Chapter-3 Organisational Profile

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Power sector is one of the basic sectors which are contributing extensively for the physical, economical and socio-structural development of the each country. Power sector is generally considered as prime mover, and can be defined as 'the set of interconnected structural elements that provide framework supporting an entire structure of development' (*Kalita & Medhi, 2012*). The Indian power sector has undergone many changes after the independence. During 1947, the country had the power generating capacity of 1,362 MW. Hydro power and coal based thermal power had been the main sources of generating electricity. Generation and distribution of electrical power was carried out primarily by private utility companies. Notable amongst them and still in existence is The Calcutta Electric. On those days power was available only in a few urban centres whereas rural areas and villages did not have electricity.

After 1947, all new power generation, transmission and distribution in the rural and the urban centres (which were not served by private utilities) came under the purview of State Electricity Boards (SEBs) and under the Central Government Agencies. The concept of operating power section as well as systems on a regional basis crossing the political boundaries of states was introduced in the early sixties of 20th century. In spite of the overall development that has taken place, the power supply industries had/ have been under a constant pressure to bridge the gap between supply and demand. In the Constitution of India "Electricity" is a subject that falls within the jurisdiction of the Centre and the States. The **Electricity** (Supply) Act, 1948, provides an elaborate institutional frame work and financing norms of the performance of the electricity industry in the country. The Act envisaged creation of State Electricity Boards (SEBs) for planning and implementing the power development programmes in their respective States. The Act also provided for creation of central generation companies for setting up and operating generating facilities in the Central Sector. The Central **Electricity Authority** constituted under the Act is responsible for power planning at the national level. In addition the Electricity (Supply) Act also allowed from the beginning the private licensees to distribute and/or generate electricity in the specified areas designated by the concerned State Government/SEB (Indian Power Sector,

<u>www.indianpowersector.com</u>). India can be proud of for the various ongoing projects under National Thermal Power Corporation (NTPC), National Hydro-Electric Power Corporation (NHPC), Power Grid Corporation Limited (PGCL), North-Eastern Electric Power Corporation Limited (NEEPCO), Tata Power, Adani Power etc., which has lead, India as the fifth largest producer and consumer of electricity in the world.

3.1 Origin of North-Eastern Electric Power Corporation Limited

(NEEPCO) North Eastern Electric Power Corporation Limited (NEEPCO) is an electricity generation public sector undertaking owned by the <u>Government of India</u> under the <u>Ministry of Power</u>, formed on 2nd April 1976, Headquarters at Shillong, Meghalaya. Company made a modest beginning with 50MW Khandong Power Station which was commissioned in 1984 as a part of 275MW integrated Kopili Hydro Electric (H.E) Power Station. Today, NEEPCO initiates to form plan, investigate, design, construct, generate, operate and maintain power stations in the North Eastern Region of the country. The company was conferred with 'Schedule A' status by the Government of India in August, 2008. NEEPCO continues in its quest for continual improvement and has submitted a proposal for conferring 'Mini Ratna' Category-I status, which has been awarded at the month of April, 2013 (33rd Annual Report, 2008-2009).

Vision: To be a leading integrated Electric Power Company of the country with a strong environment conscience (*Annual Report*, 2013-2014).

Mission: To harness the huge power potential of the country, from conventional and non-conventional sources, with minimal impact of the environment, through a planned development of the power generation projects by an integrated approach covering all aspects of investigation, planning, design, construction operation and maintenance of power projects which in turn would effectively promote the development of nation as a whole (*Annual Report*, 2013-2014).

3.2 Corporate Objectives

The corporate documents of NEEPCO states its objectives as follows-

• To responsibly exploit the vast hydro & thermal power potential for sustainable development of N.E. Region.

- To be competitive in liberalization and globalisation environment.
- To promote industrial growth in N.E Region thereby improving quality of life and prosperity.
- To provide infrastructure, medical and schooling and create productive environmental opportunities.
 - To fulfil the electricity need of N.E. Region and India.
 - To improve socio-economic condition of neighbourhood.
 - To develop human resource to world standard (Annual Report, 2013-2014).

3.3 Corporate Governance

The Corporate Governance of NEEPCO deals with laws, practices and implicit rules that determine a company's ability to take managerial decision vis-a-vis its Stakeholders-in particular and as well as its shareholders creditors, customers, the State and employees. NEEPCO management endeavours to act in the best interest of all its stakeholders at all times and has adopted good corporate governance practices (Annual Report, 2012-2012).

1. Philosophy on Code of Governance

- To have an adequate control system in operation and provide information to the Board on a timely basis in a transparent manner so as to enable the Board to monitor the performance and ensure accountability of the Management.
- To increase the efficiency of Business Enterprise for creation of Wealth of the Enterprise and Country as a whole.
- To ensure that Employees and Board subscribe to the corporate values and apply them in their conduct.

2. Composition of Board and Particulars of Directors

Composition of Board- the Board of Directors of the Company consists of 15 (Fifteen) Directors, including 4 (four) whole-time Directors, 1 (one) Government part-time Director representing the Government of India, 5 (five) Government part-time Directors representing Government of North-East States and 5 (five) Independent Directors.

