateral or Multi-lateral).

Important Imperatives as separate entities also requires ring fencing of Accounts.

7.2.2. Training Recommendations

Figure 18 - Training Needs at Interface Levels Assessment

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
8.1	Operational, Managerial & Commercial imperatives as separate entities	There is a need for strengthening of Commercial function at the boundaries of exchange such as BPSAs between the APDCL and Generating Companies. Transmission Service Agreements (Bilateral or Multi-lateral) • Business Plans for each utility for the next 5 years (including capex plans) • Ring fencing of Accounts • Transmission to look after grid operation as a ring fenced activity	GMS, CGMS, Sr. Executives from Commercial, Finance functions	2 days	MT	Consultancy Firm which has handled similar work in the Country

7.3. *Higher Level Needs (capacity addition; meeting demand in rural areas etc.)*

7.3.1. Key Findings: Needs and Priorities

There is a need to deliberate and develop strategic plans to address:

External factors that impact on the utilities such as Policy; Fuel supply and pricing; Competition- Average tariff of the state-owned plants is much higher that the power sourced from the Central Generating Stations and where there is an increasingly high dependence on the power allotted from the Central Sources ~64% and installed capacity in the state has been stagnant since long.

Government of Assam's policy on renewable based distributed generation and forecasted peak power demand of 1,883MW by 2014 will place demand on corresponding capacity to be created in the utilities for project formulation, and skill sets to manage project execution and contracts management.

7.3.2. Training Recommendations

Figure 19 - Higher Levels Training Needs Assessment

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
9.1	Course on Power Project Development & Capacity Expansion	Economic aspects & technical feasibility of power projects; Fuel supply and pricing, case studies in power project development. Timely execution & commissioning of the proposed capital investment projects.	Executives from Planning Groups	3 days	MT	PMI or similar
9.2	Project Formulation; Management & Execution (for Distribution)	Project formulation; planning, scheduling and implementation; Expansion scheme preparation, Network Up gradation, evaluation for providing new connections/electrification and services; Capex program; Distribution Project case example	Project Development Planning Department & Execution Group of APDCL	4 days	MT	External Source
9.3	Project Formulation; Management & Execution (AEGCL):	Transmission project planning, scheduling and implementation; Project management software; Transmission Project case Example	Project Development Planning Department & Execution Group of AEGCL	4 days	LT	Power Grid Corporation Ltd

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
9.4	Contracts Management	To upgrade the knowledge about critical issues in the tendering – bid invitation, evaluation of tenders, award of contracts and arbitration. The course will include Performance of contract and consequences of non-performance of contract; Claims and Disputes; Post award function in Contracts; Arbitration	Executives handling Contract packaging & implementation in the 3 utilities	4 days	MT	PMI/CENPIED/ Reliance Institute
9.5	Renewable based distributed generation	Policy of Assam Govt; discussions on potential using locally available renewable resources; all aspects of viability and long term sustainability of DG projects; detail case studies on experience in India**+** visit States with experience of RE	Planning Department	2 days	LT	Assam Energy Development Agency or visit Agencies at Central level

7.4. General Management, Functional Mgmt & Cross functional

7.4.1. Key Findings: Needs and Priorities

Operating as a corporate entity requires a business orientation and General Management competencies such as strategic management; leadership; change management, planning and effective delegation; effective communication; etc.

Further, at senior management levels, because of interdependence of tasks, a multi disciplinary orientation is essential, such as Finance skills for understanding financial aspects of decision making and HR skills for building commitment & performance.

Again a basic Quality course with 7 quality tools, across the Organizations will provide a common language and quality orientation.

7.4.2. TRAINING RECOMMENDATIONS

Figure 20 - General Management, Functional Mgmt & Cross Functional Training Needs Assessment

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
10.1	Finance For Managerial Decision Making	To enhance understanding of financial aspects of decision making Analysis &Interpretation of financial statements which reflect biz results; financial indicators of performance; economics of capital investment for decision making; analysing cost information for cost reduction and cost control; managing working capital for optl. efficiency; budget & mgmt control systems	Senior Mangers and above, in the three Utilities	4 days	MT	Institutes such as PMI, Reliance Mgmt Institute; CENPIED, ASCI Or specialist Consulting Firms such as DHIYA Consulting International Firms like AF-Mercados
10.2	General Management Course	• Scanning the Environment; key policy provisions at national and state level and its implication • Strategic planning & Management; • Finance; analyzing financial statements; cost management strategies; Working capital mgmt • Leadership; • Organization building; • HRM & Development Marketing; customer orientation-internal & external • O&M (strategy & achieving excellence through benchmarking)	GMS, CGMS From the 3 utilities	6 days	MT	Institutes such as ASCI, PMI, Reliance Mgmt Institute; CENPIED,
10.3	HR for Line Personnel	Building commitment & performance culture; Performance Management;	Department Heads in the three utilities	3 days	MT-LT	Institutes such as PMI, Reliance Mgmt Institute;

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
		Coaching skills; Managing & developing human resources; HR Challenges & new orientations in work culture as business entities, with enhanced accountability, customer orientation etc.; philosophy of outsourcing;				CENPIED HR & Trg Consultants 'Shrica Excellence'
10.4	Motivation & Empowerment	Mentoring & Counselling Team Leadership Empowerment Motivating environment	-do-	2 days	MT	Institutes such as PMI, Reliance Mgmt Institute; CENPIED HR & Trg Consultants 'Shrica Excellence'
10.5	Managing Outsourcing:	Performance Contracts; Supervising Performance; partnership; MIS /Maintaining Documentation	At Senior levels –for those who will take decisions on outsourcing; and Middle Level executives for Supervision of the Contracts	1-1/2 days	ST-MT	CENPIED/NDPL
10.6	Quality Orientation Program	Across the 3 entities- as a basic development intervention. Top down & bottoms up-a common language 7 Quality Tools. Implementing QC	For all employees of all three utilities Plan for covering entire population	1-1/2 days	ST-MT	Local Resources on Quality Circle/TQM
10.7	Study Visit(s) to other Utilities: Planned interventions	Focussed interactions on specific processes and practices linked to performance Improvement, along with classroom sessions & field visits. This would be an opportunity to study best	Planned interventions for teams, from the three utilities These could be for multi-level teams (Sr	5 days	LT	To well performing utilities

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
		practices and benchmarks	Execs. to Operators)			

7.5. Corresponding Stakeholder needs

7.5.1. Key Findings: Needs and Priorities

There is a need to strengthen and support the important constituents such as AERC, Consumer Groups, potential franchisees for Distribution business etc., with a view to meeting the overall objectives of the Project.

1. There is very little been done by way of education of **Consumer Bodies, NGOs** and there is a need to cover:
   - *Utility - Consumer interface* (by the Utilities) APDCL's mechanisms (current & proposed) for customer care mechanisms; its Grievance redressal & dispute resolution mechanisms; and Safety
   - *Public Outreach and Education for increased participation* (by AERC); Utility Regulation: Principles & Concepts (Rationale for regulation/ Objectives & Goals/ Overview of Regulatory Approaches/ Issues of Equity and Access to Rural Areas); Consumer awareness of performance standards; grievance mechanisms
2. There is a need to explore extending of distribution franchising to more geographical areas and moving from feeder/transformer levels to division/subdivision level and to full size services at circle level. Necessary skills, both for **potential Franchisees** and for **Project Mgrs** (from APDCL), addressing all issues of planning & implementing Distribution Franchising are important.
3. **AERC**- on issues such as to develop a road map for loss reduction for APDCL; adopt tariff fixation based on the Cost of Supply method

7.5.2. Training Recommendations

Figure 21 - Corresponding Stakeholder Training Needs Assessment

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
11.1	Utility - Consumer interface	To share APDCL's mechanisms (current & proposed) for customer care; Grievance	Representatives from various Consumer	1 day	MT	Internal Resources From within

Training Needs						
Sl No.	Training Course Title	Training synopsis & Contents	Target Audience	Duration	Priority	Source
		redressal & dispute resolution mechanisms; safety etc.	Categories - especially domestic category; NGOS			APDCL
11.2	Public Outreach and Education for increased participation (under the aegis of AERC)	Utility Regulation: Principles & Concepts (Rationale for regulation / Overview of Regulatory Approaches / Issues of Equity and Access to Rural Areas); Consumer awareness of performance standards; grievance mechanisms	Representatives from various Consumer Categories -especially domestic category; NGOS	2 days	MT	Internal Resources From within AERC
11.3	Workshop on: Practical Approaches & Issues in Loss reduction & tariff fixation based on the Cost of Supply methodology	The Workshop will facilitate the Commission in developing a road map for loss reduction for APDCL; and adopting tariff fixation based on the Cost of Supply method	AERC Professional staff	3 days	MT	Consultancy Firm which has handled similar work in the Country/ASCI
11.4	Distribution Franchising	There is a need to explore extending of distribution franchising to more geographical areas and moving from feeder/transformer levels to division/subdivision level and to full size services at circle level. Necessary skills, both for **potential Franchisees** and for Project Mgrs (from APDCL), addressing all issues of planning & implementing Distribution Franchising are important.	1. For Potential Franchisees 2. For Project Mgrs (from APDCL)	4 days	MT-LT	Consultancy Firms such as Feedback Ventures

IV STRATEGY & PLAN FOR IMPLEMENTATION

1. SOME CONSIDERATIONS FOR PLANNNING

The needs are vast and varied and the target population (discussed below) to be trained is large, hence it is evident that it is neither practical nor feasible for the three Utilities to meet all the needs. Not only will it require an organization, resources (trainers, budgets) and necessary systems, but there are also the following considerations:

- Training courses need to be well paced, allowing-sufficient time for organizations to assimilate learning. There is a need for corresponding capability in AEGCL, APGCL & APDCL to absorb training and for training to get institutionalized. Hence, there is a certain pace at which conventional training courses can be implemented at the three utilities.
- Considering the gaps in staffing of sanctioned posts - reflected in dual charge of posts, the availability of the participants for training especially for off-site training is limited and training would place considerable pressures on the existing staff to be released for training.
- Training is most effective when delivered 'just-in-time' (JIT). It is therefore suggested that Capacity building activities during the first year, be largely linked to and proceed in conjunction with the action plans proposed in the short- term for the Project. The workshops could coincide with the working sessions.

Keeping this in view, the approach that is proposed is to first focus on key priority needs and on-site development.

2. TARGET POPULATION

The electricity sector in India has spelt out specific training norms in terms of person days and Budgets (% of salary Budget). These training norms largely coincide with prevalent practices in similar utilities in India. The National Training Policy for the Power Sector 2004 of Ministry of Power /GoI states:

Minimum period of 1 week annually for each employee

Minimum of 1.5% salary budget initially towards training function

However, moving to the National norms (as discussed in '1' above) in the short term may not be practical and feasible for the three Utilities. There is also issue of availability of right personnel for training-already there is a shortage of manpower in the Utilities and training would place pressures on the existing staff to be released for training. Keeping this in view, the following **target** is proposed:

Taking approx 14,000 employees (1855 in Transmission 1438 in Generation and 11,232 in Distribution) x 6 days=84,000 man days/annually of training is considered too high to implemented. Instead, ***in the short term 28,000 man-days/annually*** *is recommended, which translates into* ***4 training streams*** *running concurrently through the year,* ***and 42,000 in the medium term.***

During the next six months possibly, one common stream for the 3 utilities and separate streams for Generation; Transmission and Distribution, as required.

3. SOME CONSIDERATIONS FOR IMPLEMENTING THE PLAN

a) As the needs are large, the key is to prioritize and identify training courses with a potential for *immediate, high impact results.*

b) To identify and develop a pool of internal training resources who can form a potential pool of trainers for both delivering and implementing the training Program.

   The trainer competencies required are at Annex VII 4 Training of Trainers.

   Even where training is conducted by external agencies/institutions, it is suggested that a counterpart internal resource is associated, so that the learning from the same can be institutionalized and be carried forward.

   Further, there will have to number of initiatives/support to ensure that the resource is available when required and to recognize and reward the trainers.

c) For professional staff recruited/internally assigned for managing the training function, there is a need to upgrade their skills as 'brokers of training', who will be able to source the best and be 'good brokers' of training, who are informed and can ensure quality control.

d) There already are a number of training institutions that provide high quality services to the electricity sector within the region. These resources could be leveraged to provide a significant amount of training to the personnel relatively quickly and relatively inexpensively.

   In the initial years (2 years), to consider forming partnerships/tie-ups with Institutions to build capacity in the various categories (such as for PMI for Generation; PGCIL for Transmission NDPL's CENPIED *or* Reliance Energy Management Institute). Such long-term partnerships are recommended from the point of view of *sustainability* of the capacity building initiatives in the Utilities. Also once the internal resources are identified, the partnership could also cover follow-up support and mentoring of the resource persons from the Utilities.

   In case this approach is accepted, the Consultants will facilitate the arrangement

e) The USAID in collaboration with the Ministry of Power (MoP), GoI has developed several standard training courses under the program DRUM, for enhancing the knowledge and experience of distribution engineers, managers and technicians. These courses are delivered by Indian training institutional partners. Instead of drawing curriculum and locating resource persons, it is recommended to tie up with one such Institution –say CENPIED of NDPL or Reliance Mgmt Institute of Reliance Power.

f) For some training themes that require in-depth practical experience and case studies such as course on 'operational and commercial imperatives of working as separate entities'; or course on 'Franchising', 'road map for loss reduction' etc., small but specialized boutique consultancies are far more effective as a resource. Accordingly, Feedback Ventures work in the area of Franchising or Dhiya consulting Group for ARR filings & Regulatory Accounting; 'Shrica Excellence' in developing trainer competencies & HR courses has been recommended.

V DESCRIPTION OF QUALITY ASSURANCE PROCESS FOR CAPACITY BUILDING COURSES

Training Courses will need to be subjected to a rigorous quality assurance process to ensure:

- Training meets the needs of the Utilities and is of quality
- The benefits of the course are harnessed, and
- The learning that takes place gets institutionalized

A system of regular evaluation and review will ensure training is updated to reflect the changing requirements and is relevant. The quality assurance **recommended here requires certain processes and systems to be implemented; the same is needed at the three stages discussed below:**

- **Pre-Course Stage**
  - Quality Assurance process starts with *setting clear objectives or takeaways* from the Course (what will be achieved at the end of the course –e.g. enhancing understanding level; developing a competency, building a skill–conceptual or practical etc.). If the objectives remain vague, it reflects through all subsequent stages of the course.
  - The needs and objectives of the course essentially then drive the *design and detailed agenda of the course* and determining the target audience. The key message that is intended must be articulated and built- into the content of the sessions.
  - The Course material based on the course outline, next needs to be identified/ developed.
  - The process of making nominations is of utmost importance**.** It is vital to establish link between training with HR subsystems such as promotion, career planning, and transfer, etc. Further, individual training and development plan should form an integral part of the annual performance appraisal system, once such a system is introduced. In other words, the process of identifying performance gaps becomes part of the performance management system.

One of basic requirements is a data base on current skill levels/experience details, for the employees. Absence of this comes in the way of nominating right persons for the training

Training Policy to also address issues such as compulsory service in the function in which trained before transfer; nominations of those with less than 1.5 /2 years service left before retirement may not be considered.

