NATIONAL TRAINING POLICY FOR THE POWER SECTOR

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Ministry of Power
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Government of India
Ministry of Power
Shram Shakti Bhawan

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RESOLUTION

Sub: National Training Policy for the Power Sector of India

Considering that the need for training has acquired critical importance in the context of the rapid technological changes as well as social transformation taking place in the country in general and power sector in particular, the Government feels that it is necessary to develop a dynamic training policy in consonance with the changing business context to achieve higher productivity and customer satisfaction. Accordingly, a Standing Committee on training was constituted to bring into focus, the need to step up training and human resource development, create an orientation of power sector personnel and stake holders towards the urgency and need for reforms and energy conservation as well as provide a standing join forum for coordination of training related matters in the power sector.

The said committee, held extensive deliberations and consultations and organized a National level seminar attended by the Chief Executive Officers and Heads of HRD of Central, State and Private Power utilities, academic institutions and Central/State Electricity Regulatory Commissions to draw up a comprehensive training policy. Three Zonal meetings were also conducted at Bangalore, Nagpur and Guwahati to present the strategy and action plan before the power generators, distributors and other stakeholders for eliciting their views.

The final report of the committee devising a training strategy and time bound action plan for its implementation submitted to the Government is annexed. The Government accepts the recommendations of the committee and resolves to adopt the same through the active involvement of all the organizations in the power sector in India. The implementation of the training policy will be monitored by the Standing Committee on Training quarterly.

Sd/-
(P.I. Suvrathan)
Joint Secretary to the Government of India

Copy for information and necessary action to:

1. The Chairman, Central Electricity Authority of India.
2. The Chairmen, Central & State Electricity Regulatory Commissions
3. The Chairmen, State Electricity Boards,
4. The Chief Executives of all Central, State Government PSUs and Private Sector Power Utilities of India
5. Heads of all Training Institutes of Power Sector
6. PS to MOP
7. PS to MOS(P)
8. PS to Secretary (Power)
9. PS to SS (Power)
10. AS (P), JS (Hydel), JS (Dist.), JS (T&R), JS (F&A)
11. All Directors & Deputy Secretaries in the Ministry of Power
12. All Under Secretaries/Desk Officers/Section Officers in the MOP.

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1.0 Preamble

The main objective of electricity industry is to achieve customer satisfaction through generation of electricity of the right quality and quantity at an affordable cost and supply to the consumers efficiently whenever and wherever required. This involves planning, design, engineering, procurement, handling and storing, construction, commissioning, operation and maintenance of power plants, equipment, transmission and distribution, sale of energy and collection of revenue, management of personnel and finance etc., each a critical task in its own right.

Trained manpower is required at every stage of the above mentioned tasks. Fast advancement of technology is making every sphere of the electricity supply industry more and more sophisticated, requiring specially skilled engineers, supervisors, artisans, managers etc. to manage the industry. The growing concern over environmental degradation and depletion of the conventional energy sources has made the task more challenging. The technical knowledge acquired from engineering colleges, polytechnics, industrial training institutes and other technical institutions needs to be supplemented with applied engineering and managerial skills. These skills are to be regularly updated to cope with the ever progressing and rapidly advancing technologies being introduced in the power sector where the speed of obsolescence often overtakes the pace of acquisition of a particular skill

Due to the introduction of more sophisticated technology and automation, the Man/MW ratio is declining. The Man/MW ratio in thermal sector in India has declined from 4.71 in the Sixth plan to less than 2.0 in the Ninth plan. In the hydro sector too, the Man/MW ratio has come down from 6.04 in the Sixth plan to 2.0 in the Ninth plan. The same trend is evident in terms of the number of personnel/ million units supplied - declining from 4.6 in 1992-93 to 2.5 in 2000-2001, a 45% decrease in eight years.

This indicates the increasing importance of each individual, which in turn makes manpower quality criteria more demanding. Added to this is the fact that electricity industry is a highly capital intensive industry. This necessitates the operation of the plants and equipment in the most safe and efficient manner to minimise the cost of supply.

Power sector reforms in India have gained momentum with the initiative of most of the State Governments in establishing State Electricity Regulatory Commissions (SERC) and restructuring the SEBs. The reforms are expected to change the way the Indian Electricity Supply Industry has been functioning for the last five decades and therefore demands major changes in the roles of technical/managerial personnel at various levels. As power sector reforms involve a number of complex and intricate issues, the people involved will need to be equipped with specific inputs in terms of knowledge, skills and attitude to enable them to play their changed roles effectively. This policy document is expected to help the stakeholders concerned in discharging the training responsibilities in a more effective manner.

2.0 Need for a Training Policy

The electricity industry is undergoing transformation through paradigm changes in Government policies, economic environment and consumer awareness. Unlike the past, electricity generation, transmission and distribution are now considered as commercial activities. Profit is no more a dirty word. From this changing business context has emerged a new factor for success: The competitive spirit to achieve higher productivity and customer satisfaction.

To survive in this competitive market, organizations will have to challenge the existing core beliefs, processes and methodologies and focus on hands-on learning to inculcate the necessary knowledge, skills and attitudes in their personnel.

The Department of Personnel & Training which is the nodal agency for training has issued guidelines to all the Ministries in 1996 for implementing a Training Policy for employees falling under its jurisdiction. The present power sector training activities are based on the broad parameters of the report of the "Committee on Training" constituted in 1985 under the Chairmanship of Sh. M.K. Sambamurti, the then Chairman CEA. Since then the technological and economic environment has undergone a sea change and there is an urgent need to have a National Training Policy document for the Power Sector containing a formal affirmation of the commitment to training and spelling out, in broad terms, the objectives, strategy, content and modalities to be followed in the field of training.

3.0 Standing Committee on Training in power Sector

3.1 Genesis

In a meeting on Training and Research in Power Sector, chaired by Shri Suresh P. Prabhu, Hon'ble Minister of Power, held on 8th February 2001, it was felt that there is a need to work out a National Training Policy and a committee in this regard should be constituted. This committee would provide a standing joint forum for evolving a national perspective and operational plans on training in the power sector.

Accordingly Ministry of Power vide Office Order No. 3/8(ii)/2001-T&R, dated 26 February, 2001, constituted a Standing Committee on Training to be chaired by Joint Secretary (T&R), Ministry of Power with Director General, NPTI as its Convener (See Annexure – 1 for details).

3.2 Scope of the Standing Committee:

The scope of the Committee was to bring into focus, the need to step up training and human resource development, create an orientation of power sector personnel and stake holders towards the urgency and the need for reforms and energy conservation as well as provide a standing joint forum for coordination of training related matters in the power sector.