- Board Meetings, Committee Meetings & Procedures- minimum four Board meetings are held in each year. Apart from the four scheduled Board Meetings. Other than these nine meetings of the Board of the Company were held during the year to review legal compliance report presented by the Company Secretary.
- **3.** Code of Conduct- The Company is committed to conducting its business in accordance with the highest standards of business ethics and in compliance with all applicable laws, rules and regulations.
- **4. Training of the Board Members-** The Board members are provided necessary documents brochures, reports and internal policies to enable them to familiarize with company's procedures and practices. Various Board Members were nominated to attend workshops/ training programmes on relevant topics.

3.4 General Overview of NEEPCO

NEEPCO is one of the largest power utility in the North-Eastern Region. It is contributing in making the power available to the region as a whole with reliability, quality and economy of operation. NEEPCO plays a central role in facilitating energy infrastructure development in the NE Region with present Manpower of 2635 and installed capacity of 1130 MW (Hydro 755MW & Thermal 375MW) as on 30th September, 2014 (Annual Report, 2013-14). NEEPCO derives strong funding support from the Government of India, which had/has been periodically providing equity and loans to the Corporation. NEEPCO, since its inception, it has built a strong image and today NER currently operates on 2909.91 MW which includes the contribution from NEEPCO 39%, NHPC 4%, OTPC 12%, and other contribution from the State Government(s) as Assam 1%, Arunachal 4%, Meghalaya11%, Tripura 6%, Mizoram 3%, Nagaland 1% and Manipur 2% as on August, 2014. The Corporation is expected to add another 922 MW during the 12th Five Year Plan, thereby raising the total installed capacity to 2,052 MW. NEEPCO is also expected to participate in building the 3750 MW Upper Siang Hydro Electric Project Stage II in Arunachal Pradesh. NEEPCO is currently the largest power producer in NER and caters to around 50 percent of the region's energy requirements (SMERA, 2014).

NEEPCO has its number of plants under operation 275 MW Kopili HEP, Assam; 75

MW Doyang HEP, Nagaland; 84MW Agartala GTP, Tripura; 291 MW Assam GPB, Assam; 405MW Ranganadi HEP, Arunachal Pradesh, 600 MW Kameng H.E. Project, Arunachal Pradesh and as well as number of upcoming projects as 5MW Solar PV Project, Tripura; 101MW TGBPP, Tripura; 110 MW Pare HEP, Arunachal Pradesh; 60MW Turial HEP, Mizoram etc., leading to the total 927 MW till March, 2017. Other than this NEEPCO also has many ongoing projects under joint venture as 50 MW Grid Interactive Solar PV Power Project, Madhya Pradesh, 120 MW Dibbin HEP, Arunachal Pradesh, 100 MW Wind Power Project, Gujarat etc (Annual Report, NEEPCO is committed to bring about a significant socio-economic development of the North-East Region in a planned and sustainable manner keeping in mind the rich bio-diversity and fragile eco-system of the Region. The company has a very ambitious growth plan for its capacity addition in the pipe line. Already NEEPCO is poised to add 917 MW in the 12th Five Year Plan. (36th Annual Report, 2011-12). Even it accomplished it constant achievement through business endeavor, it has been receiving constant guidance and supports from the Ministry of Finance, Ministry of Govt. of India, Central Electricity Authority, Central Water Commission and other departments of the Government of India, State Government and other Departments of all North East States, Financial Institutions, bank and leading agencies. Thus, NEEPCO's establishes a positive track record of operations and able to establish a strong market position on the path of progress.

(a) Completed Projects of NEEPCO

• Kopili Hydro Electric Plant (KHEP): Located in the River Kopili in the North Cachar Hills District of Assam, The Kopili Hydro Electric Project was the maiden venture of NEEPCO. It is the first project which started with the capacity of 150 MW when it came to existence in 1976. The first stage of Kopili power plant has two numbers of dams and dyke system for creating two reservoirs, one on the Kopili River and other on the Umrong Stream (a tributary of Kopili). Water from the Kopili reservoirs is utilised in the Khandong power station through a 2852 meter long tunnel to generate 50MW (2×25MW) of power. The water from the Umrong Stream is taken through 5473 meter long tunnel to the Kopili power station to generate 200MW (4×50MW) of power. At present the generation status during the financial year