- **During the Course**

On accepting participants/target audience who meet the criteria in terms of level and functions, other important processes relate to maintaining discipline of timely reporting; attending all sessions, etc.

A participant level feedback on quality of the course; faculty input; relevance; pedagogy; administration logistics, key learning; etc. are documented. Feedback form at Annex VII 5.

- **Post Course Stage**

Apart from feedback, the courses is also a mechanism

  - During number of in-house courses, the sessions result in a number of new ideas getting created, often recommendations will emerge relating to improvement in a system/function, new approaches, etc. There must be systems and processes to capture all this and document the same and disseminate it to concerned groups and stake holders.
  - While feedback provides assessment of quality of course, coverage, relevance, etc., it is very important to measure the impact of the course at Department.
  - Measurement forms an integral part of the training. The development of managers cannot be deemed to have taken place unless it results in identifiable changes in the role/behaviour/skill levels of the participants.

It is important to recognize that it is not enough to train individuals. It is equally important to develop mechanisms- so that the capacity is maintained and enhanced once in place. It is vital to build strong foundations: structures and systems within which the individuals can work effectively and use the skills acquired.

VI IMPLEMENTATION OF THE CAPACITY BUILDING PLAN

From August 2011 to March 2012, the team implemented all the short-term capacity building activities recommended in this plan. The initiatives were delivered in two different ways. On one hand, the consultancy team members performed specific workshops for the company staff. On the other hand, the consultant hired external experts to come to Assam to deliver the contents of the course. Finally, a study tour was performed to NDPL in Delhi were selected ASEB's managers met relevant NDPL's staff to discuss about how to optimize the management of the successor companies in Assam.

Details of the materials can be found in the volume labelled 'Training Activities and Workshop Materials'.

VII ANNEX

1. INDEPENDENT NEEDS AND TRAINING COURSES FOR EACH OF THE THREE UTILITIES

1.1. GENERATION (APGCL)

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
OPERATIONS											
1	Planning	1. Preparation of annual and five year plans for the organization (APGCL)	Avail.	CGM	HQ	Planning	Seminar in-house	In house training with guest speakers from State Planning/Finance Departments	40	MT	G.4
		2. Preparation of annual maintenance plans including special repairs, rehabilitation and modernization.		GM/DGM/SM							
2	Financial Management	1. Assessment of techno-economic feasibility of proposed new projects	Avail.	CGM, GM /DGM	HQ	Financial Management	Seminar in-house	Capacity Building Project Team (Finance Experts)	40	MT	G.5
		2. Assessment of economic viability of proposed R&M measure									
3	Performance Monitoring /MIS	1. Development of progress reports for performance monitoring - daily, weekly, monthly, and annual at plant and HQ level.	Avail.	CGM	HQ/ Plant	Performance Monitoring	Seminar in-house	1. In house training	40	ST	G.1
		2. Completion of performance monitoring reports.		GM/DGM/SM				2. Capacity Building Project Team			
4	Monitoring Tools	1. Training in operation of monitoring tools like Primevera.	Avail.	Managers/ Computer Operators	HQ	Monitoring Tools	Seminar Away	Software suppliers	80	ST	G.2
5	Latest	1. Knowledge and development of	Avail.	CGM	HQ	Advances in	Seminar	External Institution	40	MT	G.6

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
	advances in construction and operation techniques	capacity to take advantage of latest advances in construction and operation techniques.		GM/DGM/SM		construction and operation techniques	Away	NTPC / BHEL / Consultancy organizations			
6	Maintenance planning and management; Enhancing operational efficiency; Improving auxiliary consumption, plant availability and PLF	1. Understanding critical issues in the operation of thermal and hydro - electric plants. 2. Improving capacity of managers to take on-the-spot decisions to resolve critical issues. 3. Improving capacity of managers to initiate measures (including innovative measures) to enhance efficiency 4. Understanding and implementing measures to improve efficiency and economy in operation. 5. Learning to be vigilant to prevent accidents / damage to equipment.	Avail.	1. GM/ DGM/ SM	HQ	Maintenance Planning and Management	1. Training for Trainers (Seminar Away)	External Institution NTPC / BHEL / Consultancy organizations	40	ST	G.3
				2. Operators /Technicians	Plant		2. Seminar in-house	Training delivered by Trained Trainers	80	MT	G.3
7	Inventory Management; Spare Parts Management;	1. Understanding and implementing policies for inventory and spare parts management	Avail.	SM/Managers, Store Keepers	Plant	Inventory Management	Seminar in-house	1. In house training 2. Capacity Building Project Team	40	MT	G.7
8	Procurement	1. Understanding and implementing procurement procedures.	Avail.	GM/DGM	Plant	Procurement	Seminar in-house	In-house training / Capacity Building Project Team	24	MT	G.8
9	Vendor Development	1. Encourage procurement from list of approved vendors maintained at HQ 2. Judicially assess performance of vendors to record in vendor register.	Avail.	SM/Managers, Store Keepers	Plant	Vendor development	Seminar in-house	In-house training	24	LT	G.10

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
10	Dispute resolution	1. Understand laws relating to industrial disputes 2. Ability to understand, sympathise with and take action to remove workers grievances. 3. Ability to take corrective action to resolve disputes in initial stages.	Recruit: 1. Labour Officer (experienced) - One 2. Labour Inspectors - Three	GM/DGM/SM/Manager/Workers union representatives	HQ Plant	Dispute Resolution	Seminar in-house	In-house training with guest speakers from State Labour Department	40	LT	G.11
11	Fuel Procurement	1. Understanding gas production, transportation, compression, supply, quality, composition, heat value, measurement etc. 2. Understanding agreement of supply and transportation of gas	Avail.	GM/DGM	HQ	Fuel Procurement	Seminar in-house	In-house training with guest speakers from Gas Supplying Companies	16	LT	G.12
12	Environment, health and safety	1. Understanding environment / pollution control guidelines and take steps for their implementation and monitoring. 2. Understanding health and safety requirements and taka steps for implementation and monitoring.	Avail.	DGM/SM/ Managers	Plant	Environment health and safety	Seminar in-house	In-house training with guest speakers from State Pollution Control Board/Department of Health	40	MT	G.9
CAPACITY INVESTMENT AND BUSINESS PLAN											
1	Capital Investment Planning	Data Gathering & Updating Load Forecasting; Performance Assessment/Audit of Plant, Distribution & Transmission Systems vs. Standards; Project Formulation or Generation of Alternative Solutions to Problems; Identification of Best Solutions to Problems	Avail. @APDCL, APGCL Unclear @ AEGCL	Engineering and Select Key Finance Staff of 3 utilities	HQ, Plant Substations	Seminar-Workshop on Capital Investment Planning	Practical assistance - Trainees to be guided in the preparation of their capital investment	External experts	At least 3 man-months for each utility or 396 hours	MT	CI&BP.1

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
							plans through lectures and laboratory exercises. Training for Trainers & Seminar-Away				
2	Business Planning	Environment mapping (SWOT, market and policy/regulatory environment assessment); formulation of business goals & objectives; operations planning; financial planning; development of performance monitoring systems	Avail.	Senior Executives & Top Management of 3 utilities	HQ, Plant Substations, Regions	Seminar-Workshop on Business Planning	Practical assistance - Trainees to be guided in improving their business plans through lectures and laboratory exercises.	External Experts	At least 1 man-month for each utility or 66 hours	MT	CI&BP.2
FINANCE											
1	Financial Risk Management	Identification of Risks	Avail.	DGM, GM, CGM of Finance Deptt	HQ	Training on Risk Management	Seminar-in-House	External Institutions like NDPL, NPTI etc.	3 hours per day @ 6 days or 18 hours	MT	F.1
		Analysis of Risks	Avail.	DGM, GM, CGM of Finance Deptt	HQ						
		Strategy and Action Plan to mitigate risks	Avail.	DGM, GM, CGM of Finance Deptt	HQ						

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
2	Budget Management System	Zero based budgeting; Budget Variance Analysis	Avail.	DGM, Sr Manager	HQ	Workshop on Budget Management	Seminar-in-House	External Experts	3 hours per day @2 days or 6 hours	MT	F.2
3	Working Capital Management	Management of Cash and Other Current Assets; Debt Management; Bank management Understanding and complying with AERC norms	Avail.	CGM (Finance) and other Senior Finance Officials in Divisions, Circles, Zones	HQ	Workshop on Working Capital Management	Seminar-in-House	External Finance Experts	3 hours per day @2 days or 6 hours	ST	F.3
4	Inventory Management	Basics of Inventory Management; Inventory Management Techniques including ERP	Avail.	All employees in Subdivisions (APDCL), Stores (All three Utilities) and Finance	HQ	Programme on Inventory Management	Seminar-in-House	External Experts	3 hours per day @ 6 days or 18 hours	Long Term	F.4
ACCOUNTING											
1	Legal Compliances	Compliance with Schedule VI of the 1956 Companies Act	Avail.	GM, DGM, AGM, Senior AO & AO Accounts Dept; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Legal Compliances	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	ST	A.1
2	Seminar on Convergence to IFRS	Compliance with IFRS	Avail.	GM and AO from each utility. Must be Chartered Accountants	Seminar away	Seminar on Convergence to IFRS	Seminar away	Institute of Chartered Accountants of India and Institute of Cost and Works Accountan of India	40 hours	MT	A.2

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
3	Control and Monitoring System	Internal Audit, Internal Control and Internal Audit Committee	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Control and Monitoring Systems	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.3
4	Accounting Documents	Development and maintenance of accounting manuals, chart of account, monthly reporting systems, subsidiary and control books among others	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Accounting Documents	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	ST	A.4
5	Work and Accounting Classifications	Control of capital work in progress and accounting for capital and deferred revenue expenditures	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on CWIP and Accounting Classifications	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.5
6	Costing	Maintenance of Costing Records and Cost Audit	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Cost Audit and Maintenance of Costing Records	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.6
7	Inventory Control	Accounting & Control of Inventory	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Inventory Accounting & Control	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.7

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
8	Internal Audit and Reviews and Proprietary Audit	Internal Audit and Reviews and Proprietary Audit	Avail.	2 Executive Officers from each of the accounts department of the zones, circles and divisions of the 3 utilities	Zones	Training on Internal Audit and Reviews and Proprietary Audit	Zones	Training Institute of the Principal Accountant-General of Assam	9 hours@ days or 18 hours at each zone (tentative)	MT	A.8
HUMAN RESOURCES											
1	Develop and establish 'Human Resources Steering Committee (HRSC)'	• To inculcate an appreciation of key HR issues & priorities in the 3 utilities & action Plans needed • to understand the approach & road map to Implementation of action plans • Effective functioning of HRSC	Avail.	Team members constituted by the Mgmt. (Chairperson, CGM HR, HR from the three Utilities)	Corp Office/PMU	HRSC HR Orientation	In – house Seminar	CB Project Team	1 day	ST	HR. 1
2	Enhancing Capacity of HR Functionaries at the Field level	Greater understanding of HR of HR & Relations, as applicable at field/ Plant level	Avail.	**Engrs. in the Field working in HR. with no prior HR training** (20-25 participants)	From 3 utilities . Working at Power stations , APDCL-Circles/ Divisions	Enhancing Capacity of HR Functionaries	In-house Course	External: Power Mgmt Inst. or HR & Trg Consultants 'Shrica Excellence'	3- 4 days	ST	HR. 2
3	'Pipeline of HR talent/HR Resource Pool'- As part of building HR function - HR professionals to	Providing a perspective of power sector, & HR challenges in the context of the utilities, so that they can contribute as 'HR resource pool'	NIL	Newly recruited HR Professionals for the 3 utilities	From 3 utilities	Induction Level Training Scheme for HR	In-house cum External	Power Mgmt Inst.	4 weeks	ST	HR. 3

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
	be recruited at induction levels and trained for the 3 utilities										
4	Developing internal training resources for: a. Managing Training courses b. Developing internal training resources for Training Delivery	To build necessary skill sets for effectively managing the training courses and delivery of training	Avail. but to be ident.	To be identified from Generation, Tran., Distribution, Finance	Corporate Functions & Field	Training of Internal Resources (as Trainers & Mgrs of Courses)	In-house	*Shrica Excellence* Consultants	5 days	MT	HR. 4
6	General Management Course (for transition points in career –Sr. Manager to DGM)	To develop relevant competencies related to enhanced role, linked to promotions	Avail.	Senior Managers with more than one year experience in their current position and who are eligible to be considered for next level-DGM.	All three Utilities	General Management Course (Career Linked Training Intervention)	External	ASCI /Power Mgmt Inst/Reliance Mgmt Inst; CENPIED	6 days	MT	HR. 6
INFORMATION TECHNOLOGY											
1	Role of IT for Power Sector	Awareness on the importance of IT for empowering the Power Utilities	Avail.	CGM (Zones)/ DGM (Circles)	Headquarter	Workshop on IT Best Practices in Power Utilities	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NDPL etc	2 X 8 hrs	ST	I.1

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
3	MS - Office and Messaging System basics	Improvement of IT Usage	Avail.	Graduate Engineers Trainees (new Joinees)	Headquarters/ Division /Sub-Divisions	Training on MS - Office and Mail Messaging System	Seminar - Away	External Institutions like NDPL etc	3 X 8 hrs	ST	I.3
4	Importance of System Security and Business Continuity Planning	Preparation of controls for System Security and Business Continuity	Avail.	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Circle Office/ Division Office	System Security and BCP Planning	Seminar - Away	Capacity Building Project Team	8 hrs	LT	I.4
5	Automatic Metering System Advantages	Understanding the AMR System Advantages	Avail.	DGM (Circles)/ SM (Divisions)/ Manager (Sub - Division)	Circle Office/ Division Office/ Sub-Division	Program on Meter Data Acquisition and Meter data Analysis processes	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	ST	I.5
6	Importance and components of ERP for a Power Utility	Understanding the ERP Components for support processes of a Utility	Avail.	CGM (Zones)/ DGM (Circles)	Headquarter	Program on Enterprise Resource Planning System	Seminar - Away	External Institutions like NPTI, NDPL etc	8 hrs	ST	I.6
CORPORATE ISSUES											
Regulatory Affairs Group in the Utilities											