4.0 Methodology

4.1 Meetings

4.1.1 In its first meeting held on 9th April 2001 the Standing Committee on Training took a broad overview of the present status of training in power sector. Commercial orientation and consumer satisfaction were identified as an integral part of the HRD policy for Power Sector.

4.1.2 In its second meeting held on 19th June 2001 the committee deliberated on the draft resolution of the All India Conference for formulation of a National Training Policy for Power Sector held on 20th and 21st April, 2001 at New Delhi. A core group was formed to further study the policy and to devise a suitable strategy/action plan for implementation.

4.1.3 The core group in its meeting on 23rd June 2001 discussed the draft training policy drawn up in the earlier meetings of the Standing Committee and prepared a draft strategy/action plan for its implementation. To give the policy document a true national character, the core group also recommended that zonal meetings be arranged to elicit further views from all over the country.

4.1.4 Accordingly Zonal meetings were arranged at Bangalore, Guwahati & Nagpur on 27th August, 8th September & 10th September, 2001 respectively and the draft training policy guidelines and Strategy/Action plans were presented before the participants. The suggestions and observations of the participants have been incorporated as far as practicable.

4.1.5 The third and final meeting of the committee was held on 22nd September 2001 at Power Management Institute, NTPC, to finalize the draft policy document.

List of participants of the Standing Committee meetings, Core Group meetings and zonal meetings are given as Annexures 2, 3, 4 & 5.

4.2 Two day National Conference

To evolve a national consensus on a National Training Policy for Power Sector with wide participation from all over the country a two day conference was organized by the National Power Training Institute on 20th and 21st April, 2001 at New Delhi for CEOs and HRD heads of central, state and private Power Utilities, academic institutions and Central/State Electricity Regulatory Commissions. Hon'ble Union Minister of Power Shri Suresh P. Prabhu inaugurated the conference in the presence of Union Minister Of State of Power Smt. Jayawanti Mehta. Eighty-four participants from various power sector organizations and academic institutions shared their views on the issues related to training in electricity industry.

Issues deliberated in the Conference

- Emphasis on the idea that money spent on Training is an investment – not an expenditure and to appreciate the cost of lack of training besides cost/benefit perceptions.

- The need for a new direction for the training policy in tune with the changing scenario in the power sector, and guidelines for the National Training Policy for the Power Sector.

- Redefining the role of power engineers as business managers of a high technology sector.

- Developing standard performance parameters for each category of employees based on best practices and bench marking concepts.

- Reassessing the training needs of Power Sector Personnel in the new environment, identifying and addressing performance problems. Training Need assessment in Project planning, implementation & monitoring, O&M, Transmission & Distribution, Tariff, Reforms & Restructuring

- Designing training activities to ensure that they are job-oriented and need-based resulting in increased productivity and consumer satisfaction.

- Planning for training as an integrated HRD activity with a commitment to impart training for all in the power sector at entry level as well as in-service.

- Networking amongst various organizations under the Ministry of Power and other reputed Institutes for optimizing training modules and to change the present attitude of 'my-resources – my-people' to 'our resources-our-people', so that redundancy/duplication of hi-tech infrastructure facilities is avoided and optimal utilization of existing training infrastructure and facilities and expertise through networking is made possible.

- Interaction amongst representatives from the Ministry of Power, Central Electricity Authority, Regulatory Commissions, Management Institutions, Central and State Public Sector Power Utilities, SEBs, NPTI, CPRI, ASCI etc. for course development, training etc.

- Developing a funding mechanism for implementation of Training Policy by the Power Sector Organizations.

- Self-sustenance of HRD Institutions in Power Sector: Feasibility & Operation.

- Review of the existing training courses and methods.

- Faculty upgradation and Training of Trainers (ToT).

- Evaluation (Impact) of Training and to evolve internal & external mechanisms for effectively institutionalizing the training functions based on Training Policy.

5.0 Present status of training and the areas of concern

The important issues, which the committee identified and felt the need to be addressed, while formulating the National Training Policy are:

5.1 Training Culture

While appreciating the efforts put in by the various Power Utilities in this direction, it has been observed that a large number of Power Utilities have not yet set up the required training infrastructure and adequate importance is not being given to training. Training is being considered as an optional activity and is taken up in isolation instead of as an integral activity to achieve the organization's goals.

5.2 Training Infrastructure

Basically three types of training infrastructures/facilities are available :

i) Training institutes recognized by CEA for imparting statutory induction training
ii) Lineman Training Institutes
iii) Other Training facility (Class/board rooms for refresher/ management programs) including networking with academic/training institutions outside power sector .

Decentralisaton of training, particularly, for operational level staff would be necessary. At the same time expensive infrastructure need not be created at each plant level. There ought to be networking of the facilities for better utilization of the resources. Resorting to peripatetic training, wherever feasible, may be considered.

5.2.1 Training Institutes Recognized by CEA

There are thirty-eight Training Institutes recognized by CEA under various Power Utilities (Annexure 6). These institutes mostly cater to the induction training needs of thermal power stations.

5.2.2 Lineman Training Centres

A good number of the SEBs have at least one lineman-training center. But they are quite inadequate vis-à-vis the enormous need. Also the quality of these centers is often far from satisfactory.

5.2.3 Other Training Facilities at the National Level

National Power Training Institute has established a Centre for Advanced Management & Power Studies (CAMPS) at its Faridabad campus. In addition to a number of short-term courses on Technology-Management interface, it also conduct a two-year full time MBA Program in Power Management. NPTI also conducts professional courses, integrating power-training experience with academics, like PDC & PGDC in Power Plant Engineering and B.E./B.Tech. in Power Engineering etc. These products should be gainfully utilized in the reforming power sector.

Many power sector organizations (e.g. : NTPC, NHPC, Power Grid etc) have developed regular tie up with institutions like IITs, IIMs, MDI etc. for providing necessary knowledge and skill inputs to their personnel.

5.3 Training Records

Lack of meaningful Training Records is always an obstacle to assess the number of persons who have received training, type of training and performance.

5.4 No training for non-technical staff

It has been noticed that in technology centered organizations like Power Utilities, the training of Non-technical officers and staff is often neglected/ignored. There is inadequacy of trainers and also insufficient training facilities for them in the Power Sector. This is an important thrust area where adequate action is required to be taken both at the Central and State levels.

5.5 Training Needs Assessment/Job Analysis

Training needs assessment has to precede the design and delivery of training. Identification of training should not be generic in nature but more focused with reference to the specific skills required to perform the job. The needs identification should be done scientifically and the process should involve the employee himself. A proper analysis of the jobs of individual functionaries or groups is the key to the identification of their training needs. Every job is to be broken down into its specific task components that the job holder is expected to perform. Standard Performance parameters for each category of technical/non-technical staff are to be developed.