- of 2013-2014 (01/04/2013 to 31/03/2014) is 973.16 MU and during December, 2014 is 59.70 MU.
- Assam Gas Based Power Plant (AGBP): This is combined cycle gas turbine project located at Bokuloni village, Dibrugarh District of Assam. Presently it is partly financed by the loan of 37.272 Billion yen under bilateral credit agreement with the overseas economic cooperation fund of Japan. The plant mainly uses the natural gas available in the oil fields of Upper Assam. The power station comprises of 6 Gas Turbines and 3 Steam Turbines arranged in a modular fashion. It has a capacity of 291 MW (6× 33.50MW) Gas Turbine and (3×30.00MW) Steam Turbine, giving benefits to Assam, Arunachal Pradesh, Manipur, Meghalaya, Nagaland and Tripura. At present the generation status during the financial year of 2013-2014 (01/04/2013 to 31/03/2014) is 1726.42 MU and during December, 2014 is 154.34 MU.
- Agartala Gas Turbine Power Project (AGTP): The project is located in the Ramchandra Nagar, west of Agartala. The project runs on an Open Cycle Mode and consists of 4 Gas Turbines of 21MW each uses natural gas obtained from the gas fields of ONGC. The project has been financed through the budgetary support of the Government of India and external commercial borrowings from the Deutsche Bank of Germany. The project was completed in 1997-98. Presently it has the capacity of 84 MW (4×21MW), giving benefits to the states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland. At present the generation status during the financial year of 2013-2014 (01/04/2013 to 31/03/2014) is 641.65 MU and during December, 2014 is 48.05 MU.
- Doyang Hydro Electric Plant (DHEP): This project is located in Wokha District of Nagalnd on the River Doyang, a tributary of the River Brahamputra. The project has the annual generation of 75 MW (3×25MW). The project proved, beneficiary for the states of Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. At present the generation status during the financial year of 2013-2014 (01/04/2013 to 31/03/2014) is 245.73MU and during December, 2014 is 5.89 MU.

• Ranganadi Hydro Electric Plant (RHEP): The Project is located in the Lower Subansiri District of Arunachal Pradesh in the Ranganadi Basin and the adjoining Dikrong Basin. The project has the total power generation capacity of 405 (3×135MW) providing benefits to Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. At present the generation status during the financial year of 2013-2014 (01/04/2013 to 31/03/2014) is 980.91MU and during December, 2014 is 39.45 MU.

(b) Ongoing Projects of NEEPCO

- 600 MW Kameng Hydro Electric Project, Arunchal Pradesh: Kameng Project envisages the utilization of the flows of Bichom and Tenga Rivers (tributaries of River Kameng). The overall generation capacity of the project is estimated to be 600 MW of power. The project progress work considerably improved with the completion of boring of power tunnel from Tenga dam to Surge shaft and boring of High Pressure Tunnel (HPT). The concrete lining of Surge Shaft, excavation and concreting of Tenga Dam and Bichom Dam, fabrication etc., are also progressing satisfactorily. Construction of the project is estimated to be completed on March 2017.
- 110 MW Pare Hydro Electric Project, Arunachal Pradesh: The Pare Hydro Electric Project is formerly known as Dikrong Hydro Electric Project situated in the Papum Pare District of Arunachal Pradesh. NEEPCO has taken this project to harness the rich hydro power potential of the river Dikrong, a tributary of Brahmaputra. The project envisages the construction of 78m high concrete gravity dam and 2.828km long head race tunnel having 7.50m diameter on the right bank of the river Dikrong. The catchment area of the project is 824Sq. km with maximum available head will be about 67.36m. The commissioning of the diversion tunnel and boring of pressure shaft has been achieved in February, 2013 and 31st July, 2012 respectively.
- 60 MW Tuirial Hydro Electric Project, Mizoram: Tuirial Hydro Electric Project is envisaged as the medium head storage scheme with the installed capacity of 60 MW (2×30MW). The project develops the lowest possible stage of the Tuirial River and is located in the Aizwal District of Mizoram. The

Cabinet Committee on Economic Affairs (CCEA) clearance of the project was obtained on 7th July, 1998. Boring of the diversion tunnel with 60% lining woks has been completed up to March, 2013. Further, excavation of Power House, Switchyard, Spillway and concreting of Intake Structure is also progressing. The project is estimated to be completed on December, 2015.

(c) Upcoming Projects of NEEPCO

NEEPCO has been devoted substantial effort over the Year in preparing Detailed Project Reports (DPRs) of large numbers of Projects as:-

Sl. No.	Name of the Project	State	Status	Task Schedule
2.	Siang Upper Stage- II Hydro Electric Project (3750 MW)	Arunachal Pradesh	MOA was signed with State Govt. on 28.05.2013 for implementation in joint venture between NEEPCO, NHPC and State Government Draft DPR is under process	8 Year
3.	Killing Hydro Electric Project (85MW)	Assam and Meghalaya	Govt. of Meghalaya conveyed its clearance on 26.09.2012 and Govt. of Assam on 25.07.2013 for undertaking detailed Survey and Investigation for DPR preparation and subsequent implementation	5 Year
4.	Garo Hills Thermal Power Project (500MW)	Meghalaya	MOA was signed with State Govt. on 17.03.2011. The Project site has been identified near East Garo Hills District of Meghalaya. Preliminary survey for the site has been completed.	3 Year
5.	100 MW Wind power project	Gujarat	MOU with M/s ECI Engineering & Construction Co. Ltd. was signed on 28.03.2014 for implementation of 100 MW Wind Power Project, Gujarat in JV with NEEPCO's Equity Participation of 40%	1 Year
6	50 MW Solar Power Project	Madhya Pradesh	A JV Company namely, M/s WAANEEP Solar Pvt. Ltd. was formed with M/s WAAREE Energies Ltd. on 28.03.2014 for implementation of 50 MW Grid Interactive Solar PV Power Project in Madhya Pradesh with NEEPCO's Equity participation of 40%.	1 Year