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	-	• Understanding of Regulatory requirements & Processes; • Regulatory Accounting, • Tariff methodology, ARR filings • Compliance with regulation for performance standards • Development of internal systems to monitor the performance indices and reporting.	-	Regulatory Affairs Wing	-	Course on Regulatory Requirements & Regulatory Interface	-	-	3 days	MT	-
Needs at Interface levels & Important Imperatives as Separate Entities											
1	-	There is a need for strengthening of Commercial function at the boundaries of exchange such as BPSAs between the APDCL and Generating Companies. Transmission Service Agreements (Bilateral or Multi-lateral) • Business Plans for each utility for the next 5 years (including capex plans) • Ring fencing of Accounts • Transmission to look after grid operation as a ring fenced activity	-	GMS, CGMS, Sr. Executives from Commercial, Finance functions	-	Operational, Managerial & Commercial imperatives as separate entities	-	-	2 days	MT	-
Needs arising from Higher Level Issues											
1	-	Economic aspects & technical feasibility of power projects; Fuel supply and pricing, case studies in power project development. – Timely execution & commissioning of the proposed capital investment projects.	-	Executives from Planning Groups	-	Course on Power Project Development & Capacity Expansion	-	-	3 days	MT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
4	-	To upgrade the knowledge about critical issues in the tendering – bid invitation, evaluation of tenders, award of contracts and arbitration. The course will include Performance of contract and consequences of non-performance of contract; Claims and Disputes; Post award function in Contracts; Arbitration	-	Executives handling Contract packaging & implementation in the 3 utilities	-	Contracts Management	-	-	4 days	MT	-
5	-	Policy of Assam Govt; discussions on potential using locally available renewable resources; all aspects of viability and long term sustainability of DG projects; detail case studies on experience in India+ visit States with experience of RE	-	Planning Department	-	Renewable based distributed generation	-	-	2 days	LT	-
General Management, Functional Mgmt., Cross functional											
1	-	To enhance understanding of financial aspects of decision making Analysis &Interpretation of financial statements which reflect biz results; financial indicators of performance; economics of capital investment for decision making; analysing cost information for cost reduction and cost control; managing working capital for optl. efficiency; budget & mgmt control systems	-	Senior Mangers and above, in the three Utilities	-	Finance For Managerial Decision Making	-	-	4 days	MT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
2	-	• Scanning the Environment; key policy provisions at national and state level and its implication • Strategic planning & Management; • Finance; analyzing financial statements; cost management strategies; Working capital mgmt • Leadership; • Organization building; • HRM & Development Marketing; customer orientation-internal & external • O&M (strategy & achieving excellence through benchmarking)	-	GMS, CGMS From the 3 utilities	-	General Management Course	-	-	6 days	MT	-
3	-	Building commitment & performance culture; Performance Management; Coaching skills; Managing & developing human resources; HR Challenges & new orientations in work culture as business entities, with enhanced accountability, customer orientation etc.; philosophy of outsourcing;	-	Department Heads in the three utilities	-	HR for Line Personnel	-	-	3 days	MT-LT	-
4	-	Mentoring & Counselling Team Leadership Empowerment Motivating environment	-	-do-	-	Motivation & Empowerment	-	-	2 days	MT	-
5	-	Performance Contracts; Supervising Performance; partnership; MIS /Maintaining Documentation	-	At Senior levels –for those who will take decisions on outsourcing; and Middle Level executives for Supervision of the Contracts	-	Managing Outsourcing:	-	-	1-1/2 days	ST-MT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
6	-	Across the 3 entities- as a basic development intervention. Top down & bottoms up-a common language 7 Quality Tools. Implementing QC	-	For all employees of all three utilities Plan for covering entire population	-	Quality Orientation Program	-	-	1-1/2 days	ST-MT	-
7	-	Focussed interactions on specific processes and practices linked to performance Improvement, along with classroom sessions & field visits. This would be an opportunity to study best practices and benchmarks	-	Planned interventions for teams, from the three utilities These could be for multi-level teams (Sr Execs. to Operators)	-	Study Visit(s) to other Utilities: Planned interventions	-	-	5 days	LT	-

1.2. TRANSMISSION (AEGCL)

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
OPERATIONS											
1(a)	Planning of System strengthening & system expansion	1. Long term load forecasting & Annual load forecasting 2. System studies. 3. Substation & Transmission line designs. 4. Assessment of techno-economic feasibility of proposed new projects both for system strengthening and system expansion 5. Assessment of economic viability of R&M Proposals	Ext.l Entry	1. C.G.M. 2. G.M. 3. D.G.M. 4. S.M. & MANAGER	HQ	Long Time Load fore casting	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad. c) PRDC Bangalore	3-Days 21 Hrs @ 7 Hrs per day	ST	T.1
						Power System Studies"Hands on" using soft ware	a) Seminar-in-House as in House Talent is available. b) Provision is available for such Free Training programmes by Soft ware supplier under AMC @ soft ware supplier's Place	a) Capacity Building Project Team. b) PRDC Bangalore - The supplier of Mi-power soft ware. Free annual Training as per AMC	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.2
						Substation Design & Engineering	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.3
						Transmission line design & Engineering	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.4
1 (b)	Annual & Five Year Plan	Preparation of annual and five year plans for the AEGCL	In-House Train.	1. G.M. 2. D.G.M. 3. S.M. &	HQ	DPR preparation & Budget proposal	Seminar-in-house	In-house training with guest speakers from State Planning/Finance	3-Days21 Hrs @ 7 Hrs per	ST	T.5

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
				MANAGER		preparation		Departments	day		
2	System protection & protection co-ordination	1. Power system protection. 2. Testing & commissioning of substations. 3. Failure analysis of the Equipment. 4. Condition Monitoring & RLA	External Entry	1. DGM 2. S.M. 3. Manager. 4. A.M.	HQ	System protection & Protection coordination.	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad. c) PRDC Bangalore	One Week- 6 days - 42 Hrs @ 7Hrs per day	ST	T.6
						Testing & Commissioning of New substations.	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	3-Days 21 Hrs @ 7 Hrs per day	ST	T.7
						CONDITION MONITORING & RLA	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad. c) PRDC Bangalore	One Week- 6 days - 42 Hrs @ 7Hrs per day	ST	T.8
						New Type of Relays	Seminar Away	Relay manufacturer's / Relay suppliers Units	3-Days 21 Hrs @ 7 Hrs per day	ST	T.9
3	Procurement	1. Process Improvement in Procurement including **"E-Tendering".** 2. Vender development	Ext. Entry	1. DGM. 2. S.M. 3. Manager	HQ	Procurement	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	3-Days 21 Hrs @ 7 Hrs per day	ST	T.10
4	Construction / Execution	1. Project management. 2. Latest Techniques in construction/Execution. 3. Environmental & social impact assessment practices. 4. Inventory & spares Management. 5. Project Execution & commissioning. 6.Health and safety of	Ext. Entry	1. DGM 2. S.M. 3. Manager 4. A.M.	HQ and Field staff	Project Management & Monitoring	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	2-Days 14 Hrs @ 7 Hrs per day	ST	T.11
						Project's detailed execution procedures (Substations &	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	ST	T.12

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
		execution staff				Transmission Lines)					
5(a)	O&M of Transmission system	1. Substations maintenance. 2. Transmission lines maintenance including Hot Line Techniques. 3. Enhancing the Transmission system Availability. 4. Safety Procedures. 5. Improving capacity of managers to take on-the-spot decisions to resolve critical issues during emergencies	Ext. Entry	1. DGM. 2. S.M.	HQ	Operation & Maintenance of Transmission lines & substations	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	ST	T.13
5(b)			Seminar in-house by Trainers who obtained Training as per 5(a)	1. Manager 2. A.M. 3. Technicians 4. Mechanics	Field staff		Seminar-in-house	By the trainers as per Sl No-13(a)	One Week- 6 days - 42 Hrs @ 7Hrs per day	ST	T.14
5(c)		Hot Line maintenance	Ext. Entry	1. Manager 2. A.M. 3. Technicians. 4. Mechanics	Field staff	Hot Line Training programme	Seminar Away	Hot Line Training Institute of CEA Bangalore	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	ST	T.15
6	SLD operations	Power System Operations	Ext. Entry	1. DGM 2. S.M. 3. Manager. 4. A.M.	SLD Guwahathi	Power system Operations of State Load dispatch Centre	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	ST	T.16
7	Regulatory Affairs	All Matters pertaining to Regulatory Affairs	Ext. Entry	All Regulatory affairs staff of AEGCL	HQ	Regulatory Affairs	Seminar Away	a) NPTI /PSTI Guwahathi & Bangalore b) ESCI Hyderabad.	One Week- 6 days - 42Hrs @ 7Hrs per day	ST	T.17
CAPACITY INVESTMENT AND BUSINESS PLAN											

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	Capital Investment Planning	Data Gathering & Updating Load Forecasting; Performance Assessment/Audit of Plant, Distribution & Transmission Systems vs. Standards; Project Formulation or Generation of Alternative Solutions to Problems; Identification of Best Solutions to Problems	Avail. @APDCL,APGCL Unclear @ AEGCL	Engineering and Select Key Finance Staff of 3 utilities	HQ, Plant Substations	Seminar-Workshop on Capital Investment Planning	Practical assistance - Trainees to be guided in the preparation of their capital investment plans through lectures and laboratory exercises. Training for Trainers & Seminar-Away	External experts	At least 3 man-months for each utility or 396 hours	MT	CI&BP.1
2	Business Planning	Environment mapping (SWOT, market and policy/regulatory environment assessment); formulation of business goals & objectives; operations planning; financial planning; development of performance monitoring systems	Avail.	Senior Executives & Top Management of 3 utilities	HQ, Plant Substations, Regions	Seminar-Workshop on Business Planning	Practical assistance - Trainees to be guided in improving their business plans through lectures and laboratory exercises.	External Experts	At least 1 man-month for each utility or 66 hours	MT	CI&BP.2
FINANCE											
1	Financial Risk Management	Identification of Risks	Avail.	DGM, GM, CGM of Finance Deptt	HQ	Training on Risk Management	Seminar-in-House	External Institutions like NDPL, NPTI etc.	3 hours per day @ 6 days or 18 hours	MT	F.1
		Analysis of Risks	Avail.	DGM, GM, CGM of Finance Deptt	HQ						
		Strategy and Action Plan to mitigate risks	Avail.	DGM, GM, CGM of Finance	HQ						

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
				Deptt							
2	Budget Management System	Zero based budgeting; Budget Variance Analysis	Avail.	DGM, Sr Manager	HQ	Workshop on Budget Management	Seminar-in-House	External Experts	3 hours per day @2 days or 6 hours	MT	F.2
3	Working Capital Management	Management of Cash and Other Current Assets; Debt Management; Bank management Understanding and complying with AERC norms	Avail.	CGM (Finance) and other Senior Finance Officials in Divisions, Circles, Zones	HQ	Workshop on Working Capital Management	Seminar-in-House	External Finance Experts	3 hours per day @2 days or 6 hours	ST	F.3
ACCOUNTING											
1	Legal Compliances	Compliance with Schedule VI of the 1956 Companies Act	Avail.	GM, DGM, AGM, Senior AO & AO Accounts Dept; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Legal Compliances	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	ST	A.1
2	Seminar on Convergence to IFRS	Compliance with IFRS	Avail.	GM and AO from each utility. Must be Chartered Accountants	Seminar away	Seminar on Convergence to IFRS	Seminar away	Institute of Chartered Accountants of India and Institute of Cost and Works Accountants of India	40 hours	MT	A.2

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
3	Control and Monitoring System	Internal Audit, Internal Control and Internal Audit Committee	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Control and Monitoring Systems	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.3
4	Accounting Documents	Development and maintenance of accounting manuals, chart of account, monthly reporting systems, subsidiary and control books among others	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Accounting Documents	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	ST	A.4
5	Work and Accounting Classifications	Control of capital work in progress and accounting for capital and deferred revenue expenditures	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on CWIP and Accounting Classifications	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.5
6	Costing	Maintenance of Costing Records and Cost Audit	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Cost Audit and Maintenance of Costing Records	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.6

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
7	Inventory Control	Accounting & Control of Inventory	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Inventory Accounting & Control	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.7
8	Internal Audit and Reviews and Proprietary Audit	Internal Audit and Reviews and Proprietary Audit	Avail.	2 Executive Officers from each of the accounts department of the zones, circles and divisions of the 3 utilities	Zones	Training on Internal Audit and Reviews and Proprietary Audit	Zones	Training Institute of the Principal Accountant-General of Assam	9 hours@ days or 18 hours at each zone (tentative)	MT	A.8
HUMAN RESOURCES											
1	Develop and establish 'Human Resources Steering Committee (HRSC)'	• To inculcate an appreciation of key HR issues & priorities in the 3 utilities & action Plans needed • To understand the approach & road map to Implementation of action plans • Effective functioning of HRSC	Avail.	Team members constituted by the Mgmt. (Chairperson, CGM HR, HR from the three Utilities)	Corp Office/PMU	HRSC HR Orientation	In – house Seminar	CB Project Team	1 day	ST	HR. 1
2	Enhancing Capacity of HR Functionaries at the Field level	Greater understanding of HR of HR & Relations, as applicable at field/ Plant level	Avail.	**Engrs. in the Field working in HR. with no prior HR training**	From 3 utilities. Working at Power	Enhancing Capacity of HR Functionaries	In-house Course	External: Power Mgmt Inst. or HR & Trg Consultants 'Shrica Excellence'	3- 4 days	ST	HR. 2

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
				(20-25 participants)	stations, APDCL-Circles/ Divisions						
3	'Pipeline of HR talent/HR Resource Pool'- As part of building HR function - HR professionals to be recruited at induction levels and trained for the 3 utilities	Providing a perspective of power sector, & HR challenges in the context of the utilities, so that they can contribute as 'HR resource pool'	NIL	Newly recruited HR Professionals for the 3 utilities	From 3 utilities	Induction Level Training Scheme for HR	In-house cum External	Power Mgmt Inst.	4 weeks	ST	HR. 3
4	Developing internal training resources for: a. Managing Training courses b. Developing internal training resources for Training Delivery	To build necessary skill sets for effectively managing the training courses and delivery of training	Avail. but to be identified	To be identified from Generation, Tran., Distribution, Finance	Corporate Functions & Field	Training of Internal Resources (as Trainers & Mgrs of Courses)	In-house	*Shrica Excellence* Consultants	5 days	MT	HR. 4
6	General Management Course (for transition points in career –Sr. Manager to DGM)	To develop relevant competencies related to enhanced role, linked to promotions	Avail.	Senior Managers with more than one year experience in their current position and who are	All three Utilities	General Management Course (Career Linked Training Intervention)	External	ASCI /Power Mgmt Inst/Reliance Mgmt Inst; CENPIED	6 days	MT	HR. 6

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
				eligible to be considered for next level-DGM.							
INFORMATION TECHNOLOGY											
1	Role of IT for Power Sector	Awareness on the importance of IT for empowering the Power Utilities	Avail.	CGM (Zones)/ DGM (Circles)	HQ	Workshop on IT Best Practices in Power Utilities	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NDPL etc	2 X 8 hrs	ST	I.1
3	MS - Office and Messaging System basics	Improvement of IT Usage	Avail.	Graduate Engineers Trainees (new Joinees)	HQ /Division/Sub-Divisions	Training on MS - Office and Mail Messaging System	Seminar - Away	External Institutions like NDPL etc	3 X 8 hrs	ST	I.3
4	Importance of System Security and Business Continuity Planning	Preparation of controls for System Security and Business Continuity	Avail.	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Circle Office/ Division Office	System Security and BCP Planning	Seminar - Away	Capacity Building Project Team	8 hrs	LT	I.4
5	Automatic Metering System Advantages	Understanding the AMR System Advantages	Avail.	DGM (Circles)/ SM (Divisions)/ Manager (Sub-Division)	Circle Office/ Division Office/ Sub-Division	Program on Meter Data Acquisition and Meter data Analysis processes	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	ST	I.5
6	Importance and components of ERP for a Power Utility	Understanding the ERP Components for support processes of a Utility	Avail.	CGM (Zones)/ DGM (Circles)	HQ	Program on Enterprise Resource Planning System	Seminar - Away	External Institutions like NPTI, NDPL etc	8 hrs	ST	I.6
CORPORATE ISSUES											