5.6 Non-Availability of adequate Training for Hydro Power Personnel

Though more than 30 percent power comes from Hydro Power sources, very few recognized Hydro Training Institutes exist in the country. The recent establishment of training facilities by NHPC, OHPC and KSEB has eased the situation to a marginal extent.

5.7 Lack of Emphasis on Training In Transmission & Distribution

About 80% of the total personnel of the Power Sector are engaged in the area of Operation and Maintenance of Power System, Transmission and Distribution. But very little emphasis is being given for training activity in these areas. In view of the rapid technological development in this field and introduction of higher AC and DC voltages in the system, greater attention is required for this discipline. Employees working in Distribution constitute the public face of the utility, who have also been provided very little training for communicating effectively with customers and meeting the requirements of the customer. The entire staff is engaged in the maintenance of a technically complex system at low levels of efficiency and meeting consumer needs is only of incidental importance.

5.8 Training in Renewable and Non-Conventional Sources of Energy

While there is a constant growth in generation of electricity from Renewable and Non-conventional sources of energy, facility for training/ awareness creation in power sector practically does not exist. Steps must be taken to establish facilities to provide training and generate awareness in this field.

5.9 Under-Utilization of the Training Facilities

Under-utilization of the training facilities is a cause for concern. The best personnel are not normally spared for training either on account of non-availability of training reserves or they are being engaged on important assignments. Poor quality of training infrastructure also is a cause for under utilization.

5.10 Review/Evaluation of Training Programs

In many of the training Institutes, the training programs are not being evaluated in a scientific manner during or at the end of the program. Very rarely any attempt is made to measure the effectiveness of training by getting feed back on the performance of trained personnel after a specified period. It has been noticed that the content, form and duration of a number of programs, especially the induction level ones, are being continued for a number of years without taking cognizance of the changes taking place. The content of the training programs do not reflect the requirements of the organization and the needs of various types of skills.

The forays of SEBs in to the field of long term induction level training programs need to be adequately planned as a good number of them are not properly equipped with necessary software and hardware.

5.11 Simulator Training

The complexity of the modern power plants generates a compelling need for the operators to have a sound knowledge of the processes coupled with the diagnostic ability to understand events extraneous to the normal power plant behaviour and preparedness to act as the situation demands. Simulator is a cost effective tool to provide highly interactive and high quality training to the operating personnel. As per the study conducted by EPRI, USA benefits of Simulator training in terms of availability, thermal performance, component life and environment compliance savings, average Rs. 2.00 lakhs per MW per year. In the Indian context, for nearly 70,000 MW of Thermal Power, the annual savings would be Rs. 1400 Crores, presuming that the operational efficiencies of thermal Power Plants are as good as that in US.

5.12 Management Training

Continuous development of Executives/Managers, especially at the transition period in their career and in the context of continuously changing business environment is of utmost importance. There are a large number of knowledgeable engineers available in various Divisions/Departments of the different Power Sector organizations who need to develop their managerial ability as professional managers. Due to the process of reforms, restructuring, unbundling, privatization etc. the role of managers has become crucial and Management Programs to develop necessary competencies among them have become essential.

Executives in Finance and Management with non-technical background do not have adequate knowledge of the technical issues that is essential to help them discharge their duties efficiently and to effectively support the technical staff. The integration of disciplines such as finance, management and HRD with technology is still to take place. Electricity industry is no longer confined to electrical engineering alone.

5.13 Attitudinal Changes/ Behavioral Sciences.

Attitude of an individual plays an extremely important role in his/her performance. Thus, in spite of the availability of the best of knowledge and skill, the ability to provide the desired services may still be found wanting in individuals if they are not imbued with appropriate attitudes. **t** has been observed that training is presently concentrated mainly in the area of acquisition of knowledge and upgradation of skills and very little emphasis is given on attitudinal changes/behavioral sciences. It is high time to introduce these aspects of training in the management curriculum of induction level training as well as re-training programs. In some of the Companies training in behavioral aspects has achieved very good results. After undergoing such training the employees develop a sense of belonging to the organization and a better appreciation of the interests of other stake holders in the system. Bringing about attitudinal changes to meet the changing power sector scenario is now an

imperative need. Executive training programme to develop the right attitude through business games, counseling, etc. are to be designed to bridge the gaps in performance between the public and the Private Sector Organisations.

5.14 Impact of Reforms

The reforms process promises to radically change the way the electricity industry has been functioning hitherto. But, still there is a lack of clarity and adequate information among most of the personnel in the organisations in regard to their role, functions, responsibilities and new skills required in the changing environment. Also the concepts of reform are very often wrongly projected/ understood as against the interest of the employees and consumers which needs to be corrected. It needs to be appreciated that in the reform and restructuring process the interest of the employees have fully been taken care of, and no retrenchment or layoff has taken place in any of the SEBs where reforms and restructuring have been initiated. There is a need to communicate with the employees to remove the misconceptions about reforms. Along with this the employees are also to be motivated and equipped to meet the challenges in the new roles they would be playing during the reforms process in the organization and in the post reform scenario. It should be appreciated that when power sector is undergoing structural changes and the expectations of society become more demanding, it makes sense to equip one self to meet these emerging challenges.

The stakeholders like policymakers, lawmakers, trade union leaders, consumers, media etc. need to understand the rationale of reforms and their implications. A proper and timely HRD initiative in an organization will allay the fears and provide inputs required to achieve the benefits of reforms in power sector. The attitudes have to be changed to treat electricity as a business.

5.15 Implications of Reform for Training

The following issues would need to be addressed:-

- Need for a positive attitude among the employees
- Need for building greater accountability and responsibility in employees
- Need for the employees to understand the requirements of customers.
- Creating an environment for initiative by linking performance with recognition and reward .
- Doing away with " Blame everything on management" syndrome
- Empowering the employees to cope effectively with the changing scenario
- Addressing the issue of ageing of skilled employees with no fresh recruitment
- Emphasis on Energy Conservation
- Reduction of cost of delivered power
- Providing quality and reliable power

5.16 Regulatory Commissions

The setting up of Regulatory Commissions is an important development in power sector reforms in the country. However, most regulatory commissions are staffed with personnel from the SEBs as well as the Government and are used to "old style" regulation based on Government directives and legal procedures. There is an enormous need for capacity building on issues pertaining to a more objective and result oriented regulation for power sector reforms to succeed in the country.