Sl.	Name of the	State	Status	Task
No.	Project			Schedule
7	UMPP (4000 MW) in JV between NHPC, BHEL and NEEPCO	Odisha	A consortium of NHPC (40%), BHEL (34%) and NEEPCO (26%) is to participate in the bidding for the 4000 MW UMPP in Sundargarh, Odisha. Finalisation of the MOU to be drawn amongst the consortium members is in progress	7 Year
8	Grid Interactive Solar Power Project (2 MW), Lanka	Assam	Detail project report prepared through consultant M/s STEAG Energy Services (India) Pvt. Ltd., Noida and obtaining clearance from State Pollution Control Board is under process.	1 Year
9	Grid Interactive Wind Power Project, at Kopili HEP	Assam	Detailed investigation for feasibility of setting up wind power project is being carried out through C-WET, Chennai which is scheduled to be completed in December' 2014.	1 Year
10	Grid interactive Solar Power Project (5MW), Surjyamoninagar	Tripura	NIT for preparation of DPR for the project was floated on 09.10.2013 and opened on 13.11.2013. Evaluation is completed Draft MOU with the Govt. of Tripura is under finalisation	1 Year

Note: MOA- Memorandum of Association, DPR- Detailed Project Report, NIT- Notice Inviting Tender, MW- Mega Watt (measuring unit of electricity), MOU- Memorandum of Understanding, NHPC- National Thermal Power Corporation, BHEL- Bharat Heavy Electricals, C-WET- Centre for Wind Energy Technology, ITI- Industrial Training Institute, UMPP- Ultra Mega Power Projects, JV- Joint Venture

11. **Rajiv Gandhi Gramin Vidyutikaran Yojana** (**RGGVY**): The Company has been entrusted by the Government of Tripura for Implementation of Rural Electricity Infrastructure and Household Electrificatin Scheme under 12th Plan Gramin Vidyutikaran Yojana in two Districts viz. Sephahijala and South Tripura. The financing of the Project shall be made by Rural Electrification Corporation (REC) through the Government of Tripura. Detailed Project Report (DPR) for the works was prepared in the month of November, 2013 and the same have been approved by REC in January, 2013. Subsequently, tenders for the works have been invited on 10th February, 2014. The works are scheduled for completion within two year from the date of order placement. (*Source: NEEPCO Portal & 37th Annual Report of NEEPCO*, 2012-2013)

Other than the above future projects NEEPCO has also entered into the Joint Venture agreement with private developers for implementation of various 50MW Solar Power Projects. Development of 120MW Dibbin Hydro Electric Project is also in the path of

progress in Arunachal Pradesh with KSK Energy Ventures Ltd. NEEPCO has further taken up conversion of Rokhia and Baramura Gas Based Open Cycle Project in to Combine Cycle Project with a capacity of 35 MW and 25 MW respectively (*Source: NEEPCO Portal*)

3.5 Wings of NEEPCO

Department of Human Resource / Personnel Administration (P&A) -

Department of Personnel Administration or Human Resource is considered critical to developing and sustaining workforce competencies which is the life-line for sustenance of company's growth and developing a competitive edge in today's corporate world. The department of Human Resource of NEEPCO tries to nurture and sharpen the knowledge and skills of employees and ensures the highest level of moral and motivation. As a part of the initiative taken up by the Ministry of Power towards building up of trained manpower by adopting ITI under the "Adopt an ITI Scheme", NEEPCO has adopted 2 ITI Scheme namely, ITI Haflong, North Cachar Hills District, Assam and ITI Dirang, West Kameng District, Arunachal Pradesh. Our Senior Officers have been deputed to act as Chairpersons in respective Institute Management Committee towards successful adoption of the ITIs under Public Private Partnership.

Others than these, the HRD wing also keep contact with the other external training programs as Transfer of Technology (ToT), Association for Overseas Technical Scholarship (AOTS) schemes, Globally recognised internet based e-learning courses as International Project Management Association (IPMA) etc. Thus, HRD wing of NEEPCO gives immense importance upon on dedication and takes various initiatives towards building up of trained manpower (38th Annual Report & 33rd Annual Report).

Training and Development (**T&D**) - Company success always lies with the employees without, whom commitment and dedication, it would not be possible to achieve the target. To keep pace with the growth of the company and changing environment, constant endeavour has been made for the improvement of skill and knowledge and enhance the competency level of the employees by providing extensive training. A total of 1378 employees were trained during the year 2013-14 through various in-house training programmes organised within the HRD Institute. Out of these 20 executives were nominated to attend different overseas training

programs. Therefore, it is evident to have enough skilled manpower working in a performance driven organisational culture to draw the best out of them on a sustainable basis. Together with the HRD wing the department of T&D organises various other training programmes on Contract Management, Programme on Java, Yoga Programme, Self -Perfection for Work Excellence, Team Building etc. Other than these the department is also keen to develop Quality Management, Quality Circle Management, Mentorship Development, Working with Computer, Organisational Belongingness etc (37th Annual Report).