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
Regulatory Affairs Group in the Utilities											
1	-	• Understanding of Regulatory requirements & Processes; • Regulatory Accounting, • Tariff methodology, ARR filings • Compliance with regulation for performance standards • Development of internal systems to monitor the performance indices and reporting.	-	Regulatory Affairs Wing	-	Course on Regulatory Requirements & Regulatory Interface	-	-	3 days	MT	-
Needs at Interface levels & Important Imperatives as Separate Entities											
1	-	There is a need for strengthening of Commercial function at the boundaries of exchange such as BPSAs between the APDCL and Generating Companies. Transmission Service Agreements (Bilateral or Multi-lateral) • Business Plans for each utility for the next 5 years (including capex plans) • Ring fencing of Accounts • Transmission to look after grid operation as a ring fenced activity	-	GMS, CGMS, Sr. Executives from Commercial, Finance functions	-	Operational, Managerial & Commercial imperatives as separate entities	-	-	2 days	MT	-
Needs arising from Higher Level Issues											
1	-	Economic aspects & technical feasibility of power projects; Fuel supply and pricing, case studies in power project	-	Executives from Planning Groups	-	Course on Power Project Development & Capacity	-	-	3 days	MT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
		development. – Timely execution & commissioning of the proposed capital investment projects.				Expansion					
3	-	Transmission project planning, scheduling and implementation; Project management software; Transmission Project case Example	-	Project Development Planning Department & Execution Group of AEGCL	-	Project Formulation; Management & Execution (AEGCL):	-	-	4 days	LT	-
4	-	To upgrade the knowledge about critical issues in the tendering – bid invitation, evaluation of tenders, award of contracts and arbitration. The course will include Performance of contract and consequences of non-performance of contract; Claims and Disputes; Post award function in Contracts; Arbitration	-	Executives handling Contract packaging & implementation in the 3 utilities	-	Contracts Management	-	-	4 days	MT	-
5	-	Policy of Assam Govt; discussions on potential using locally available renewable resources; all aspects of viability and long term sustainability of DG projects; detail case studies on experience in India+ visit States with experience of RE	-	Planning Department	-	Renewable based distributed generation	-	-	2 days	LT	-
General Management, Functional Mgmt., Cross functional											

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	-	To enhance understanding of financial aspects of decision making Analysis &Interpretation of financial statements which reflect biz results; financial indicators of performance; economics of capital investment for decision making; analysing cost information for cost reduction and cost control; managing working capital for optl. efficiency; budget & mgmt control systems	-	Senior Mangers and above, in the three Utilities	-	Finance For Managerial Decision Making	-	-	4 days	MT	-
2	-	• Scanning the Environment; key policy provisions at national and state level and its implication • Strategic planning & Management; • Finance; analyzing financial statements; cost management strategies; Working capital mgmt • Leadership; • Organization building; • HRM & Development Marketing; customer orientation-internal & external • O&M (strategy & achieving excellence through benchmarking)	-	GMS, CGMS From the 3 utilities	-	General Management Course	-	-	6 days	MT	-
3	-	Building commitment & performance culture; Performance Management; Coaching skills; Managing & developing human resources;	-	Department Heads in the three utilities	-	HR for Line Personnel	-	-	3 days	MT-LT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
		HR Challenges & new orientations in work culture as business entities, with enhanced accountability, customer orientation etc.; philosophy of outsourcing;									
4	-	Mentoring & Counselling Team Leadership Empowerment Motivating environment	-	-do-	-	Motivation & Empowerment	-	-	2 days	MT	-
5	-	Performance Contracts; Supervising Performance; partnership; MIS /Maintaining Documentation	-	At Senior levels –for those who will take decisions on outsourcing; and Middle Level executives for Supervision of the Contracts	-	Managing Outsourcing:	-	-	1-1/2 days	ST-MT	-
6	-	Across the 3 entities- as a basic development intervention. Top down & bottoms up-a common language 7 Quality Tools. Implementing QC	-	For all employees of all three utilities Plan for covering entire population	-	Quality Orientation Program	-	-	1-1/2 days	ST-MT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
7	-	Focussed interactions on specific processes and practices linked to performance Improvement, along with classroom sessions & field visits. This would be an opportunity to study best practices and benchmarks	-	Planned interventions for teams, from the three utilities These could be for multi-level teams (Sr Execs. to Operators)	-	Study Visit(s) to other Utilities: Planned interventions	-	-	5 days	LT	-

1.3. *DISTRIBUTION (APDCL)*

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
OPERATIONS											
1	Focus on AT&C Loss Reduction	Understanding significance of various Loss Reduction Methods	Avail.	CGM (Zones)/ DGM (Circles)	Headquarter	Programme on AT&C Loss Reduction Best Practices	Seminar In-House	Capacity Building Project Team	8 hrs	ST	D.1
2	Data Analysis for bulk consumer meters	Data Analysis for downloaded data against bulk consumer meters	Avail.	Managers/ Asstt Managers/ Junior Engineers	Headquarters/ Division/Testing Department	Workshop on Meter Data Analysis	Seminar Away: Best Practicing Distribution Utilities	External Institutions like SEMS, NDPL etc	2 X 8 hrs	ST	D.2
3	Focus on Network Planning	Understanding significance of Analysis of Network and Network	Avail.	CGM (Zones)/ DGM (Circles)/ SM(Divisions)	Headquarters/ Division/Sub-Divisions	Programme on Network Planning	Seminar Away: Best Practicing	External Institutions like NDPL	2 X 8 hrs	ST	D.3

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
		Planning					Distribution Utilities	etc			
4	Focus on Revenue Cycle Management	Meter Reading and Billing System Improvement	Avail.	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Headquarters/ Division/Sub-Divisions	Programme on Revenue Cycle Management	Seminar In-House	Capacity Building Project Team	4 hrs	ST	D.4
5	Focus on Energy Accounting	Understanding significance of Energy Accounting	Avail.	CGM (Zones)/ DGM (Circles)	Headquarter	Programme on Energy Accounting	Seminar In-House	Capacity Building Project Team	4 hrs	ST	D.5
6	Change Management	Management of changes in Distribution Process Improvement	Avail.	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Circle Office/Division Office	DRUM (Distribution Reform under US Aid) Programme on Change Management	Seminar Away: Training Program advised by Ministry of Power	External Institutions like NPTI, NDPL etc	5 X 8 hrs	MT	D.6
7	Application of GIS in Power Distribution	Understanding GIS based initiatives in Commercial, Network Planning and Asset Mapping for RAPDRP	Avail.	DGM (Circles)/ SM (Divisions)/ Manager (Sub-Division)	Circle Office/Division Office/ Sub-Division	Programme on GIS	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	MT	D.7
8	Distribution System O&M, SCADA, DMS, OMS	Understanding best practices in Distribution System O&M including SCADA, DMS, OMS etc for RAPDRP part A and B	Avail.	SM (Divisions)/ Manager (Sub-Division)	Division Office/ Sub-Division	Programme on best practices on Distribution System O&M	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	3 X 8 hrs	MT	D.8
9	Induction Programme for new joinees (GET)	Induction Programme for new joinees, Graduate Engineer Trainees to power distribution best practices	Avail.	Graduate Engineers Trainees (new Joinees)	Headquarters/Division/Sub-Divisions	Induction Programme for new joinees (Graduate Engineers)	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	20 X 8 hrs	MT and LT	D.9

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
10	Distribution Metering	Understanding best practices in metering for power distribution	Avail.	Junior Engineers/ Technicians	Circle Office/Division Office/ Sub-Division	Programme on best practices on Distribution Metering	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	1 X 8 hrs	MT and LT	D.10
11	Induction Programme for Technician Trainees	Induction Programme for Technician Trainees to power distribution best practices	Avail.	Graduate Engineers Trainees (new Joinees)	Headquarters/Division/Sub-Divisions	Induction Programme for new joinees (Technician Trainees)	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	20 X 8 hrs	MT and LT	D.11
12	Safety, Fire Fighting & Disaster Management	Preparedness for disaster management and safety awareness	Avail.	Graduate Engineers / Technicians	Headquarters/Division/Sub-Divisions	Workshop on Safety, Fire Fighting & Disaster Management	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	MT and LT	D.12
CAPACITY INVESTMENT AND BUSINESS PLAN											
1	Capital Investment Planning	Data Gathering & Updating Load Forecasting; Performance Assessment/Audit of Plant, Distribution & Transmission Systems vs. Standards; Project Formulation or Generation of Alternative Solutions to Problems; Identification of Best Solutions to Problems	Avail. @APDCL,APGCL Unclear @ AEGCL	Engineering and Select Key Finance Staff of 3 utilities	HQ, Plant Substations	Seminar-Workshop on Capital Investment Planning	Practical assistance - Trainees to be guided in the preparation of their capital investment plans through lectures and laboratory exercises. Training for Trainers & Seminar-Away	External experts	At least 3 man-months for each utility or 396 hours	MT	CI&BP.1
2	Business Planning	Environment mapping (SWOT, market and policy/regulatory	Avail.	Senior Executives & Top Management of 3	HQ, Plant Substations, Regions	Seminar-Workshop on Business Planning	Practical assistance - Trainees to be	External Experts	At least 1 man-month	MT	CI&BP.2

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
		environment assessment); formulation of business goals & objectives; operations planning; financial planning; development of performance monitoring systems		utilities			guided in improving their business plans through lectures and laboratory exercises.		for each utility or 66 hours		
FINANCE											
1	Financial Risk Management	Identification of Risks	Avail.	DGM, GM, CGM of Finance Deptt	Headquarters	Training on Risk Management	Seminar-in-House	External Institutions like NDPL, NPTI etc.	3 hours per day @ 6 days or 18 hours	MT	F.1
		Analysis of Risks	Avail.	DGM, GM, CGM of Finance Deptt	Headquarters						
		Strategy and Action Plan to mitigate risks	Avail.	DGM, GM, CGM of Finance Deptt	Headquarters						
2	Budget Management System	Zero based budgeting; Budget Variance Analysis	Avail.	DGM, Sr Manager	Headquarters	Workshop on Budget Management	Seminar-in-House	External Experts	3 hours per day @2 days or 6 hours	MT	F.2
3	Working Capital Management	Management of Cash and Other Current Assets; Debt Management; Bank management Understanding and complying with AERC norms	Avail.	CGM (Finance) and other Senior Finance Officials in Divisions, Circles, Zones	Headquarters	Workshop on Working Capital Management	Seminar-in-House	External Finance Experts	3 hours per day @2 days or 6 hours	ST	F.3

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
4	Inventory Management	Basics of Inventory Management; Inventory Management Techniques including ERP	Avail.	All employees in Subdivisions (APDCL), Stores (All three Utilities) and Finance	Headquarters	Programme on Inventory Management	Seminar-in-House	External Experts	3 hours per day @ 6 days or 18 hours	LT	F.4
					ACCOUNTING						
1	Legal Compliances	Compliance with Schedule VI of the 1956 Companies Act	Avail.	GM, DGM, AGM, Senior AO & AO Accounts Dept; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Legal Compliances	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	ST	A.1
2	Seminar on Convergence to IFRS	Compliance with IFRS	Avail.	GM and AO from each utility. Must be Chartered Accountants	Seminar away	Seminar on Convergence to IFRS	Seminar away	Institute of Chartered Accountants of India and Institute of Cost and Works Accountants of India	40 hours	MT	A.2
3	Control and Monitoring System	Internal Audit, Internal Control and Internal Audit Committee	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Control and Monitoring Systems	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.3
4	Accounting Documents	Development and maintenance of accounting manuals, chart of account, monthly reporting	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical	In-house	Seminar-Workshop on Accounting Documents	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 2 days	ST	A.4

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
		systems, subsidiary and control books among others		(total 35)							
5	Work and Accounting Classifications	Control of capital work in progress and accounting for capital and deferred revenue expenditures	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on CWIP and Accounting Classifications	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.5
6	Costing	Maintenance of Costing Records and Cost Audit	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Cost Audit and Maintenance of Costing Records	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.6
7	Inventory Control	Accounting & Control of Inventory	Avail.	GM, DGM, AGM, Senor AO & AO of Accounts Department; GM & DGM Technical (total 35)	In-house	Seminar-Workshop on Inventory Accounting & Control	In-house	Capacity-Building Project Team (BB Jindal)	9 hours including lunch for 1 day	ST	A.7
8	Internal Audit and Reviews and Proprietary Audit	Internal Audit and Reviews and Proprietary Audit	Avail.	2 Executive Officers from each of the accounts department of the zones, circles and divisions of the 3 utilities	Zones	Training on Internal Audit and Reviews and Proprietary Audit	Zones	Training Institute of the Principal Accountant-General of Assam	9 hours@ days or 18 hours at each zone (tentative)	MT	A.8
HUMAN RESOURCES											
1	Develop and establish	• To inculcate an appreciation of key HR	Avail.	Team members constituted by the	Corp Office/PMU	HRSC HR	In – house	CB Project	1 day	ST	HR.