5.17 Training in Information technology

Information technology has pervaded all spheres of life. It has been observed that many of the state Power Utilities are not utilizing various IT tools to the extent required. The number of IT literate persons in Power Utilities is very small. Application of IT shall not only lead to improved productivity but it would usher in

more transparency in all operations. IT could be effectively used to reduce transmission & distribution loss, for billing and collection of revenue etc.

5.18 Inadequacy of Trainers & Insufficient career development options

There is inadequacy of trainers and also insufficient career development options for them in the power sector. Training of trainers programmes are to be developed to upgrade the skills of the trainers posted in training cells/centers/institutes. A network of successful line managers with training aptitude is to be created so that they are available to create multiplier effect in the training area. Management should relieve them to discharge their training responsibility. This is an important thrust area where immediate action is required to be taken both at the Central and State levels.

5.19 Training for Contract Labour

As most of the power utilities use contract labour both for operation and maintenance to large extent, proper knowledge of operation and maintenance of equipments is essential for the contract labour. Training at periodic intervals may be enforced as a requirement in qualifying for contract for supply of labour in power plants.

6.0 Policy Guidelines

The basic philosophy on which the guidelines have been devised is :

TRAINING FOR ALL : EVERY EMPLOYEE HAS A RIGHT TO RECEIVE NEED BASED TRAINING AT REGULAR INTERVALS TO ENABLE HIM/HER TO DEVELOP HIS/HER POTENTIAL TO THE MAXIMUM AND CONTRIBUTE HIS/HER BEST TO THE ORGANISATION .

THE ULTIMATE GOAL OF POWER TRAINING IS CUSTOMER SATISFACTION THROUGH REDUCTION IN COST OF DELIVERED POWER AND ITS RELIABLE AND QUALITY SUPPLY AT THE HIGHEST LEVELS OF EFFICIENCY AND ACCOUNTABILITY.

6.1 Training for All

Every Organization in the Power Sector should have a written Training Policy Document containing strategies to ensure training for all for a minimum period of one week annually for each employee .

6.2 Top Management Commitment

The top management must have strong commitment towards training and take effective steps to spread the culture of training and development thereby promoting competencies and commitment among employees. A senior Board level member should be given responsibility for this area. The utility/company must evolve a perspective plan to achieve “training for all”.

6.3 Training - an investment

Money spent on training should be treated as an investment rather than as expenditure. There should be a move towards reflecting personnel as corporate assets as is done by NTPC. Expenditure on training should be included for tariff computation.

6.4 Training for all Cadres

Training should be essential for all personnel working in power sector right from the lowest cadre to the highest cadre and a prerequisite for promotion. Training and skill development credit should be institutionalized. The practice of on-job-training should be encouraged. Detailed cadre training plans are to be prepared to achieve the levels of performance prescribed in the table of standard performance parameters. Provisions should be made in the agreements to the effect that contract labour engaged in O& M are trained personnel.

6.5 MoUs with Reforming States

Training may be included in the Memorandum of Understanding being signed by Ministry of Power with the Reforming states and the public sector undertakings.

6.6 Training for Transmission & Distribution personnel

As 80% of the power sector personnel are engaged in Transmission & Distribution (T&D) function, Indian Electricity Rules should be amended expeditiously to make training mandatory at the induction level as well as at periodic intervals to ensure safety, reliability and efficiency in transmission and distribution of electricity. Power Grid Corporation of India Ltd. and State Sector T&D Companies could pool their resources to build common training facilities.

6.7 Research in Training

Research in training should be encouraged to evolve new methods of training, its evaluation and impact assessment. It should include areas such as :

- Evolving methods to measure the work place impact of training, through a process starting with preparation of standard performance parameters
- Multi skilling
- Sustaining positive attitudes
- Develop power-sector specific business games, case studies, computer based training etc.
- Use of modern concepts and equipments in training

6.8 Training Plan

Each organization in the power sector should put in place a comprehensive training plan evolved through :

6.8.1 Preparation of matrix of standard performance parameters based on best industry practices and bench-marking. This matrix would be the basis for the training need assessment, design of training courses and their evaluation.

6.8.2 A **periodical Training Need Analysis** (say once in two years) for evolving an annual need based training intervention agenda.

6.8.3 **Identifying planned training intervention** for each level of transition in an employee's career such as:

➢ Technical training and skill upgradation in :

- Power Station (Thermal, Hydro and non-conventional) technologies and Operations & Maintenance
- Transmission Systems technologies and Operations & Maintenance,
- Distribution System technologies and Operations & Maintenance,

- Handling critical emergencies like : cascade tripping of grid
- Energy Efficiency
- Energy - Environment Interface
- Rural Electrification
- Power Trading

➢ Personality Development

- Human Values and Ethics
- Attitudes and Behavior
- Executive and Managerial Skills
- Customer Orientation
- Integrated Personality Development
- Communication skills
- Developing commercial/business outlook
- Marketing skills in a competitive environment

➢ Organisation Development Issues

- Functional management areas (such as Corporate Planning, Project Management, Financial Management, Materials Management, Human Resource Management)
- Industry best practices
- Bench marking
- Total Quality Management
- Industrial Relations in the changed scenario
- Rehabilitation & Resettlement Management
- Safety and Security

➢ Information Technology and Computer Skills

- Adequate training should be provided to make the employees IT literate.

Note : The management of each power utility must emphasise bridging the gap relating to the missing skills among its personnel through training. The concept of Best Practices and Benchmarking are to be adopted while developing need- based training programs. Due emphasis should be given to training of apprentices systematically in carefully identified skills.

6.8.4 Formulate Cadre Training Plan for each category of employees.

6.8.5 Prepare Training Action Plans to facilitate and institutionalize the process of transfer of learning to the work environment.

6.8.6 Finalise strategies and approaches to accomplish (a) "Training for all"; and (b) provide need based training at regular intervals.

6.9 Educational Upgradation Plan

- Employers shall facilitate leave and financial opportunities to employees for acquiring higher educational qualifications.
- For non qualified workmen to qualifying in ITI
- For ITI Certificate holders to Diploma in Engineering
- For Diploma Holders to Graduate in Engineering
- For Engineers and Executives to acquire PG level qualifications (M.Tech. /MBA, etc.)
- For Postgraduates – research work leading to PhD.

6.10 Management Development Programs

Exposure to new technologies and best practices should be encouraged. At least one long term training opportunity/ program in a career should be planned for middle and senior level officers. Management development would be crucial to apex level managers of power sector to equip them to effectively manage higher as well as changing job responsibilities.