Information Technology (**IT**) - The IT department, set up in the year 1995 recognises that Information Technology is not only a strategic necessity but a major enabler of strategic competitiveness. NEEPCO tries to introduce, upgrade and produce hardware and software technologies in all its functional areas with an ultimate objective of having fully networked corporation with all application running in an online system. Today, NEEPCO is proud to possess a complete Very Small Aperture Terminal (VSAT), a two-way satellite ground station enabled communication network and state of the art project monitoring system with Video Conferencing facility, online recruitment system for HR department. Moreover, expression of interest has been invited for selecting an ERP (Enterprise Resource Planning) packages. The ERP implementation is proposed to be completed within two Year and necessary budget has been also initiated by the management along with the preparation of IT Security Policy (37th Annual Report).

Research and Development (R&D) - Since, its inception, company has taken various attempts to address the challenges and opportunities in the increasingly competitive global market for strengthening technological capabilities and growth. Some of the R&D initiatives are:-

 Application of Remote Sensing and Geographic Information System (GIS) in estimation of river inflow, generation modernisation to increase the efficiency of Hydro Power Plants and Accessment of Turbine efficiency under different reservoir level at Kopili Hydroelectric Plant is the R&D projects taken up during the year.

- Study of the corrosion and erosion of metal in the water path and underwater turbine parts and selection of erosion resistant corrosion inhibitors system for Hydro Electric Projects.
- Study on the prospect of upgrading the existing open circuit cooling system to acidity-free cooling system through neutralization of to contain corrosion.
- Study of the Catchment of the RHEP through remote sensing to access the status of soil erosion and silt generation with particular reference to upcoming projects in the area and augmentation of reservoir silt data collection (38th Annual Report).

Corporate Social Responsibility (CSR) and Sustainable Development (SD) - The Corporate Social Responsibility (CSR) agenda of a corporation is reflective of its social conscience and commitment to the community and society at large within which it operates. Therefore, NEEPCO has always given top priority towards allround development of the people residing in and around its operational areas. As a responsible corporate citizen, NEEPCO has been undertaking various community development activities particularly in the field of education, health, sports, infrastructure development etc. Construction of Bailey bridge over DHEP reservoir covering 600m length, Chubi Bridge connecting Wokha-Merapani Road creating accessibility for the other districts such as Mokokchung, Mon, Tuensang and Zunheboto with commercial sites, Nodal Agency as Vivekananda Kendra Shiksha Vibhag managing schools of good academic standards, Inauguration of Fitness Centre for fewer injuries and less human error, organising and encouraging Inter Project Sports Meet for interaction amongst the employees serving in various far flung projects/ offices and establishments of the corporation are some of the CSR activities which directed towards general well-being.

The company is also striving to maintain a balance developmental course of action through contributing towards sustainable development. Specific Sustainable Development Plan has been developed in line with the guidelines issued by the department of Public Enterprises. The plan includes activities such as Water Management- the sewage water contamination reduction at corporate office Shillong and Energy Management- energy conservation at corporate office Shillong etc., are

listed projects which costs during Rs. 75.92 lakh as against Rs. 101.50 lakh. Other than these improvements, Energy management at the NEEPCO Complex Guwahati leading to reduction in per capita energy consumption, Afforestation for creation of green belt adjacent to the reservoir area at Ranganadi Hydro Electric Project. In addition to the above, the company also took up additional 9 projects to achieve the threshold limit of expenditure for future activities (38th Annual Report).

Public Relation - The public relations wing of NEEPCO continued its sustained efforts to work towards improvement of communications with the public so that NEEPCO's mission and vision are known and appreciated. The wing continued to publish the in-house quarterly journal known as NEEPCO News. Other than this the company is also trying to implement the use of Rajbhasha (Hindi) among the employees through issuing papers on bilingual according to Official Language Act 1963, Section (3). The programme called Today's Word is also observed everyday on black board by writing equivalent Hindi to English words. Various other initiatives are also taken by the public relation wing through print and electronic media from time to time for further commutations on organisations rules and policies (37th Annual Report).

Commercial Wing The Commercial Department at the Corporate Headquarters primarily looks after the Tariff & Revenue matters in addition to other commercial issues that arise from time to time. It is assigned with the responsibility of filing of Tariff Petitions for the Operational Power Stations of the Corporation as per the Tariff Regulations set out by the Central Electricity Regulatory Commission (CERC).

The other important functions of the Commercial Department include:

- Rising of bills for the energy supplied and collection of revenue.
- Reconciliation of energy accounts.
- Preparing, negotiating and signing of Bulk Power Supply Agreements in respect of Operating Power Stations.
- Preparing, negotiating and signing of Power Purchase Agreements for the upcoming Power Projects.
- Coordinating with the Ministry of Power (MOP), North Eastern Regional Power Committee (NERPC), North Eastern Regional Load Dispatch Centre

(NERLDC), Beneficiary States/State Electricity Boards, and other Power Sector Utilities with regard to Tariff & Revenue matters.