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
	'Human Resources Steering Committee (HRSC)'	issues & priorities in the 3 utilities & action Plans needed • to understand the approach & road map to Implementation of action plans • Effective functioning of HRSC		Mgmt. (Chairperson, CGM HR, HR from the three Utilities)		Orientation	Seminar	Team			1
2	Enhancing Capacity of HR Functionaries at the Field level	Greater understanding of HR of HR & Relations, as applicable at field/ Plant level	Avail.	**Engrs. in the Field working in HR. with no prior HR training** (20-25 participants)	From 3 utilities. Working at Power stations, APDCL - Circles/ Divisions	Enhancing Capacity of HR Functionaries	In-house Course	External: Power Mgmt Inst. or HR & Trg Consultants 'Shrica Excellence'	3- 4 days	ST	HR. 2
3	'Pipeline of HR talent/HR Resource Pool'-As part of building HR function - HR professionals to be recruited at induction levels and trained for the 3 utilities	Providing a perspective of power sector, & HR challenges in the context of the utilities, so that they can contribute as 'HR resource pool'	NIL	Newly recruited HR Professionals for the 3 utilities	From 3 utilities	Induction Level Training Scheme for HR	In-house cum External	Power Mgmt Inst.	4 weeks	ST	HR. 3
4	Developing internal training resources for: a. Managing Training courses b. Developing internal	To build necessary skill sets for effectively managing the training courses and delivery of training	Avail. but to be identified	To be identified from Generation, Tran., Distribution, Finance	Corporate Functions & Field	Training of Internal Resources (as Trainers & Mgrs of Courses)	In-house	*Shrica Excellence* Consultants	5 days	MT	HR. 4

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
	training resources for Training Delivery										
5	Study Visit(s) to other Utilities: Focussed interactions on specific processes and practices linked to performance Improvement, along with classroom sessions& field visits	To develop a firsthand appreciation of and learn about improved processes and practices in other utilities and to inspire exploring/ initiating Improvements on return from study visit.	Avail.	Multi-level Team(s) from Circles of APDCL to well performing Utility, say NDPL	NDPL	Study Visit(s) to Distribution Utility	External	CB Project Team	5 days	ST	HR. 5
6	General Management Course (for transition points in career – Sr. Manager to DGM)	To develop relevant competencies related to enhanced role, linked to promotions	Avail.	Senior Managers with more than one year experience in their current position and who are eligible to be considered for next level-DGM.	All three Utilities	General Management Course (Career Linked Training Intervention)	External	ASCI /Power Mgmt Inst/Reliance Mgmt Inst; CENPIED	6 days	MT	HR. 6
INFORMATION TECHNOLOGY											
1	Role of IT for Power Sector	Awareness on the importance of IT for empowering the Power Utilities	Avail.	CGM (Zones)/ DGM (Circles)	Headquarter	Workshop on IT Best Practices in Power Utilities	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NDPL etc	2 X 8 hrs	ST	I.1

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
2	Role of R-APDRP (Part-A)	Importance of R-APDRP Part-A Scheme for APDCL	Avail.	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Headquarters/Division/Sub-Divisions	Workshop on expectations from R-APDRP (Part-A) Scheme	Seminar In-House	Capacity Building Project Team	4 hrs	ST	I.2
3	MS - Office and Messaging System basics	Improvement of IT Usage	Avail.	Graduate Engineers Trainees (new Joinees)	Headquarters/Division/Sub-Divisions	Training on MS - Office and Mail Messaging System	Seminar - Away	External Institutions like NDPL etc	3 X 8 hrs	ST	I.3
4	Importance of System Security and Business Continuity Planning	Preparation of controls for System Security and Business Continuity	Avail.	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Circle Office/Division Office	System Security and BCP Planning	Seminar - Away	Capacity Building Project Team	8 hrs	LT	I.4
5	Automatic Metering System Advantages	Understanding the AMR System Advantages	Avail.	DGM (Circles)/ SM (Divisions)/ Manager (Sub-Division)	Circle Office/Division Office/ Sub-Division	Program on Meter Data Acquisition and Meter data Analysis processes	Seminar Away: Best Practicing Distribution Utilities	External Institutions like NPTI, NDPL etc	2 X 8 hrs	ST	I.5
6	Importance and components of ERP for a Power Utility	Understanding the ERP Components for support processes of a Utility	Avail.	CGM (Zones)/ DGM (Circles)	Headquarter	Program on Enterprise Resource Planning System	Seminar - Away	External Institutions like NPTI, NDPL etc	8 hrs	ST	I.6
CORPORATE ISSUES											
Regulatory Affairs Group in the Utilities											

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	-	• Understanding of Regulatory requirements & Processes; • Regulatory Accounting, • Tariff methodology, ARR filings • Compliance with regulation for performance standards • Development of internal systems to monitor the performance indices and reporting.	-	Regulatory Affairs Wing	-	Course on Regulatory Requirements & Regulatory Interface	-	-	3 days	MT	-
Needs at Interface levels & Important Imperatives as Separate Entities											
1	-	There is a need for strengthening of Commercial function at the boundaries of exchange such as BPSAs between the APDCL and Generating Companies. Transmission Service Agreements (Bilateral or Multi-lateral) • Business Plans for each utility for the next 5 years (including capex plans) • Ring fencing of Accounts • Transmission to look after grid operation as a ring fenced activity	-	GMS, CGMS, Sr. Executives from Commercial, Finance functions	-	Operational, Managerial & Commercial imperatives as separate entities	-	-	2 days	MT	-
Needs arising from Higher Level Issues											

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
1	-	Economic aspects & technical feasibility of power projects; Fuel supply and pricing, case studies in power project development. – Timely execution & commissioning of the proposed capital investment projects.	-	Executives from Planning Groups	-	Course on Power Project Development & Capacity Expansion	-	-	3 days	MT	-
2	-	Project formulation; planning, scheduling and implementation; Expansion scheme preparation, Network Up gradation, evaluation for providing new connections/ electrification and services; Capex program; Distribution Project case example	-	Project Development Planning Department & Execution Group of APDCL	-	Project Formulation; Management & Execution (for Distribution)	-	-	4 days	MT	-
4	-	To upgrade the knowledge about critical issues in the tendering – bid invitation, evaluation of tenders, award of contracts and arbitration. The course will include Performance of contract and consequences of non-performance of contract; Claims and Disputes; Post award function in Contracts; Arbitration	-	Executives handling Contract packaging & implementation in the 3 utilities	-	Contracts Management	-	-	4 days	MT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
5	-	Policy of Assam Govt; discussions on potential using locally available renewable resources; all aspects of viability and long term sustainability of DG projects; detail case studies on experience in India+ visit States with experience of RE	-	Planning Department	-	Renewable based distributed generation	-	-	2 days	LT	-
General Management, Functional Mgmt., Cross functional											
1	-	To enhance understanding of financial aspects of decision making Analysis & Interpretation of financial statements which reflect biz results; financial indicators of performance; economics of capital investment for decision making; analysing cost information for cost reduction and cost control; managing working capital for optl. efficiency; budget & mgmt control systems	-	Senior Mangers and above, in the three Utilities	-	Finance For Managerial Decision Making	-	-	4 days	MT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
2	-	• Scanning the Environment; key policy provisions at national and state level and its implication • Strategic planning & Management; • Finance; analyzing financial statements; cost management strategies; Working capital mgmt • Leadership; • Organization building; • HRM & Development Marketing; customer orientation-internal & external • O&M (strategy & achieving excellence through benchmarking)	-	GMS, CGMS From the 3 utilities	-	General Management Course	-	-	6 days	MT	-
3	-	Building commitment & performance culture; Performance Management; Coaching skills; Managing & developing human resources; HR Challenges & new orientations in work culture as business entities, with enhanced accountability, customer orientation etc.; philosophy of outsourcing;	-	Department Heads in the three utilities	-	HR for Line Personnel	-	-	3 days	MT-LT	-

No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department	Training Session Name	Format	Source	Duration (h)	Priority	TSDD
4	-	Mentoring & Counseling Team Leadership Empowerment Motivating environment	-	-do-	-	Motivation & Empowerment	-	-	2 days	MT	-
5	-	Performance Contracts; Supervising Performance; partnership; MIS /Maintaining Documentation	-	At Senior levels – for those who will take decisions on outsourcing; and Middle Level executives for Supervision of the Contracts	-	Managing Outsourcing	-	-	1-1/2 days	ST-MT	-
6	-	Across the 3 entities- as a basic development intervention. Top down & bottoms up- a common language 7 Quality Tools. Implementing QC	-	For all employees of all three utilities Plan for covering entire population	-	Quality Orientation Program	-	-	1-1/2 days	ST-MT	-
7	-	Focused interactions on specific processes and practices linked to performance Improvement, along with classroom sessions & field visits. This would be an opportunity to study best practices and benchmarks	-	Planned interventions for teams, from the three utilities These could be for multi-level teams (Sr Execs. to Operators)	-	Study Visit(s) to other Utilities: Planned interventions	-	-	5 days	LT	-

2. FORM FOR ASSESSMENT OF INDIVIDUAL LEVEL TRAINING NEEDS

(Form to be perforated along the side)

Training & Development Needs

(Executives)

Name:
Designation:
Department & Location:
In position since (date):

Please see instructions overleaf before filling the form

List 2-3 training & development needs .This should reflect not only the current job but anticipate the requirements of likely future roles. **Needs For immediate job performance** 1. 2. 3. **Needs for likely future roles/assignments** (in next 2 years or so) 1. 2.

Signature of Appraisee

Signature of Reporting Officer/Appraisor

Date

Date

Instructions

The Appraise will fill the needs (2-3) taking into account his present responsibilities and the requirements of likely future roles (next 2 years or so). This should reflect not only the current job but anticipate the requirements of likely future roles

The needs are to be filled in consultation with his reporting officer

The form perforated along the side, is to be detached and sent to Training Group for developing training plans.

3. TRAINING NEEDS FORMS

3.1. *Training Needs to Fulfil Action Plans (Interim Report 2) Form*

TRAINING NEEDS ASSESSMENT					
No	Plan Activity to be developed	Skills to be developed	Potentiality	Targeted Staff	Department
1					
2					
3					
4					
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24					

3.2. Training Recommendation to address the corresponding Need Form

CAPACITY BUILDING PLAN						
No	Training Session Name	Format	Source	Duration (h)	Priority	File #
1						
2						
3						
4						
5						
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7						
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24						

3.3. TRAINING COURSE DESCRIPTION FORM

Session Name:		File:
Company/ies:		
Attendants:	Department:	
Duration (h):	Training Format:	
Trainer Characteristics:		
Objective of the Training:		
Scope of the Training:		

4. TRAINER COMPETENCIES

Roles and Competencies for Trainers /Internal Resource Persons

Based on study conducted by McLagan, the ASTD (American Society for Training & Development) has developed core or essential competencies that every successful trainer needs. These could serve as guideline for identifying & developing internal trainers. While some competencies can be built by participating in training course for Trainers, others such as Feedback Skill, Intellectual Versatility, Subject Matter Understanding etc. are something trainers should inherently possess.

- **Adult Learning Understanding** — knowing how adults acquire and use knowledge, skills, attitudes; understanding individual differences in learning.
- **Career Development Theories and Techniques Understanding** — knowing the techniques and methods used in career development; understanding their appropriate uses.
- **Competency Identification Skill** — identifying the knowledge and skill requirements of jobs, tasks, and roles.
- **Objectives Preparation Skill** — preparing clear statements which describe desired outputs.
- **Performance Observation Skill** — tracking and describing behaviours and their effects.
- **Subject Matter Understanding** — knowing the content of a given function or discipline being addressed.
- **Training and Development Theories and Techniques Understanding** — knowing the theories and methods used in training and understanding their appropriate use.
- **Research Skill** — selecting, developing, and using methodologies such as statistical and data collection techniques for formal inquiry.
- **Business Understanding** — knowing how the functions of a business work and relate to each other; knowing the economic impact of business decisions.
- **Industry Understanding** — knowing the key concepts and variables such as critical issues, economic vulnerabilities, measurements, distribution channels, inputs, outputs, and information sources that define an industry or sector.
- **Organization Behaviour Understanding** — seeing organizations as dynamic political, economic, and social systems which have multiple goals; using this larger perspective as a framework for understanding and influencing events and change.
- **Organization Understanding** — knowing the strategy, structure, power networks, financial position, and systems of a specific organization.
- **Coaching Skill** — helping individuals recognize and understand personal needs, values, problems, alternatives, and goals.
- **Feedback Skill** — communicating information, opinions, observations, and conclusions so that they are understood and can be acted upon.
- **Group Process Skill** — influencing groups so that tasks, relationships, and individual needs are addressed.
- **Presentation Skill** — presenting information orally so that an intended purpose is achieved.
- **Questioning Skill** — gathering information from stimulating insight in individuals and groups through use of interviews, questionnaires, and other probing methods.
- **Relationship-Building Skill** — establishing relationships and networks across a broad range of people and groups.
- **Writing Skill** — preparing written material that follows generally accepted rules of style and form, is appropriate for the audience, is creative and accomplishes its intended purpose.
- **Data Reduction Skill** — scanning, synthesizing, and drawing conclusions from data.
- **Information Search Skill** — gathering information from printed and other recorded sources; identifying and using information specialists and reference services and aids.
- **Intellectual Versatility** — recognizing, exploring, and using a broad range of ideas and practices; thinking logically and creatively without undue influence from personal biases.
- **Model-Building Skill** — conceptualizing and developing theoretical and practical frameworks that describe complex ideas in understandable, usable ways.

- **Observing Skill** — recognizing objectively what is happening in or across situations.
- **Self-Knowledge** — knowing one's personal values, needs, interests, style, and competencies and their effects on others.
- **Visioning Skill** — projecting trends and visualizing possible and probable futures and their implications.

5. COURSE FEEDBACK FORM

WORKSHOP ON ----------

Course Feedback Form

Please let us know your feedback on the course, using the rating scale (wherever applicable) and by providing your comments/views, on the various elements of the course. This will help us with our future activities.

1. How would you rate the content of the course (Structure/ relevance and coverage):

A	B	C	D	E

A - Excellent, B - Good, C - Average, D- Below Average, E - Not Satisfactory

2. How would you rate he handling of sessions (delivery, handling of questions, etc.) by the faculty:

A	B	C	D	E

A - Excellent, B - Good, C - Average, D- Below Average, E - Not Satisfactory

3. What were the most and least valuable aspects of the course:

4. How would you rate the logistics and administrative arrangements:

5. Some thoughts on how you might use/apply the course learnings at your work situation:

6. Overall Assessment of the course:

A	B	C	D	E

A - Excellent, B - Good, C - Average, D- Below Average, E - Not Satisfactory

7. Additional Comments/Suggestions:

Name: *(Optional)* **.....**

Organization: .....

6. TRAINING SESSIONS DETAILED DESCRIPTION

6.1. GENERATION

Session Name:	Performance Monitoring	File:	G.1
Company/ies:	APGCL		
Attendants:	CGM/GM/AGM/DGM/SM	Department:	HQ/Plant
Duration (h):	40	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

1. Development of progress reports for performance monitoring - daily, weekly, monthly, and annual at plant and HQ level.
2. Completion of performance monitoring reports.

Scope of the Training:

1. Objective of performance monitoring.
2. Design of progress reports-daily, weekly, monthly at different levels.
3. Guidelines for filling in progress reports
4. Performance monitoring at different levels - frequency, depth, follow up.
5. Role of plant inspection by senior officers

Session Name:	Monitoring Tools	File:	G.2
Company/ies:	APGCL		
Attendants:	Managers/Computer Operators	Department:	HQ
Duration (h):	80	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: Training in operation of monitoring tools like Primevera.			
Scope of the Training: Training in operation of monitoring tools like Primevera.			

Session Name:	Maintenance Planning and Management	File:	G.3
Company/ies:	APGCL		
Attendants:	1. CGM/ GM/DGM/ SM 2. Operators / Technicians	Department:	1. HQ 2. Plant
Duration (h):	1. 60 2. 80	Training Format:	1. Training for trainers 2. Seminar-in-house. (by trainers)
Trainer Characteristics:			

Objective of the Training:

1. Understanding critical issues in the operation of thermal and hydro -electric plants.
2. Improving capacity of managers to take on-the-spot decisions to resolve critical issues.
3. Improving capacity of managers to initiate measures (including innovative measures) to enhance efficiency.
4. Understanding and implementing measures to improve efficiency and economy in operation.
5. Learning to be vigilant to prevent accidents / damage to equipment.

Scope of the Training:

1. Power station management - critical issues.
2. O&M of gas stations
3. O&M of hydro electric stations
4. Energy Audit / Residual Life Assessment / Life Extension studies.

Session Name:	Planning	File:	G.4
Company/ies:	APGCL		
Attendants:	CGM/GM/DGM/SM	Department:	HQ
Duration (h):	40	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

1. Preparation of annual and five year plans for the organization (APGCL).
2. Preparation of annual maintenance plans including special repairs, rehabilitation and modernization.

Scope of the Training:

1. Assessment of demand for peak power and energy.
2. Setting up annual generation targets for different plants of the utility.
3. Identification of gaps between demand and supply and determination of priorities of sources for profitable purchase of energy to fill in gaps.
4. Determination of budgetary requirements for capital works including construction of new plants and R&M of existing plants.
5. Preparation of Annual Plan for the utility and obtaining approval of State Government for the same.
6. Finalize construction plans (annual) for new projects including budgetary allocations.