6.11 Training Organization Structure

6.11.1 At the National level, responsibilities like the parameters for minimum standard of training facilities, the course syllabi, inspection of training centers to ensure minimum standards of infrastructure, quality of trainers and the training courses, giving accredition to the training institutions and to the trainers, evaluating the performance of the Training Institutes annually and rewarding the best performing Training Institutes/Trainers are to be entrusted to a suitable national level organization, such as the Central Electricity Authority. The parameters for accredition may be made public through web-site.

6.11.2 The Training Function should be headed by the head of the Personnel Division in an organization supported by a team of HRD specialists.

6.11.3 Appropriate performance measurement and incentive systems for those in training area should be ensured.

6.11.4 Continuous upgradation of knowledge and skill of trainers be ensured by providing exposure to the latest technology/management practices.

6.12 Creation of Training Infrastructure

6.12.1 An adequate training infrastructure for Hydro Power, Transmission, Distribution & Non Conventional Energy should be developed.

6.12.2 As there is no training facility available in the North Eastern Region, an Institute specially dedicated to this region may be established.

6.12.3 As far as possible, duplication of Specialized cost intensive training facilities should be avoided.

6.13 Training Management Information System (TMIS)

6.13.1 Training function to be IT enabled so as to facilitate follow up and reference through Internet, computer based training etc.

6.13.2 Efforts should be made to integrate training institutions through a Training Management Information System (TMIS).

6.14 Training Budget

Organizations should allocate adequate funds to training and development activities for meeting the stipulated training requirement. A minimum of 1.5% salary budget may be provided initially, gradually increasing it to a level of 5% depending on organisation's requirement.

6.15 Training Allowance

A training allowance should be extended to all the persons engaged in Training Institutes. The autonomous training institutes may get UGC / AICTE scales and benefits.

6.16 Networking of Training facilities

Training facilities should be optimally utilised by the power sector organisations through networking with reputed Educational / Professional Institutes like NPTI, PMI(NTPC), CIRE(REC), IIMs, IITs, MDI, ASCI etc. to tap the best management and technical expertise. Training infrastructure and expertise available with private sector organizations may also be included in the networking

6.17 Feedback

A mechanism to evaluate the effectiveness of training programs is essential. Sponsoring organizations should send the feedback on the efficacy of training at the workplace for further improvement of the programs. The benefits should be evaluated and course content modified based on the inputs .

6.18 Distance Education

Industry supported distance education programs including development of Computer Based Training (CBT) should be encouraged which would equip the engineers in the field with specific managerial skills like Human Resource Management, Finance, Project Management etc. to face the coming challenges in the power sector.

6.19 Case Studies Depository

Case studies on operational and project management issues from various Power Utilities / SEB's / CPSU's etc. should be developed and kept in a Common Depository. This depository could be made available on the web-site for imparting training and sharing experiences.

6.20 Training on Reforms

Since reform and restructuring process initiated is going to change the power sector, training in Power Sector Reforms should be provided to all concerned including the regulators and consumer forums. The middle and senior level managers should be exposed to the regulatory framework prevalent in other countries.

6.21 ISO 9000 Certification

Training institutions should as far as possible obtain ISO-9001: 2000 certification.

6.22 Training at Manufacturer's works

Manufacturers may be involved in training activity to ensure that their specific product knowledge and expertise and facilities are appropriately utilised. The suppliers of equipment should be required to provide necessary training to operate their equipment. These should be properly institutionalized so as to reap optimal benefits from the suppliers and absorb the technology. Where absorption of technology is envisaged through supply of modern equipments, training of staff should be an integral part of the contract so that the technology is internalized.

6.23 Simulator Training

Simulator training should be used for operational staff of the Power Plants at suitable intervals.

6.24 Training for Contract Labour

Adequate training should be made a pre-requisite for the contractors to qualify for supply of labour in power plants. Contract documents should accordingly be modified.

6.25 Training in Disaster Management

There is an urgent need to conduct purposeful training courses on "Disaster management" and for developing standard operation practices (SOP) for all agencies.

A team of trainers in State Electricity Board/Central, State power utility/Substation should be trained in Disaster Management to tackle situations like fire, earthquake, terrorist attacks etc. to restore power within the shortest possible time. These trainers in turn can train the other personnel.

6.26 Training Abroad

Opportunities for foreign training should be provided to meritorious candidates through objective selection criteria. After such costly training, the trained persons should be posted at locations where they can utilize the training received and in turn guide others.

7.0 Implementation Strategy

7.1 General

7.1.1 A Policy Statement should be issued by the central government to convey the training policy decisions to all concerned in power generators and Power Utilities, regulatory bodies, training/academic institutions, state and central government departments etc. The notification should also be available on the website of Ministry of Power and the Central Electricity Authority.

Action – MOP

**Time frame – 2 months*

7.1.2 Arrange wide publicity of the policy guidelines through business magazines/journals/dailies.

Action – MOP/CPSUs/NPTI

Time frame – 2 months

7.1.3 Organise meet of CEOs and others concerned to explain the importance of the policy guidelines and present a result-oriented action plan for discussion. The Standing Committee on Training is to meet at least twice a year to review the porogress.

Action – MOP & NPTI

Time frame –6 Months

7.1.4 Training issues should be included as a regular agenda item in the Power Ministers' Conferences.

Action – MOP

7.1.5 Establish a mechanism to facilitate, feedback and review of the activities envisaged in the Training Action Plan.

Action – MOP, CEA, NPTI

Time frame – 6 months

* Note : Time frame is from the zero date i.e. the date of formal acceptance and release of the Policy Document by MOP.

7.2 Policy specific

7.2.1 Ensure that a written Training Policy Document containing strategies to ensure training for all for a minimum period of one week annually for each employee is in place in every organization. A sample standard Policy statement to be provided to all Power Utilities.

Action – CEA/MOP/NPTI (ref. Guideline 6.1)

Time frame – 3 months

7.2.2 Each Power Utility shall exhibit its top management commitment towards training by displaying its training policy prominently.

Action – NPTI and Power Utilities(ref. Guideline 6 .2)

Time frame – 3 months

7.2.3 Training as an investment.

7.2.3.1 Workshop on 'human asset accounting' shall be organized to arrive at a standard mode of human asset evaluation.

Action – NTPC and other organisations (ref. Guideline 6.3)

Time frame – 1year

7.2.3.2 Expenditure on training may be considered for tariff computation by regulatory authorities.

Action – MOP(ref. Guideline 6.3)

Time frame – 3 months

7.2.4 Guidelines for compulsory training for all personnel working in power sector right from lowest to highest cadre, preparation of Table of Standard Performance parameters, Cadre Training Plan and Training Action Plan should be issued.