• Financial Accounting of Sales and Receipts

Industrial Relations - Industrial relations in NEEPCO remain congenial and harmonious through-out the year. No man-days were lost in NEEPCO on account of any industrial disputes. Regular meetings were convened between the Management and representatives of Trade Union Members and Associations to discuss various issues across the table and resolved amicably for greater interest of the Company (36th Annual Report).

Land & Acquisition Land and Acquisition forms the part of Resettlement and Rehabilitation (R&R) Plan forms a part of the Environmental Impact Assessment and Management Plan Reports (EIA and EMP) and is assessed and approved by the Expert Appraisal Committee (EAC) of Ministry of Environment, Forest and Climate Change (MoEF&CC) for according Environmental Clearance to the project. The R&R Plan for project affected families for ongoing projects has been prepared based on National Policy for Rehabilitation and Resettlement, 2003 and as per National Rehabilitation and Resettlement Policy, 2007 (NRRP-2007). For new and upcoming projects the provisions of the R&R Plan would be according to the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 and its amendments which come from time to time. The R&R Plan is implemented in association with the concerned State Government, representatives from project affected families and other stakeholders in the area. A broad R&R package being implemented by NEEPCO at its various projects comprises the following (NEEPCO Portal, 2010)

For project affected persons

- Construction of residential houses
- Construction of sanitary latrine
- Construction/grant of/for cattle /poultry sheds
- Agricultural /horticultural land
- Land development and protection measures against sediment flow
- Transportation / displacement grant

For village infrastructure

- Site development for village land
- Development of road
- Providing power supply
- Providing water supply
- Construction of sanitation and sewerage facilities
- Construction of school building
- Construction of religious worship place
- Construction of Community Hall
- Construction of Panchayat Ghar
- Construction of post office building
- Grant for opening fair price shop
- Construction of market
- Construction of park and playground
- Medical facilities- primary health centre
- Veterinary services
- Preservation of historical monuments
- Cremation ground / grave yards
- Preservation of biodiversity sites

Economic rehabilitation

- Agricultural activities
- Horticultural activities
- Dairying
- Poultry rearing
- Piggery

Vigilance - From the era of its establishment NEEPCO vigilance department dealt with various aspects of vigilance mechanism under the direct guideline of Central Vigilance Commission (CVC). For exclusive and independent functioning of the department, NEEPCO ensured transparency, objectivity and quality in vigilance activities. Complaints received from various sources were taken up for prompt investigation and the result have been disposed off in accordance with the time frame

prescribed by CVC. Emphasis was given to the aspect of preventive Vigilance to streamline the rules and procedures and making all efforts to arrest the loopholes detected during investigation of various cases.

In order to improve system and procedure in respect of various short comings observed related to processing of tender of works and procurement etc, a number of suggestions have been forwarded to Management. Various steps have been taken towards implementation of e-procurement, e-payment, registering online vigilance complaints etc. As a part of leveraging technology, the vigilance department has uploaded the Annual Immovable Property Returns (AIPRs) of Executives in the NEEPCO's website. The Vigilance Awareness Week was also organised in the company with the effect from 29.10.2012 to 03.11.2012 (38th Annual Report).

Audit Committee - The Audit committee was constituted in the year 2001. The members of the Audit Committee consist of three Independent Director and one Working Director Technical. The Committee met six (6) times during the year, the meeting were also attended by Directors (Finance), Head of the Internal Audit and Statutory Auditors as Special Invitees. The Company Secretary acts as the Secretary to the Committee. The Committee regularly reviews all financial statements before placing before Board of Directors (*37*th *Annual Report*). The terms of reference of the Committee are:

- Review of the Company's financial reporting process and the disclosures made in its financial reports to ensure that the financial statement are sufficient, correct and credible.
- Review of the half-yearly and annual financial statements before submission to the Board.
- Review of the adequacy of internal control systems.
- Recommend fixation of audit fee and also approval of payment for any other services of external auditors in accordance with SEC 224 (8) (aa), as amended by the Companies (Amendment Act, 2000).
- Discuss with internal auditors on any significant findings and follow up thereon.
- Review contracts awarded on nomination/ offer basis in terms of Department of Public Enterprises (DPE) guidelines.

3.6 Performance Overview of NEEPCO

The overall performance of the company over the years has been very encouraging. The corporation has also maintained consistency in its operation despite many constraints. The Tariff Petitions of all the power stations have been approved by Central Electricity Regulatory Commission (CERC) applicable with effect from 1st April, 2009 vide notification dated 19th January, 2009. Accordingly sale of energy from the company have been accounted for. The performance overview of NEEPCO has been divided into two parts: - financial performance, illustrating the asset management and revenue generation capability of NEEPCO and operational performance, focusing on the working alignment of all the power units to achieve the core business goals.