Session Name:	Financial Management	File:	G.5
Company/ies:	APGCL		
Attendants:	CGM/GM/DGM/SM	Department:	HQ
Duration (h):	40	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

1. Assessment of techno-economic feasibility of proposed new projects
2. Assessment of economic viability of proposed R&M measure

Scope of the Training:

1. Introduction to State budget, Capital and Revenue expenditure, budgetary subheads (related to "power/energy")
2. Concept and calculated (for power projects) of internal rate of return, benefit cost ratio, payback period, debt service coverage ratio etc.

Session Name:	Advances in construction and operation techniques	File:	G.6
Company/ies:	APGCL		
Attendants:	CGM/GM/DGM/SM	Department:	HQ
Duration (h):	40	Training Format:	Seminar Away
Trainer Characteristics:			

Objective of the Training:

Knowledge and development of capacity to take advantage of latest advances in construction and operation techniques.

Scope of the Training:

1. Brief explanation of operation of different components of thermal and hydro-electric projects of types currently operating in APGCL.
2. Design and operational deficiencies observed in equipment operating at APGCL's generating stations.
3. Advances in Theram Plant technologies towards attaining higher efficiency and economy in operation.
4. Exposure to high capacity gas turbines, combined cycle operation, super-critical thermal plants, advanced materials of construction etc.

Session Name:	Inventory Management	File:	G.7
Company/ies:	APGCL		
Attendants:	SM/ Managers/ Store-Keepers	Department:	Plant
Duration (h):	40	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

Understanding and implementing policies for inventory and spare parts management

Scope of the Training:

1. Classification of stores and spares parts
2. Inventory and spare parts managements - general policies.
3. Procedures for stores verification

Session Name:	Procurement	File:	G.8
Company/ies:	APGCL		
Attendants:	GM/DGM	Department:	Plant
Duration (h):	24	Training Format:	Seminar in-house
Trainer Characteristics:			
Objective of the Training: Understanding and implementing procurement procedures.			
Scope of the Training: 1. Procurement procedures for equipments, materials and spares currently followed at APGCL 2. Delegation of powers 3. Guidelines for ensuring economy, speed, competition and quality			

Session Name:	Environment health and safety	File:	G.9
Company/ies:	APGCL		
Attendants:	DGM/SM/Managers	Department:	Plant
Duration (h):	40	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

1. Understanding environment / pollution control guidelines and take steps for their implementation and monitoring.
2. Understanding health and safety requirements and take steps for implementation and monitoring.

Scope of the Training:

1. Description of Environment Norms and Guidelines prescribed by State Pollution Control Board and by the Ministry of Environment and Forest (MoEF) Government of India.
2. Current status of adherence to prescribed Environmental norms and guidelines.
3. Monitoring of environmental norms at generating stations.
4. General requirements for protection of health of staff and workers at plants - safe drinking water, sanitation, housing etc.
5. Safety requirements during construction, erection and operation. Provision of protective equipments to workers.
6. Responsibility of project management to comply with environment, health and safety standards.

Session Name:	Vendor development	File:	G.10
Company/ies:	APGCL		
Attendants:	SM/Managers/Store-Keepers	Department:	Plant
Duration (h):	24	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

1. Encourage procurement from list of approved vendors maintained at HQ
2. Judicially assess performance vendor register.

Scope of the Training:

1. Preparation of classified lists of approved vendors
2. Documentation of history of purchases from vendors as regards quality, prompt delivery etc.

Session Name:	Dispute Resolution	File:	G.11
Company/ies:	APGCL		
Attendants:	GM/DGM/SM/Managers Union representatives	Department:	1. HQ 2. Plant
Duration (h):	40	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

1. Understand laws relating to industrial disputes
2. Take corrective action to resolve disputes in initial stages.

Scope of the Training:

1. Introduction to laws regarding industrial disputes
2. Activation of different levels of disputes resolution machinery at plant level

Session Name:	Fuel Procurement	File:	G.12
Company/ies:	APGCL		
Attendants:	DGM/SM/Managers	Department:	HQ
Duration (h):	16	Training Format:	Seminar in-house
Trainer Characteristics:			

Objective of the Training:

1. Understanding gas production, transportation, compression, supply, quality, composition, heat value, measurement etc.
2. Understanding agreement of supply and transportation of gas

Scope of the Training:

1. Introduction to gas production, transportation, compression and supply to generating stations,
2. Fundamentals of gas quality, composition, heat value etc.
3. Measurement of gas received at generating station
4. Study of agreements of APGCL with gas suppliers / transporters and keeping watch over adherence by suppliers / transporters to terms of agreement

6.2. TRANSMISSION

Session Name:	Load fore casting	File:	T.1
Company/ies:	AEGCL		
Attendants:	Planning section 1. C.G.M. 2. G.M. 3. D.G.M. 4. S.M. & MANAGER	Department:	HQ
Duration (h):	3-Days 21 Hrs @ 7 Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: Assessment of the ASEB Peak loads on Long term as per the National & International practices			
Scope of the Training: 1. Concept of Long term Load fore casting. 2. Data requirement, Methodology. 3. Methodology including the demand for each category of consumer to be estimated independently by using one or more of the following methods. a) Time Series models (Trend Analysis) b) Multiple Regression Using Econometric parameters c) End Use Analysis d) Scenario Approach			

Session Name:	POWER SYSTEM STUDIES "Hands On" using soft ware	File:	T.2
Company/ies:	AEGCL		
Attendants:	Planning section 1. C.G.M. 2. G.M. 3. D.G.M. 4. S.M. & MANAGER	Department:	HQ
Duration (h):	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	Training Format:	(Seminar-in-house as in-house Talent is available) (Provision is available for such Free Training programmes by Soft ware supplier under AMC @ soft ware supplier's Place)
Trainer Characteristics:			

Objective of the Training:

Assessment of the AEGCL Transmission system strengthening & expansion proposals on Year wise basis with the objective of satisfying the Transmission system to meet the projected peak loads as per the grid code norms with

1. Minimum energy losses.
2. Voltages with in specified levels.
3. System to meet the contingency conditions.

Scope of the Training:

1. Transmission net work Net work modelling.
2. Load flow studies:
   - Base study as per existing conditions.
   - To meet the Future loads by the system
3. Short circuit studies.
4. Stability studies.
5. Techno-Economical studies for each of the proposed project

Session Name:	Substation Design & Engineering	File:	T.3
Company/ies:	AEGCL		
Attendants:	Planning section 1. DGM 2. S.M. 3. Manager. 4. A.M.	Department:	HQ
Duration (h):	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			

Objective of the Training:

Knowledge and development of capacity to take advantage of latest Techniques in substation Engineering & Designs

Scope of the Training:

Substation Engineering including:

1. Substation site selection & Geo Technical investigations.
2. Bus switching schemes.
3. Selection Bus bar type & Bus bars sizes
4. Insulation coordination & Lightning protection.
5. Designing of Ground clearance, Sectional clearance, Ph to Ph clearances, Ph to Earth clearances & Bay widths,
6. SLD & lay out Preparation.
7. Selection of Major equipments & preparing Technical specifications incorporating latest Techniques.
8. Designing of Auxiliaries, Illumination, Earth Mat and Civil engineering works Etc

Session Name:	Transmission line design & Engineering	File:	T.4
Company/ies:	AEGCL		
Attendants:	Planning section 1. DGM 2. S.M. 3. Manager 4. A.M.	Department:	HQ
Duration (h):	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: Knowledge and development of capacity to take advantage of latest Techniques in Transmission line Engineering & Designs			
Scope of the Training: Transmission line Engineering: 1. Transmission Line survey using Latest Techniques. 2. Optimal Route selection. 3. Preparation of Sag Template curves. 4. Tower spotting using PLSSCAD or any other Soft ware. 5. Preparation of Tower schedules. 6. Tower design Techniques for various wind Zones & Terrain categories. 7. Environmental & social impact assessment practices. 8. Preparation of Statuary Clearances in standard formats			

Session Name:	DPR preparation & Budget proposal preparation	File:	T.5
Company/ies:	AEGCL		
Attendants:	Planning section 1. DGM 2. S.M. 3. Manager. 4. A.M.	Department:	HQ
Duration (h):	3-Days21 Hrs @ 7 Hrs per day	Training Format:	Seminar-in-house
Trainer Characteristics:			
Objective of the Training: 1. Preparation of annual and five year plans for the AEGCL. 2. Obtaining Technical & administrative approvals			
Scope of the Training: 1. Determination of budgetary requirements for capital works: • New substations & Transmission lines. • R&M of existing Transmission system 2. Preparation of Annual Plan for the AEGCL. 3. Obtaining Technical & administrative approvals from competent authorities for the same. 4. Finalizing annual plans for new projects including budgetary allocations.			

Session Name:	System protection & Protection coordination.	File:	T.6
Company/ies:	AEGCL		
Attendants:	MRT 1. DGM 2. S.M. 3. Manager. 4. A.M.	Department:	HQ/MRT
Duration (h):	One Week - 6 days - 42 Hrs @ Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			

Objective of the Training:

Knowledge and development of capacity to take advantage of latest Techniques in:

1. Power system protection.
2. Power system protection co-ordination.

Scope of the Training:

1. Protection Philosophy
2. Characteristics of various Types of Relays.
3. Calculation of Relay reach settings.
4. Emerging Trends in Protection.
5. Responsibility of Protection & Concerns in power system Protection.
6. Substation Automation

Session Name:	Testing & Commissioning of New substations	File:	T.7
Company/ies:	AEGCL		
Attendants:	MRT 1. DGM 2. S.M. 3. Manager. 4. A.M.	Department:	HQ/MRT
Duration (h):	3-Days 21 Hrs @ 7 Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: Knowledge and development of capacity in Testing & commissioning of substations			
Scope of the Training: Detailed procedures in Testing & Commissioning of: 1. Instrument Transformers. 2. Circuit Breakers. 3. Isolators & Lightning Arrestors. 4. Power Transformers. 5. Protection schemes. 6. Auxiliaries.			

Session Name:	CONDITION MONITORING & RLA	File:	T.8
Company/ies:	AEGCL		
Attendants:	MRT 1. DGM 2. S.M. 3. Manager. 4. A.M.	Department:	HQ/MRT
Duration (h):	One Week- 6 days - 42 Hrs @ 7Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: Knowledge and development of capacity to take advantage of latest Techniques in CONDITION MONOTORING & RLA			
Scope of the Training: 1. Maintenance Techniques- BDM,TSM,CBM or CM.RCM 2. CM & RLA of: • Power Transformers. • Circuit Breakers. • Instrument Transformers. • Surge Arresters. • Capacitors			

Session Name:	New Type of Relays	File:	T.9
Company/ies:	AEGCL		
Attendants:	MRT 1. DGM 2. S.M. 3. Manager. 4. A.M.	Department:	HQ/MRT
Duration (h):	3-Days 21 Hrs @ 7 Hrs per day	Training Format:	Seminar Away at Relay manufacturer's/Relay suppliers Units. (To be made mandatory in Purchase orders for imparting Training to AEGCL Staff at free of cost)
Trainer Characteristics:			
Objective of the Training: Knowledge of New Type of Relays(Only Such Type of Relays are procured)			
Scope of the Training: Under Standing of philosophy, Testing & monitoring Techniques of New Type of Relays			

Session Name:	Procurement	File:	T.10
Company/ies:	AEGCL		
Attendants:	Procurement 1. DGM 2. S.M. 3. Manager	Department:	HQ
Duration (h):	3-Days 21 Hrs @ 7 Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: Understanding and implementing procurement procedures:			
Scope of the Training: 1. "E" Tendering. 2. Procurement procedures for equipments, materials 3. Guidelines for ensuring economy, speed, competition, quality & Transparency. 4. Preparation of classified lists of approved vendors 5. Documentation of history of purchases from vendors as regards quality, prompt delivery etc.			

Session Name:	Project Management & monitoring	File:	T.11
Company/ies:	AEGCL		
Attendants:	Construction / Execution wing 1. DGM 2. S.M	Department:	Field
Duration (h):	2-Days 14 Hrs @ 7 Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			

Objective of the Training:

1. Use of Project management soft ware
2. Development of progress reports for performance monitoring - daily, weekly, monthly, and annual at field office and at HQ
3. Completion of performance monitoring reports.

Scope of the Training:

1. Objective of performance monitoring.
2. Design of progress reports-daily, weekly, monthly at different levels using soft ware.
3. Guidelines for data entry in soft ware
4. Performance monitoring at different levels, frequency, depth, follow up to facilitate completion of the project as per schedule.
5. Role of project inspection (Under execution) by senior officers

Session Name:	Project's detailed execution procedures (Substations & Transmission Lines)	File:	T.12
Company/ies:	AEGCL		
Attendants:	Construction / Execution wing 1. DGM 2. S.M	Department:	Field
Duration (h):	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: Knowledge and development of capacity to take advantage of Techniques in construction /execution & quality control of projects			
Scope of the Training: 1. Construction / execution, quality control, safety procedures and testing & commissioning procedures in Transmission lines & substations. 2. Environmental & social impact assessment practices. 3. Material accounting procedures at the site. 4. Verification of contractor's Bills & certification. 5. Documentation of Approved Drawings, Test results of Equipments during Testing & commissioning, Assets lising of equipments & land records and handing over to Maintenance staff			

Session Name:	Operation & Maintenance of Transmission lines & substations		File: (a): T.13 (b): T.14
Company/ies:	AEGCL		
Attendants:	Part (a): Construction / Execution wing 1. DGM 2. S.M. 3. Manager 4. A.M.	Part (b): Construction / Execution wing 1. Technicians. 2. Mechanics	Department: Field
Duration (h):	Part (a): Four Weeks- 24 days - 168 Hrs @ 7Hrs per day Part (b): One Week- 6 days - 42 Hrs @ 7Hrs per day	Training Format:	(a): Seminar Away (b): Seminar-in-house by the Trainers Sl. Nor 13(a)
Trainer Characteristics:			

Objective of the Training:

1. Understanding issues & latest techniques in the operation & maintenance of Transmission systems.
2. Improving capacity of managers to take on-the-spot decisions during emergencies
3. Improving capacity of managers to initiate measures (including innovative measures) to enhance efficiency by effective Schedule maintenance of Transmission systems.

Scope of the Training:

1. Asset mapping & Management.
2. Effective Implementation of safety measures & safety procedures to prevent accidents / damage to equipment.
3. Schedule maintenance works in both substations & Transmission lines to achieve the maximum Transmission system availability.
4. Use of Thermo vision cameras.