Action –CEA/ MOP (ref Guideline 6.4)

Time frame – 3 months

7.2.5 Number of persons to be trained, area of training, expenditure on training etc. should form part of the MoUs being signed by MOP with the Reforming States and the Public Sector Undertakings.

Action – MOP(ref Guideline 6.5)

Time frame – 3 months

7.2.6 Expedite amendment in I.E. rules for making induction level training in T&D mandatory.

Action – CEA/MOP (ref. Guideline6.6)

Time frame – 3 months

7.2.7 Identify the areas for research in training.

Action - All Trg. Institutes(ref. Guideline 6.7)

Time Frame - 1 Year

7.2.8 Ensure preparation of training plan by each organization

Action – All Power Utilities (ref. Guideline 6.8)

Time frame – 6 months

7.2.9 Ensure preparation of Educational Upgradation Plan.

Action – All Power Utilities (ref. Guideline 6.9)

Time Frame – 6 months

7.2.10 Ensure preparation of the schedule of at least one long term training opportunity/ program (say six weeks) in a career for middle and senior level officers by optimum utilization of facilities already created in the lead institutes of the power sector.

Action -All Power Utilities/NPTI (ref. Guideline 6. 10)

Time frame – 6 months

7.2.11 Incentive for Training Function

7.2.11.1 Performance of the Training Institutes to be evaluated annually and a reward system for the best training institute and trainer to be established.

Action – CEA (ref. Guideline 6.11.1)

Time frame – 3 months

7.2.11.2 Ensure that the Training Function is headed by a Board level Member/Head of Personnel/ Director supported by a team of HRD specialists.

Action – All Power Utilities (ref. Guideline 6.11.2)

Time frame – 6 months

7.2.11.3 Devise appropriate performance measurement and incentive system for those in training area.

Action – CEA (ref. Guideline 6.11.3)

Time frame – 6 months

7.2.11.4 Design a long-term plan for continuous upgradation of knowledge and skill of Trainers.

Action – All Power Utilities and Trg. Institutes (ref. Guideline 6.11.4)

Time frame – 6 months

7.2.12 Create the appropriate infrastructure for training.

Action–All Power Utilities and Trg. Institutes (ref. Guideline 6.12.1 & 6.12.2)

7.2.13 Establish a Training Management Information System (TMIS) .

Action – CEA/NPTI (Ref. Guideline 6. 13.2)

Time frame –I Year

7.2.14 A directive to be issued to organizations to prepare an annual training budget.

Action – MOP/ All Power Utilities (Ref.Guideline 6.14)

Time frame – 3 months

7.2.15 All Power Utilities to implement government guidelines of giving allowance and similar benefits to trainers.

Action – All Power Utilities/Training Institutes(Ref. Guideline6. 15)

Time frame – 1 Year

7.2.16 All training institutes should be encouraged to network for maximum benefit.

Action – All training institutes(Ref.Guideline 6.16)

7.2.17 A model format to evaluate the effectiveness of training programs is to be prepared.

Action – NPTI/PMI/CEA/KPCL/TNEB/APTRANSCO (Ref.Guideline 6.17)

Time frame – 6 months

7.2.18 A pilot distance education program along with a Training of Trainers program should be started for imparting specific managerial skills like HRM, Finance, Project Management etc.

Action – NPTI/PMI/ASCI/IIMs/XLRI/IGNOU (Ref.Guideline 6.18)

Time frame – 1 Year

7.2.19 Training Institutes should constitute a dedicated group to compile case studies.

Action – All training Institutes (Ref.Guideline 6. 19)

Time frame – 6 months

7.2.20 Power Sector Reforms

7.2.20.1 A massive program for sensitization of power sector personnel, opinion makers and the stake holders towards issues related to Reforms, Environment and Energy Conservation needs to be launched by pooling resources from various training, educational, technical and professional institutes. Organisations like REC and PFC, should act as catalysts in creation of an environment for decentralisation of training in this regard.

Action – NPTI / MOP/REC/PFC (Ref.Guideline 6.20)

Time Frame – 1 Month

7.2.20.2 A module on Power Sector Reforms should be included in all the training ***programs*** arranged for the power sector personnel. Specialised training programs for regulators need to be introduced. Adequate international exposure on regulation and restructuring should be given.

Action – NPTI/ MOP/ All Power Utilities (Ref.Guideline 6.20)

Time frame – 1 month

7.2.21 Impress on Training Institutes the gains of ISO:9001 quality certification.

Action – All training institutes (Ref.Guideline 6.21)

7.2.22 Chalk out the training programs by interacting with manufacturers.

Action – All training institutes (Ref.Guideline 6.22)

7.2.23 Ensure that simulator training at suitable intervals is made compulsory for operation staff of the Power Plants.

Action – MOP, CEA, All Power Gen . Companies (Ref.Guideline 6.23)

Time frame – 3 months

7.2.24 Ensure adequate training - a pre-requisite for the contractors for supply of labour in power plants. This should form a part of the contract clause.

Action –All Power Utilities (Ref.Guideline 6.24)

Time frame – 3 months

7.2.25 Training in Disaster Management should be introduced by developing a team of resource persons in this field.

Action –NPTI & All Power Companies (Ref.Guideline 6.25)

Time frame – 2 months

7.2.26 Methodology should be established for training abroad in respect of meritorious candidates at suitable intervals.

Action - All Power Companies (Ref. Guideline 6.26)

Time Frame - 3 months.

8.0 Funding

Training is an investment and not a mere item of expenditure. The funds required for training can broadly be categorised in two heads, Capital outlay (Plan) and Recurring Expenditure (Non-plan). The funds required for creating training infrastructure are currently booked under the first one while expenses towards salaries, TA/DA, maintenance fee etc. comes under the second.

In view of the sizable expenditure involved in training/re-training and its development it is suggested that:

Organizations should allocate **at least 1.5% of the Salary Budget** to Training and Development activities. Efforts should however be constantly made to increase the same to a level of 5%.

Investment to be made in setting up of the basic infrastructure shall be the responsibility of SEBs / Power Utilities. A suitable mechanism/scheme may be evolved for funding of training & development activities like procurement of simulators, working models, lab./ testing equipments etc. under Central assistance to supplement the efforts of SEBs.

9.0 Marketing Training

The training institutes/organizations have often not taken up the task of marketing training as a major element of personnel management system aimed at raising the productivity within an organization. Training Institutes and training managers must consider training as a service they are offering to the various customers, which need to be marketed like any other service. The principles of marketing a service effectively hence, need to be used extensively by them. Creation of awareness about availability of training facilities shall be the first step in this direction. The second step will be to highlight the contribution of training towards improving productivity of individuals and thereby organizations. Training Institutes should evolve a mechanism to be in constant touch with the customer organizations to continuously upgrade, match the course contents with the specific needs of the organization and use innovative methods to deliver the training inputs.