3.6 (a) **Financial Performance** - The performance of the company for the financial Year 2006-2014 are summarised below:

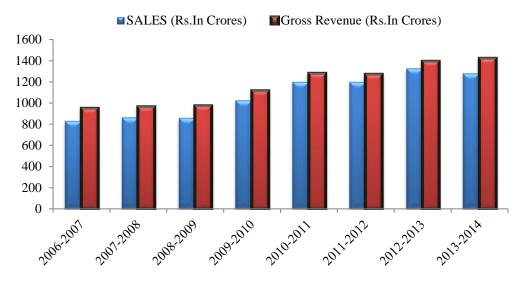
Table: 3.1- Financial Performance for 2006-2014 (Fig. Rs. In Crores)

Particulars	2006- 2007	2007- 2008	2008- 2009	2009- 2010	2010- 2011	2011- 2012	2012- 2013	2013- 2014
Sales Turn Over	827.75	860.31	857.83	1022.13	1198.27	1197.67	3125.24	1279.75
Gross Revenue	945.26	962.68	971.89	1114.35	1279.03	1269.72	1392.40	1417.72
Total Income	94526.38	96267.64	97188.88	111434.77	127902.56	1269.72	139240.34	141771.74
Depreciation	150.21	149.69	149.90	209.89	189.45	151.07	151.89	132.02
Profit Before Tax	236.27	282.24	326.88	337.41	317.55	264.28	295.44	288.00
Profit After Tax	218.64	258.31	296.97	289.38	263.56	219.12	242.30	231.52
Net Worth	3284.63	3974.97	4182.17	4406.68	4619.14	4780.01	50004.70	5279.71
Dividend	65.60	77.50	89.10	86.81	79.07	43.49	47.69	44.46
Source: 31st – 38th Annual Reports of NEEPCO								

Table 3.6 reveals, the period 2006-2007 to 2013-2014, Gross Revenue of NEEPCO maintains a positive track record by increasing gradually throughout financial Year. The company has paid a healthy dividend including the corporation's interim dividend as per the guideline of Ministry of Power, Government of India. The dividend data within the table represent the final dividend paid subject to the approval in the Annual General Meeting. The Total Income includes the income from sale of energy and other income sources as Interest income from Power Bond, Interest on investment in State Government etc. Depreciation is charged on the Straight Line Method to the extent of 90% of the cost of assets per the rates as notified by Central Electricity Regulatory Commission (CERC). The Net Worth of the company excluding capital reserve

represents a gradual increment shows the company's net economic position within the market.

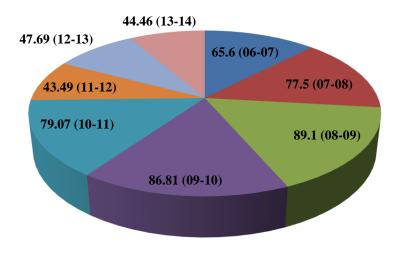
Figure: 3.1(a) Sales Turnover & Gross Revenue for the Financial Year 2006-2014 (Rs. In Crores)



Source: 31st – 38th Annual Reports of NEEPCO

The figure 3.1(a) shows the financial performance of NEEPCO for the long eight years in terms of Sales and Gross Revenue earned. The operating profit of the company shows the increasing trend, as recorded highest with 1325.24 crores and 1279.75 crores, during the Year 2012-2013 and 2013-2014 respectively. Therefore, the company has a positive financial performance.

Figure: 3.1(b) Dividend Paid for Financial Year 2006-2014 (Rs. In Crores)



Source: 31st – 38th Annual Reports of NEEPCO

The figure 3.1 (b) shows the dividend paid for the financial year of 2006-2007 to 2013-2014 of NEEPCO. The year 2009-2010 shows the maximum surplus which leads to directors recommended highest ever dividend of Rs.89.10 Crores for the financial year 2008-2009 including the interim dividend of Rs.23.00 Crores paid in February, 2009, whereas the year 2011-2012 shows the considerable declining of Rs. 43.48 Crores in terms of surplus making.

6000 5000 4000 3000 3000 3284.63 3974.97 4182.17 4406.68 4619.14 4780.01 5004.7 5279.71 4000 3284.63 2000 1000 0 2006-20072007-20082008-20092009-20102010-20112011-20122012-20132013-2014

Figure: 3.1(c) Net Worth for the Financial Year 2006-2014 (Rs. In Crores)

Source: 31st – 38th Annual Reports of NEEPCO

Fig. 3.1 (c) shows the Net Worth of the company for each financial Year 2006-2007 to 2013-2014. Looking over the diagram it can be said that the growth rate of the net worth over the financial year is positive.

3.6 (b) Operational Performance

From the date of its inception, NEEPCO has taken rapid strides in the development of power sector both in terms of enhancing power generation as well as in making power available irrespective of the rough geographical terrain of the North Eastern Region. Company sales electricity to bulk of consumers comprising of seven States owned electricity utilities of NER (excluding Sikkim). Such sale of electricity is in pursuant to the allocation made by the Ministry of Power for each of beneficiary states (38th Annual Report).