Session Name:	Hot Line Training programme	File:	T.15
Company/ies:	AEGCL		
Attendants:	Construction / Execution wing 1. Manager. 2. A.M. 3. Technicians. 4. Mechanics	Department:	Field
Duration (h):	Four Weeks- 24 days - 168 Hrs @ 7Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: To test & Replace the faulty insulators and attending problems like Hot spots by loose contacts at joints/Jumps in the Transmission lines & substations on line without availing shut downs			
Scope of the Training: 1. Practical Knowledge of Hot line equipments. 2. Practical Training in testing procedures of insulators healthiness in Lines & substations. 3. Practical Training in Hot line maintenance of Transmission lines & Substations like 4. Replacement of faulty insulators and attending loose contacts in Jump/Joints			

Session Name:	State Load dispatch Centre Power system Operations:	File:	T.16
Company/ies:	AEGCL		
Attendants:	SLD staff 1. DGM 2. S.M. 3. Manager. 4. A.M.	Department:	SLD/HQ
Duration (h):	Two Weeks- 12 days - 84 Hrs @ 7Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: To achieve the objective of effective power system operation & maintaining Grid discipline			
Scope of the Training: 1. Real time power flow studies /analysis using software. 2. Power system operations techniques. 3. Maintenance of grid discipline. 4. Power Trading techniques			

Session Name:	Regulatory Affairs	File:	T.17
Company/ies:	AEGCL		
Attendants:	Regulatory affairs wing	Department:	HQ
Duration (h):	One Week- 6 days - 42Hrs @ 7Hrs per day	Training Format:	Seminar Away
Trainer Characteristics:			
Objective of the Training: To comply with the regulatory norms			
Scope of the Training: 1. Understanding of Regulatory Processes. 2. Regulatory Accounting, finance, revenue & accounts. 3. Tariff & ERC fillings methodologies. 4. Compliance with Regulations & Regulator directives			

6.3. DISTRIBUTION

Session Name:	Programme on AT&C Loss Reduction Best Practices	File:	D.1
Company/ies:	APDCL		
Attendants:	CGM (Zones)/ DGM (Circles)	Department:	Headquarter
Duration (h):	4 Hours	Training Format:	Seminar In-House
Trainer Characteristics:			
Objective of the Training:			
Scope of the Training: • Power Distribution Sector and Reform Framework • Best Practices of one Distribution Utility in India – ○ Brief Profile ○ Challenges faced and Turnaround ○ AT&C Loss Reduction - Strategy and Best Practices ○ Customer and Market Focus ○ System Improvement – Technology Orientation ○ Key to Success			

Session Name:	Workshop on Meter Data Analysis	File:	D.2
Company/ies:	APDCL		
Attendants:	Sr Managers/ Asstt Managers/ Junior Engineers	Department:	Headquarters/Division/Testing Department
Duration (h):	2 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Data Analysis for downloaded data against bulk consumer meters			
Scope of the Training: • Downloading Billing Data • Analysis of downloaded data • Data Archival • Components used in AMR • Integration with the touch points • Critical Success Factors • Practices followed at Best Practicing Utility			

Session Name:	Programme on Network Planning	File:	D.3
Company/ies:	APDCL		
Attendants:	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	2 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Understanding significance of Analysis of Network and Network Planning			
Scope of the Training: • Regulatory Reforms & Background • Principles of Load Forecasting & Data Requirements • Network Planning Criteria for a Distribution Utility • Network Planning at best practicing utility including Load Forecasting for network			

Session Name:	Programme on Revenue Cycle Management	File:	D.4
Company/ies:	APDCL		
Attendants:	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	4 hrs	Training Format:	Seminar In-House
Trainer Characteristics:			

Objective of the Training:

Meter Reading and Billing System Improvement

Scope of the Training:

- Introduction to Revenue Cycle Management
- RCM processes –
  - New Connection
  - Meter Management
  - Meter Reading
  - Billing
  - Collection
  - Theft Recovery
  - Consumer Care
  - Regulatory affairs
- Meter Reading process
  - Manual
  - Semi-Automated
  - Automated
- Exception cases
- Billing Process and Bill Quality Check
- Integration of RCM processes as mentioned above

Session Name:	Programme on Energy Accounting	File:	D.5
Company/ies:	APDCL		
Attendants:	CGM (Zones)/ DGM (Circles)	Department:	Headquarters/Division/Testing Department
Duration (h):	4 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			

Objective of the Training:

Understanding significance of Energy Accounting

Scope of the Training:

- Significance of Energy Accounting
- Energy Accounting Level
  - Input Point
  - Grid Substation
  - Distribution Transformer
  - Consumer
- Consumer Indexing
- Issues involved in Energy Accounting
- Best practices

Session Name:	DRUM (Distribution Reform under US Aid) Programme on Change Management	File:	D.6
Company/ies:	APDCL		
Attendants:	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Department:	Headquarters/Division
Duration (h):	5 X 8 hrs	Training Format:	Seminar Away: Training Program advised by Ministry of Power
Trainer Characteristics:			
Objective of the Training: Management of changes in Distribution Process Improvement			
Scope of the Training: • Managing Change in Power Distribution • Importance of Customer Relationship and redressal of grievances • Role of Regulatory Commission • Overview of changes in Commercial Division • Overview of changes in O&M Division • Managing Turning Point • Excellence through Attitude			

Session Name:	Programme on GIS supported Network Planning, Analysis and Asset Management	File:	D.7
Company/ies:	APDCL		
Attendants:	DGM (Circles)/ SM (Divisions)/ Manager (Sub-Division)	Department:	Headquarters/Division
Duration (h):	2 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Understanding GIS based initiatives in Commercial, Network Planning and Asset Mapping for RAPDRP			
Scope of the Training: • Managing Change in Power Distribution • Introduction to GIS • GIS based Network Planning • GIS Applications • GIS updation of data and system orientation • Project Management through GIS • Automation & GIS			

Session Name:	Programme on best practices on Distribution System O&M	File:	D.8
Company/ies:	APDCL		
Attendants:	DGM (Circle)/SM(Divisions)/ Manager (Sub-Division)	Department:	Circle Office/Division Office/ Sub-Division
Duration (h):	3 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			

Objective of the Training:

Understanding best practices in Distribution System O&M including SCADA, DMS, OMS, etc for RAPDRP part A and B.

Scope of the Training:

- Need For Automation
- Field Implementation – Grid Substation Automation and Distribution Automation GSAS/DA
- Control room requirements of SCADA/EMS/DMS
- Different type of Communication system and SCADA Architectures
- Introduction of SCADA System in NDPL with awareness of BaSiDi for NDPL
- Alarm Management in SCADA and integration of SCADA with other systems
- Report Generation and Reports filtering in SCADA

Session Name:	Induction Programme for new joinees	File:	D.9
Company/ies:	APDCL		
Attendants:	Graduate Engineers Trainees (new Joinees)	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	20 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			

Objective of the Training:

Induction Programme for new joinees, Graduate Engineer Trainees to power distribution best practices

Scope of the Training:

- Overall functioning of Utility & best distribution practices (Field Training)
- Role of Regulatory Commission
- Customer Orientation
- Overview of changes in O&M Division
- Overview of changes in Commercial Division
- Managing Turning Point
- Excellence through Attitude

Session Name:	Programme on best practices on Distribution Metering	File:	D.10
Company/ies:	APDCL		
Attendants:	Junior Engineers/ Technicians	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	1 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Understanding best practices in metering for power distribution			
Scope of the Training: • Fundamentals • Metering technologies and techniques. • Meter testings • Installation practices			

Session Name:	Induction Programme for new joinees	File:	D.11
Company/ies:	APDCL		
Attendants:	Technician Trainees (new Joinees)	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	20 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Induction Programme for new joinees, Technician Trainees to power distribution best practices			
Scope of the Training: • Overall functioning of Utility & best distribution practices (Field Training) • Objectives of Power Distribution Organisation • Customer Orientation • Overview of changes in O&M Division • Overview of changes in Commercial Division • Stress Management • Excellence through Attitude			

Session Name:	Workshop on Safety, Fire Fighting & Disaster Management	File:	D.12
Company/ies:	APDCL		
Attendants:	Graduate Engineers / Technicians	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	2 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Preparedness for disaster management and safety awareness			
Scope of the Training: • Safety Awareness • Safe Practices for Distribution Utilities (Hands On Experience) • Disaster Management Planning • Fire safety management			

6.4. *FINANCE*

6.4.1. CAPACITY INVESTMENT AND BUSINESS PLAN

Session Name: Seminar –Workshop on Capital Investment Planning	File: CI&BP.1
Company/ies: All 3 utilities	
Attendants: Engineering and Select key finance staff of the utilities	Department: External
Duration (h): at least 3 man-months for each utility or 396 hours	Training Format: In-house
Trainer Characteristics: Experts on Business Planning for Generation, distribution, transmission with extensive capacity-building experience in developing countries specifically with comparable utilities	
Objective of the Training: Familiarize and build trainees' capacity on business planning and as a project output; enhanced business plans of each of the three utilities (i.e.; enhancement of the 10 year business plans now being prepared with the assistance of the capacity-building project team).	
Scope of the Training: Environment mapping and scanning (SWOT, Market assessment, policy and regulatory environment assessment); formulation of vision, goals and objectives; operation planning; financial planning and development of performance monitoring systems.	

Session Name: Seminar –Workshop on Business Planning	File: CI&BP.2
Company/ies: All 3 utilities	
Attendants: Top Management and Senior Executives of the 3 utilities	Department: In-house
Duration (h):at least 1 man-month for each utility or 66 hours (3 hours/day @ 22 days)	Training Format: Seminar Away and Training for Trainers
Trainer Characteristics: Experts on Capital Investment Planning for Generation, distribution, transmission with extensive capacity-building experience in developing countries specifically with comparable utilities	
Objective of the Training: Familiarize and build trainees' capacity on capital investment planning and as a project output; completed capital investment plans of each of the three utilities.	
Scope of the Training: Data gathering and updating; load forecasting; performance assessment/audit of generating plants, distribution and transmission system vs. standards; project formulation or the generation of alternative solutions to problems; review of economic evaluation of capital investment projects (to supplement on-going training provided by capacity building project team).	

6.4.2. FINANCE

Session Name: Financial Risk Management for Power Utilities		**File**: F.1
Company/ies: APDCL, AEGCL, APGCL		
Attendants: CGM, DGM, GM For Finance		Department: Headquarter
Duration (h): 18 hours	Training Format: Seminar in-House	
Trainer Characteristics: Expert in Financial Risk Management and Extensive working experience in risk management for power utilities		
Objective of the Training: To familiarize the participants with the types and impact of financial risks faced by power utilities; cultivate awareness of the necessity of implementing a systematic risk management framework and to build in-house capacity for financial risk management		
Scope of the Training 1. Types of financial and operating risks faced by power utilities 2. Analysis of risk faced by the Assam utilities 3. Identification/formulation of strategies and action plan to mitigate risks		

Session Name: Seminar-Workshop on Budget Management Systems	File: F.2
Company/ies: APDCL, AEGCL, APGCL	
Attendants: DGM and SM for Finance	Department: Headquarter
Duration (h): 6 hours	Training Format: Seminar in-house
Trainer Characteristics: Expert in budget management with working experience in budget management for generation, distribution and transmission utilities	
Objective of the Training: Skills development in zero based budgeting and variance analysis	
Scope of the Training 1. Budget Management for regulated power utilities 2. Zero based management 3. Budget Variance Analysis	

Session Name: Seminar-Workshop on Working Capital Management	File: F.3
Company/ies: APDCL, AEGCL, APGCL	
Attendants: CGM and other senior finance officials at Divisions, Circles and Zones	Department: Headquarters
Duration (h): 6 hours	Training Format: Seminar in-House
Trainer Characteristics: Finance expert with experience in the management of working capital for power utilities in developing countries with comparable environment to that of the Assam utilities	
Objective of the Training: Identification of the issues relevant to the effective working capital management of the three utilities including regulatory requirements and the formulation of appropriate strategies for the efficient management by the utilities of their working capital	
Scope of the Training 1. Assessment of the constraint to effective working capital management of the Assam utilities 2. Identification of the appropriate strategies for effective working capital management (cash and other current assets; debt management; bank management and others)	

Session Name Seminar-Workshop on Inventory Management	File: F.4
Company/ies: APDCL, AEGCL, APGCL	
Attendants: CGM Finance/Stores and appropriate officers in the Divisions, Circles	Department: Headquarters
Duration (h): 18 hours	Training Format: Seminar in-house
Trainer Characteristics: Expert on inventory management for power utilities	
Objective of the Training: • Familiarize and build trainees' capacity to implement an effective inventory management system and build awareness and capacity to implement effective and appropriate inventory • Management policies and procedures.	
Scope of the Training • Basic of inventory Management for power utilities • Determining effective/appropriate inventory management policies for each of the 3 Assam utilities • Familiarization with Inventory Management systems such as the ERP	

6.4.3. ACCOUNTING

Session Name: Legal Compliances.	File: A.1
Company/ies: All the three companies (AEGCL, APGCL & APDCL)	
Attendants: GM, Deputy GM, AGM, Senior AO & AO Account Department & GM & Deputy GM Technical Total No.35	Department: In – house (Seminar Rom)
Duration (h): 09:30 AM to 06:30 PM with lunch from 01:30 to 02:30*2 days	Training Format:
Trainer Characteristics: CA, B.B Jindal, M.Com, LL.B, FCA (National Accounting Expert of the Mission), Specialization in Accounting in Power Sector. Life & Central Council Member Indian Society of Training & Development of India & Guest Facility in more than a Dozen Institute	
Objective of the Training: To familiarize the appropriate officials with the legal requirements where gaps where identified; train them on the proper procedures to address the gaps	
Scope of the Training: 1. Compliance with Schedule VI of the Companies Act 1956. 2. Methodology – Presentation of Gaps and Action, Interactive Sessions, Case Study, Conclusions.	

Session Name: Seminar on Convergence with International Financial Reporting Standards (IFRS)	File: A.2
Company/ies: APDCL, AEGCL, APGCL	
Attendants: At least one GM and AO from accounts department of each utility. Must be Chartered Accountant	Department: Institute of Chartered Accountants in Kolkatta and/or Institute of Cost and Works Accountant of India
Duration (h): As required by the Institutes' programs	Training Format: Based on Institutes' format
Trainer Characteristics: The Institutes have been running these programmes for their members for capacity building. Background information on the Institutes and their IFRS programmes available in their websites: www.icai.org and www.icwai.org	
Objective of the Training: Develop in-house capacity in the utilities for the convergence to IFRS	
Scope of the Training 1. Introduction to IFRS 2. Comparison of IFRS with existing Indian Accounting Standards 3. Issues in relation to the migration to/convergence with IFRS 4. Conversion of Financial Statements prepared on the basis of Indian GAAP to IFRS based Financial Statements.	

Session Name:	Control & Monitoring System	File:	A.3
Company/ies:	All the three companies (AEGCL, APGCL & APDCL)		
Attendants:	GM, Deputy GM, AGM, Senior AO & AO Account Department & GM & Deputy GM Technical Total No.35	Department:	In-house (Seminar Room)
Duration (h):	09:30 AM to 06:30 PM with lunch from 01:30 to 02:30*1 day	Training Format:	

Trainer Characteristics:

From capacity building project team:

CA, B.B Jindal, M.Com, LL.B, FCA (National Accounting Expert of the Mission), Specialization in Accounting in Power Sector.

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Objective of the Training:

To train the appropriate officials working in the critical area with major gaps in compliance to plan for, initiate and work on the processes required to correct the gaps.

Scope of the Training:

1. Internal Audit, Internal Control and Audit Committee.
2. Methodology – Presentation of Gaps and Action, Interactive Sessions, Case Study, Conclusions.