10.0 Looking Ahead

Though policy has been able to address wide ranging issues in the reforming power sector, the success of the exercise is largely dependent on the effective implementation of the recommendations. The guidelines evolved need to be reviewed periodically to incorporate changes in the power sector.

The Standing Committee should meet at least twice a year to take stock of the status of the process of implementation of the recommended policy guidelines. It should analyse the hurdles coming in the path of implementation, suggest remedial measures and also deliberate on the issues emerging which have not been addressed by the existing policy guidelines.

Standing Committee should submit a report, titled 'State of Training in Power Sector', annually to the Ministry of Power.

Annexure –1

No.3/8(ii)/2001-T&R
Government of India
Ministry of Power

New Delhi, the February 26, 2001

OFFICE ORDER

With a view to bring into focus, the need to step up training and human resource development, create an orientation of power sector personnel and stake-holders towards the urgency and the need for reforms and energy conservation as well as provide a standing joint forum for coordination of training related matters in the power sector, a standing committee on training is constituted as under:

1.	Joint Secretary (T&R) Ministry of Power	Chairman
2.	Member in-charging of training Central Electricity Authority	Member
3.	Director in-charge of training National Thermal power Corporation	Member
4.	Director in-charge of training Power Grid Corporation of India Limited	Member
5.	Director in-charge of training National Hydroelectric Power Corporation	Member
6.	Director in-charge of training Tehri Hydro Development Corporation	Member
7.	Director in-charge of training Nathpa Jhakri Power Corporation.	Member
8.	Director in-charge of training Power Finance Corporation	Member
9.	Director in-charge of training North Eastern Electric Power Corporation	Member
10.	Director in-charge of training Rural Electrification Corporation	Member
11.	Director in-charge of training Damodar Valley Corporation	Member
12.	Member in-charge of training Bhakra Beas Management Board	Member
13.	Director General Central Power Research Institute	Member
14.	Secretary Central Electricity regulatory Commission	Member
15.	Director General National Power Training Institute	Member-Convener

2) The Committee may co-opt any experts and representatives of State Electricity boards/State Power utilities as members.

3) The Committee would, besides other recommendations, submit a draft National Training Policy for the Power Sector and operational guidelines for its implementation, taking into account, among other things, the issues listed in the minutes of the meeting chaired by the Ministry of Power on 08.02.2001 (copy enclosed).

4) Secretariat assistance to the Committee would be provided by National Power Training Institute.

5) The Committee will submit a draft Training Policy for power sector within four months and make other recommendations from time to time for optimal utilization of infrastructure.

Sd/-
(Shachindra Sharma)
Deputy Secretary to the Government of India

To
1. All Members of the Committee
2. Chairman, CEA, New Delhi
3. CMDs of NTPC/PGCIL/NHPC/THDC/NJPC/PFC/REC/NEEPCO
4. Chairman, DVC/BBMB
5. Secretary, CERC
6. Director General, NPTI/CPRI

Copy also to:
1. Chairman, SEBs/State Power Generation/Transmission/Distribution Corporations.
2. Secretary (P)/SS(P)/AS(P)/All Joint Secretaries of Ministry of Power.
3. PS to MOP/PS to MOS(P)

Sd/-
(Shachindra Sharma)
Deputy Secretary to the Government of India

Annexure –2

Standing Committee on Training
List of Participants

(First and Second Meeting held on 09-04-2001 & 19-06-2001)

Sr No.	*Name*	*Designation & Organisation*
	S/Shri	
1.	Anil Razdan, Chairman	JS(T&R),MOP
2.	Dr. B.S.K. Naidu, Member-Convener	Director General , NPTI
3.	K.K. Sinha,	Director (Personnel),NTPC
4.	N.R. Waghmare,	Member, G.E.B., Baroda
5.	D.P.S. Lamba,	Director (Personnel),THDC
6.	Amrik Singh,	Member(Power)BBMB,Chandigarh
7.	R.K. Nair,	E.D., PMI, NTPC
8.	Vinod Gulati,	ED(MS),NHPC
9.	I.C. Sharma,	Spl. Secretary,BBMB
10.	Y.P. Sharma,	Jt. Secy.,BBMB
11.	Vinod Bihari,	AGM,PFC
12.	S. Srikant,	AGM,THDC
13.	H.C. Seth,	DGM,PMI, NTPC
14.	D. Ray,	DGM,PFC
15.	Prem P Srivastava,	DGM,NJPC
16.	Venkat S. Tata,	DGM,Power Grid
17.	S.B. Srivastava,	Resident Manager,DVC
18.	Shachindra Sharma,	Dy. Secy.(T&R),MOP
19.	K.S. Samarendra Nath,	US(T&R),MoP
20.	V.B. Gupta,	Chief Engineer, CEA
21.	J.S. Jawa,	Director(Trg.) , CEA
22.	P.R. Singh,	Director(P&A), U.P. P.C.L.
23.	G.S. Misra,	Dy. G.M.U.P.P.C.L.
24.	Dr.Channakeshava,	Addl. Director, CPRI
25.	S.V. Sapre,	G.M.(HRD), G.E.B., Baroda
26.	S.K. Dutta,G.M. (Tech.)	R.E.C.
27.	Dr. P. Saxena,	Director, MNES
28.	Arjun Banerjee,	Dy. G.M.(Admn.), DVC
29.	N.K. Agarwal,	G.M., BHEL
30.	M.K. Ray,	Director,NPTI

Annexure - 3

Core Group of the Standing Committee on Training

List of Participants of the meeting held on 23rd June, 2001 at NPTI, Faridabad

Sr No.	Name & Designation	Organisation
1.	Dr. B.S.K. Naidu, D.G.	NPTI
2.	Shri N.R. Waghmare, Member	G.E.B., Baroda
3.	Shri R.K. Nair, E.D	PMI, NTPC
4.	Shri U.C. Misra, E.D.(HR)	Power Grid
5.	Shri R.K. Choudhary, ED	NPTI
6.	Shri J.S. Jawa, Director(Trg.)	CEA
7.	Shri Manas K. Ray, Director	NPTI
8.	Shri P.V. Chorghade, Sr. Manager	PMI, NTPC
9.	Shri Nitin Moharil, Dy. Director	NPTI

Annexure – 4(a)

LIST OF PARTICIPANTS

Zonal Meeting of Standing Committee on Training held at on 27th August 2001 at Bangalore.

S.No.	Name	Designation	Organisation
1.	Dr. B.S.K. Naidu	Director General	NPTI & CPRI
2.	Shri M. Nellaiappan	Chief HRD Manager	KPCL
3.	Shri S. Velu	Chief Engineer(G)	KPTCL
4.	Shri J.K. Ghaste	Consultant(Administration)	KERC
5.	Dr. Channakeshava	Addl. Director	CPRI
6.	Dr. IPS Paul	Joint Director	CPRI
7.	Dr. Sujatha Subhash	Joint Director	CPRI
8.	Shri B. Jeyaraman	Director (Trg./Dev.)	TNEB
9.	Dr. V.K. Sethi	Research Adviser	CET, Osmania Univ

Annexure – 4(b)

LIST OF PARTICIPANTS

Zonal Meeting of Standing Committee on Training held at Guwahati on 8th September, 2001.

S.No.	Name	Designation	Organisation
1.	Shri G.N. Neog,	Chief Engineer(P&P)	ASEB
2.	Shri G.C. Pathak,	Asstt. Chief Engg (Reform Cell)	ASEB
3.	Shri T.N. Das,	Senior Director(HRD)	WBSEB
4.	Shri K.P. Ray,	Director(HRD)	Meghalaya SEB
5.	Shri M. Singh,	DGM(HRD)	NEEPCO
6.	Shri C.R. Bhattacharjee,	Supdt. Engineer	Deptt. of Power, Govt. of Tripura
7.	Shri Shachindra Sharma	Dy. Secretary	Ministry of Power
8.	Shri Manas K. Ray	Director(CAMPS)	NPTI

Annexure – 4(c)

LIST OF PARTICIPANTS

Zonal Meeting of Standing Committee on Training held at Nagpur on 10th September, 2001.

1. Shri V.S. Lothe, Executive Director, NPTI(WR)
2. Shri K.K. Saha Chaudhuri, Executive Director, BSES
3. Shri V. M. Firke, Supdt. Engineer (Gen.), MSEB.
4. Shri S.D. Shinde, Executive Engineer (Trg.) MSEB
5. Shri S.R. Apte, Chief Manger (O&M-EDP), Power Grid Corporation.
6. Shri A.K. Dutta, Addl. G.M. Power Grid Corporation.
7. Shri M. Venkateshwara Rao, engineering Officer, CPRI.
8. Shri C.S. Chaudhari, Dy. Executive Engineer, MSEB
9. Shri H.P. Lall, Director,NPTI(WR)
10. Shri A.G. Vinchurkar, Director(O) I/C, NPTI(WR)
11. Shri K.S. Samarendra Nath, Under Secretary(T&R), MOP, Govt. of India.

Annexure- 5

Third Meeting of the Standing Committee on Training held on 22-09-2001
List of Participants

S.No.	Name & Designation	Organisation
1.	Shri P.I. Suvrathan, JS(T&R) Chairman, SCOT	Ministry of Power
2.	Dr. B.S.K. Naidu, D.G. Member-Convener, SCOT	NPTI
3.	Shri N. R. Waghmare, Member	GEB
4.	Shri R.K. Nair, ED	PMI, NTPC
5.	Shri U.C. Misra, ED(HR)	Power Grid
6.	Shri Vinod Gulati, ED(MS)	NHPC
7.	Shri J.S. Jawa, Director(Trg.)	CEA
8.	Shri Shachindra Sharma, Dy. Secy.(T&R)	MOP
9.	Shri K.S. Samarendra Nath, Under Secy.(T&R)	MOP
10.	Shri N.K. Aggarwal, GM	BHEL
11.	Shri Shrikanthan, AGM(HRD)	THDC
12.	Col. Arjun Banerjee, DGM(Adm.)(HRD)	DVC
13.	Shri D. Ray, DGM(CSE)	PFC
14.	Ms. Kavita Din, DGH(CA&E),	NEEPCO.
15.	Shri S.K. Dutta, GM(Tech.)	REC
16.	Shri R.K. Sood, E.I.C.	BBMB
17.	Shri A.L. Wadhawan, Jt. Secretary/HRD	BBMB
18.	Shri Prem Srivastava, DGM(MS)	NJPC
19.	Shri H.C. Seth,AGM	PMI, NTPC
20.	Shri A.P. Verma, Sr, Manager(HRD/P&A)	THDC
21.	Shri M.L. Chopra, Resident Representative	GEB

Annexure - 6

List of Training Institutes Recognised by CEA

NORTHERN REGION

NPTI National Power Training Institute (Northern Region) at Badarpur, New Delhi.

NTPC

- Training Institute at Singrauli STPS
- NCTPP Training Centre, Dadri
- Power Management Institute, Noida
- Training Institute at Rihand, STPS

RPC Technical Training Centre, Renusagar

PSEB Training Institute at Ropar STPS

UPPGC Training Institute at Obra, STPS

NHPC

- Training Institute at Chamera- I Hydro
- Training Institute at Tanakpur Hydro

WESTERN REGION

NPTI National Power Training Institute (Western Region) at Nagpur (Maharashtra)

NTPC

- Training Institute at Korba STPS
- Training Institute at Vindhyachal STPS
- Training Institute at Kawas Gas Power Project

TEC Training Institute at Trombay Thermal Power Station
Training Institute at :
(i) Bhira Hydro Station
(ii) Dharvi Receiving Station

AEC Sabarmati Thermal Power Station Training Power Station Training Institute

MSEB

- Thermal Training Institute at Nasik TPS
- Plant Training Institute at Koradi TPS

MPEB Power GenerationTraining Institute at Korba TPS

BSES Technical Training Centre at Dahanu TPS of BSES

SOUTHERN REGION

CEA

- Power System Training Institute, Bangalore
- Hot Line Training Centre, Bangalore

NPTI National Power Training Institute (Southern Region) at Neyveli

NTPC Training Institute at Ramagundam STPS

NLC Neyveli Thermal Power Station Training Centre

APSEB Thermal Institute at Vijayawada Thermal Station

TNEB Thermal Training Institute at Ennore TPS

KSEB Power Engineer Training and Research Centre at Moolamattom (New)

EASTERN REGION

NPTI National Power Training Institute (Eastern Region) at Durgapur West Bengal

NTPC Training Institute at Farakka STPS

DVC DVC Training Institute at Chandrapur

WBSEB Training Institute at WBSEB at Calcutta

CESC

- O&M Training Institute Calcutta
- Plant Training Institute, Titagarh
- Plant Training Institute Southern Generating Station

SAIL Central Power Training Institute
Steel Authority of India Ltd.at Rourkela Steel Plant

OHPC Orissa Hydro Power Corpn. Training Centre at Bhubaneshwar (Orissa)