Session Name: Accounting Documents	File: A.4
Company/ies: All the three companies (AEGCL, APGCL & APDCL)	
Attendants: GM, Deputy GM, AGM, Senior AO & AO Account Department & GM & Deputy GM Technical Total No.35	Department: Seminar Room
Duration (h): 09:30 AM to 06:30 PM with lunch from 01:30 to 02:30*2	Training Format:

Trainer Characteristics:

CA, B.B Jindal, M.Com, LL.B, FCA (National Accounting Expert of the Mission), Specialization in Accounting in Power Sector.

Life & Central Council Member Indian Society of Training & Development of India & Guest Facility in more than a Dozen Institute

Objective of the Training:

To train the appropriate officials working in the critical area with major gaps to plan for, initiate and work on the processes required to correct the gaps.

Scope of the Training:

1. Development of Accounting Manual, Chart of Account, Monthly Reporting System (Primary Unit to Corporate Account) & maintenance of Subsidiary & Control Books (Fixed Assets Registers, Contract Registers, Work Register & Register of Abandoned & Decommissioned Assets.
2. Methodology – Presentation of Gaps and Action, Interactive Sessions, Case Study, Conclusions.

Session Name:	Work & Accounting Classifications	File:	A.5
Company/ies:	All the three companies (AEGCL, APGCL & APDCL)		
Attendants:	GM, Deputy GM, AGM, Senior AO & AO Account Department & GM & Deputy GM Technical Total No.35	Department:	In-house (Seminar Room)
Duration (h):	09:30 AM to 06:30 PM with lunch from 01:30 to 02:30*1	Training Format:	

Trainer Characteristics:

CA, B.B Jindal, M.Com, LL.B, FCA (National Accounting Expert of the Mission), Specialization in Accounting in Power Sector.

Life & Central Council Member Indian Society of Training & Development of India & Guest Facility in more than a Dozen Institute

Objective of the Training:

To train the appropriate officials working in the critical area with major gaps to plan for, initiate and work on the processes required to correct the gaps.

Scope of the Training:

1. Control of Capital Work in progress and Distribution between Capital & Revenue & Differed Revenue Expenditure.
2. Methodology – Presentation of Gaps and Action, Interactive Sessions, Case Study, Conclusions.

Session Name:	Costing	File:	A.6
Company/ies:	All the three companies (AEGCL, APGCL & APDCL)		
Attendants:	GM, Deputy GM, AGM, Senior AO & AO Account Department & GM & Deputy GM Technical Total No.35	Department:	(In-house) Seminar Room
Duration (h):	09:30 AM to 06:30 PM with lunch from 01:30 to 02:30*1 day	Training Format:	

Trainer Characteristics:

From capacity building project team:

CA, B.B Jindal, M.Com, LL.B, FCA (National Accounting Expert of the Mission), Specialization in Accounting in Power Sector.

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Objective of the Training:

To train the appropriate officials working in the critical area with major gaps to plan for, initiate and work on the processes required to correct the gaps.

Scope of the Training:

1. Costing Records & Structure and Cost Audit.
2. Methodology – Presentation of Gaps and Action, Interactive Sessions, Case Study, Conclusions.

Session Name:	Inventory Control	File:	A.7
Company/ies:	All the three companies (AEGCL, APGCL & APDCL)		
Attendants:	GM, Deputy GM, AGM, Senior AO & AO Account Department & GM & Deputy GM Technical Total No.35	Department:	In-house (Seminar Room)
Duration (h):	09:30 AM to 06:30 PM with lunch from 01:30 to 02:30*1 day	Training Format:	

Trainer Characteristics:

From capacity building project team:

CA, B.B Jindal, M.Com, LL.B, FCA (National Accounting Expert of the Mission), Specialization in Accounting in Power Sector.

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Objective of the Training:

To train the appropriate officials on inventory control and accounting

Scope of the Training

1. Inventory Control & Accounting including physical Verification & write - off.
2. Methodology – Presentation of Gaps and Action, Interactive Sessions, Case Study, Conclusions.

Session Name: Training on Internal Audit and Reviews and Proprietary Audit	File: A.8
Company/ies: APDCL, APGCL, AEGCL	
Attendants: Two Executive Officers from the Account Departments of the Zones, Circles and Divisions	Department: Zones
Duration (h): 9 hours @ 2 days or 18 hours (tentative)	Training Format: Seminar in-house
Trainer Characteristics: Training Institute of the Principal Accountant General-Assam	
Objective of the Training: Familiarization and capacity building on the importance, impact, procedures and scope of Internal Audit and Reviews and Proprietary Audit	
Scope of the Training: To be designed by the proposed training institute.	

6.5. HUMAN RESOURCES

Session Name:	HRSC HR Orientation	File:	HR.1
Company/ies:	AEGCL, APGCL & APDCL		
Attendants: Target Audience	Team members constituted by the Mgmt. on Steering Committee	Department:	Corporate Office
Duration (h):	6 hours	Training Format:	In – House Workshop
Trainer Characteristics:			

Objective of the Training:

To provide the members of the Steering Committee with an overview of: current practices in HR; key areas of concerns in the three utilities; Action plans proposed in Interim Report 2 and processes for effective functioning of HRSC itself.

Scope of the Training:

1. An overview of the current HR practices; elements of strategic HRM & HRD; how these elements are linked/interface etc.
2. Key HR areas of Concern & Gaps in the three Utilities-subsystem-wise
3. Summary of contents (of IR 2 Annex) dealing with Action Plans to address the gaps with particular attention to timelines, prioritization and sequencing
4. Effective processes for HRSC:

   Some fundamentals that need to be in place for effective functioning of HRSC including teamwork, accountability and running of effective meetings (use of agendas, recording of meetings, responsibilities between meetings, importance of meeting process, etc.)

Session Name:	Enhancing Capacity of HR Functionaries at the Field Level	File: HR.2
Company/ies:	AEGCL, APGCL & APDCL	
Attendants:	Engineers who are working as HR Officers from the 3 utilities.	Department: Working at Power stations, APDCL Circles/Divisions
Duration (h): 3 days/6 hours a day	Training Format:	In - house
Trainer Characteristics:		

Objective of the Training:

- To develop a deeper understanding of the important HR functions required at the field level
- Close skill/knowledge gap for existing HR processes as well prepare for anticipated enhancements in HR processes

Scope of the Training:

- Overview of HR Function-traditional HR, Current trends & transformational role of HR
- Land acquisition-insights into procedures and problems. Land Acquisitions Act
- Rehabilitation & Resettlement Issues
- Legal Frame-work for Employee Relations & related issues
- Grievance Handling
- Mgmt of discipline-essential steps in disciplinary procedures; conducting domestic enquiries
- Basic internal customer communications; problem-solving and trouble shooting skills; and dispute resolution
- Philosophy of outsourcing (job contracts/manpower Contracts); Contract labour Mgmt
- IT in HR-employee related data base
- HR Challenges & new orientations in work culture as business entities, with enhanced accountability, customer orientation etc.

Session Name:	Induction Level Training Scheme for HR Professionals	File:	HR.3
Company/ies:	AEGCL, APGCL & APDCL		
Attendants:	Newly recruited HR Professionals	Department:	
Duration (h):	4 weeks	Training Format:	In-house and External
Trainer Characteristics:			

Objective of the Training:

To develop a 'Pipeline of HR talent/HR Resource Pool'-as part of building HR function- HR professionals to be recruited at induction levels and trained for the 3 utilities

Scope of the Training:

1. Power Sector Overview; Energy Sector in Assam; Indian Electricity Act 2003-important provisions;
2. ASEB: brief history including current status on disaggregation of the entities;; important statistics- such as PLF, no of customers etc; important stakeholder s
3. In-house Practices:
    - HR Planning; Recruitment Policy
    - Learning & Development
    - Performance Mgmt.
    - Reward & Recognition
    - Wage & Salary Administration; Various Policy Orders
    - R& R Issues
    - Land acquisition-insights into procedures and problems.LA Act &
    - Grievance Handling
    - Legal Frame-work in Employee Relations
    - Contract labour Mgmt; outsourcing(job contracts/manpower Contracts)
    - Mgmt of discipline-essential steps in disciplinary procedures; conducting domestic enquiries
    - IT in HR-employee related data base
    - Current HR Challenges in the Utilities
4. OJT & Field Visits & Project Work

Session Name:	Training of Internal Resources (as Trainers & Mgrs. of Courses)	File:	HR.4
Company/ies:			
Attendants:	Identified internal Resources from AEGCL, APGCL & APDCL	Department:	All three Utilities
Duration (h):	5 days	Training Format:	In-house
Trainer Characteristics:			
Objective of the Training: Developing identified internal resources - effective implementation of courses and -delivery training sessions			
Scope of the Training: The course will have two modules: 1. For delivery of sessions: Learning styles - an overview of different training contexts; principles of adult learning; trainer as a facilitator; use of pedagogical tools and their use for different learning objectives; key ingredients for planning effective sessions 2. For effective implementation of courses: Need analysis and objective setting; course planning; training evaluation and impact assessment, 3. Practice Sessions			

Session Name:	Study Visit(s) to Distribution Utility	File:	HR.5
Company/ies:	APDCL		
Attendants:	Multi-level Team(s) from Selected Circle(s) of APDCL	Department:	Selected Circle
Duration (h):	5 days	Training Format:	Visit to a Utility say NDPL
Trainer Characteristics:			

Objective of the Training:

Focussed study visit to provide an opportunity to see and study first- hand, the processes and practices of a well performing Utility, and apply lessons learned for performance improvement in their respective Circle(s).

Scope of the Training:

Study Visit (for team from Jorhat): Focussed interactions on *specific processes and practices* linked to performance Improvement, along with classroom sessions & field visits.

Note:

In order to allow future expansion of the lessons learnt to other circles, The Consultant has suggested APDCL to provide a 'seed team' comprising dynamic and open mind staff from all other circles (at least 2 each) to work in parallel with the selected circle.

Session Name:	General Management Course (for transition points in career – Sr. Manager to DGM)	File:	HR.6
Company/ies:			
Attendants:	AEGCL, APGCL & APDCL	Work Place:	Off-site at Training Institution
Duration (h):		Training Format:	External
Trainer Characteristics:			

Objective of the Training:

There is currently no training for upgrading skill-sets linked to career change or promotion.

Operating as a corporate entity requires a business orientation and General Management Competencies such as strategic management; leadership; change management, planning and effective delegation; effective communication; etc.

Further at senior management levels, because of interdependence of tasks, requires a multi-disciplinary orientation.

To develop relevant competencies /role related skills required at DGM level.

Scope of the Training:

General Management (Sr. Level)

- Scanning Environment; Restructuring state power sector-key policy provisions at national and state level
- Strategic Management; planning & processes
- Finance; analyzing financial statements; cost management strategies; Working capital mgmt
- Leadership; interpersonal effectiveness; Organization building; HRM& Development
- Marketing; pricing electricity tariff issues & methodologies, customer orientation-internal & external
- O&M (strategy & achieving excellence through benchmarking); Project & Contracts Mgmt.; Information Mgmt

6.6. IT

Session Name:	Workshop on IT Best Practices in Power Utilities	File:	I.1
Company/ies:	APDCL, AEGCL, APGCL		
Attendants:	CGM (Zones)/ DGM(Circles)	Department:	Headquarter
Duration (h):	2 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Awareness on the importance of IT for empowering the Power Utilities			
Scope of the Training: • Overview of best IT practices in Power Generation • Overview of best IT practices in Power Transmission • Brief of various IT practices in power distribution: Automatic Meter Reading & Data Analysis, Asset Management, Energy Audit, GIS & Consumer Indexing, Web Self Server, etc. • Overview of Change Management through IT • Importance of MIS modules • Overview of CRM modules • Brief of IT based Performance Appraisal System			

Session Name:	Workshop on expectations from R-APDRP (Part-A) Scheme	File:	I.2
Company/ies:	APDCL, AEGCL, APGCL		
Attendants:	CGM (Zones)/ DGM(Circles)/ SM(Divisions)	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	4 hrs	Training Format:	Seminar In-House
Trainer Characteristics:			
Objective of the Training: Importance of R-APDRP Part-A Scheme for APDCL			
Scope of the Training: • History of R-APDRP Scheme • Overview of R-APDRP Part-A and Part-B Schemes • Objective of R-APDRP (Part-A) Scheme • Brief of Scope of Work and Program design • Brief of the 17 modules covered in Part-A Scheme: Meter Data Acquisition, Energy Audit, New Connection, Disconnection 7 Dismantling, GIS based Consumer Indexing & Asset Mapping, GIS based Network Analysis, Centralized Customer Care Centre, etc. • Project Timelines and brief of SRS document			

Session Name:	Training on MS - Office and Mail Messaging System	File:	I.3
Company/ies:	APDCL, AEGCL, APGCL		
Attendants:	Graduate Engineers Trainees (new Joinees)	Department:	Headquarters/Division/Sub-Divisions
Duration (h):	3 X 8 hrs	Training Format:	Seminar - Away
Trainer Characteristics:			
Objective of the Training: Improvement of IT Usage			
Scope of the Training: • Overview of MS Office and its various modules • Hands-On Training on MS-Word • Hands-On Training on MS- Excel • Hands-On Training on MS-Power Point • Hands-On Training on MS-Outlook • How to use internet? • How to access and send e-mails?			

Session Name:	System Security and BCP Planning	File:	I.4
Company/ies:	APDCL, AEGCL, APGCL		
Attendants:	CGM (Zones)/ DGM (Circles)/ SM (Divisions)	Department:	Circle Office/Division Office
Duration (h):	8 hrs	Training Format:	Seminar - Away
Trainer Characteristics:			
Objective of the Training: Preparation of controls for System Security and Business Continuity			
Scope of the Training: • Importance of data security and data retention • Importance of defining access privileges for logical and physical systems • Overview of International Standards on System Security i.e. ISO 27001 • Brief on various IT tools to secure the organization's information • Overview of data backup policy • Understanding the need of Disaster Recovery Centre			

Session Name:	Program on Meter Data Acquisition and Meter data Analysis processes	File:	I.5
Company/ies:	APDCL, AEGCL, APGCL		
Attendants:	DGM (Circles)/ SM (Divisions)/ Manager (Sub-Division)	Department:	Circle Office/Division Office/ Sub-Division
Duration (h):	2 X 8 hrs	Training Format:	Seminar Away: Best Practicing Distribution Utilities
Trainer Characteristics:			
Objective of the Training: Understanding the AMR System Advantages			
Scope of the Training: • Understanding of Meter Data Acquisition process • Importance of AMR and its advantages • Communication methodologies of different MDAS systems • Brief of different operations of AMR (such as scheduling, dialing, etc.) • Importance of Data Analysis and its methodologies • Brief of billing process			

Session Name:	Program on Enterprise Resource Planning System	File:	I.6
Company/ies:	APDCL, AEGCL, APGCL		
Attendants:	CGM (Zones)/ DGM(Circles)	Department:	Headquarter
Duration (h):	2 X 8 hrs	Training Format:	Seminar - Away
Trainer Characteristics:			
Objective of the Training: Understanding the ERP Components for support processes of a Utility			
Scope of the Training: • Importance of Finance & Accounting Modules • Importance of Supply Chain Management • Importance of Human Resource • Importance of Project Plan • Importance of Customer Relationship Management • Importance of Data Services • Importance of Business Warehouse System			