Below the table 3.2, represent the comparison of the production trend of NEEPCO for the last eight Years (2006-2007 to 2013-2014). The production trend reflects the Generation Target (MU) for each of the power station which had been signed between the specific State Governments and NEEPCO called the Memorandum of Understanding (MOU). The Generation column of the table represents the actual unit

of production; therefore, rating for each station is based on this achievement in generation with respect to MOU target unit. It should be noted that the ratings are given as excellent, good, very good that is based under the Department of Public Enterprises (DPE) guidelines.

Table: 3.2 Operational Performances for the Year 2006-2014

Year	Power Stations	Target MU (RE)	Generation (MU)
2006-2007	KHEP (275MW)	1110	966
	DHEP (75MW)	200	182
	RHEP (405MW)	990	958
	AGBP (291MW)	1550	1806
	AGTP (84MW)	596	654
Total	NEEPCO 1130MW)	4446	4566
2007-2008	KHEP (275MW)	790	990
	DHEP (75MW)	239	268
	RHEP (405MW)	1510	1540
	AGBP (291MW)	1699	1727
	AGTP (84MW)	657	660
Total	NEEPCO 1130MW)	4895	5185
2008-2009	KHEP (275MW)	1172	1171
	DHEP (75MW)	246	238
	RHEP (405MW)	1600	1568
	AGBP (291MW)	1729	1767
	AGTP (84MW)	246	661
Total	NEEPCO 1130MW)	4607	5405
2009-2010	KHEP (275MW)	967	931
	DHEP (75MW)	188	180
	RHEP (405MW)	1064	1025
	AGBP (291MW)	1725	1750
	AGTP (84MW)	656	663
Total	NEEPCO 1130MW)	4600	4549
2010-2011	KHEP (275MW)	900	949
	DHEP (75MW)	240	257
	RHEP (405MW)	1403	1408
	AGBP (291MW)	1700	1835
	AGTP (84MW)	643	644
Total	NEEPCO 1130MW)	4886	5093
2011-2012	KHEP (275MW)	1171	1185
	DHEP (75MW)	227	229
	RHEP (405MW)	1027	980
	AGBP (291MW)	1747	1765
	AGTP (84MW)	656	666
Total	NEEPCO 1130MW)	4828	4825
2012-2013	KHEP (275MW)	1171	924
	DHEP (75MW)	227	213
	RHEP (405MW)	1300	1240
	AGBP (291MW)	1747	1680
	AGTP (84MW)	625	633
Total	NEEPCO 1130MW)	5070	4690
2013-2014	KHEP (275MW)	915	973
	DHEP (75MW)	227	246
	RHEP (405MW)	1250	981
	AGBP (291MW)	1725	1726
	AGTP (84MW)	602	642
Total	NEEPCO 1130MW)	4719	4568
•	Note: MU- Million Units, F	RE- Revise Estimation	1,
	(Source: Annual Report, 200	06-2007 & 2013-2014	4).

Production Trend for the Year 2012 to 2014

Below the figure 3.2 presents a comparative analysis of the production trend of completed projects of KHEP, DHEP, RHEP, AGBP and AGTP for the year 2012-2013 and 2013-2014. The production trends of the first three Hydro Electric Plants of both the year present extreme variation expect DHEP because of geographical difficult terrain. Whereas, the last two Thermal Power Plants that is AGBP and AGTP shows satisfactory generation of electricity over the Year.

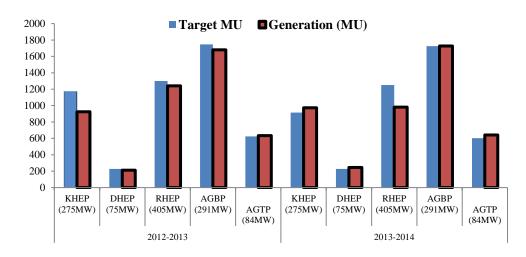


Figure: 3.2 Production Trend for the Year 2012 to 2014 (in Million Units)

Source: 31st – 38th Annual Reports of NEEPCO

3.6 (c) **Special Operational Achievements -** The special operational achievements of NEEPCO can be listed as:

- Highest recorded generation in a day from NEEPCO Power Plants was 23.074MU on 22-07-06.
- Highest recorded contribution from NEEPCO to the grid was 1043MW on 03-10-06.
- Highest recorded Power export to other Regions was 522MW on 03-10-06.
- Highest recorded Energy export in a day to other Region was 9.11MU on 11-06-06.

Overall performance of NEEPCO with respect to both financial performance and operational performance for the last eight years under the report has been very good. Despite many constraints, company has maintained a balance between demand and supply of electricity by establishing various power plants. Hence, NEEPCO has a

well-defined internal control system encompassing all its operational areas whereby transactions and decisions are processed as per delegation of power, documented policies, guidelines, manuals and circulars as well as various laws and regulations pertinent to such operation. The effectiveness of the control system is monitored by a board-level audit committee and an independent internal audit department. A summary of audit observations and action taken note (ATNs) are placed before the audit committee at regular intervals and accordingly its recommendation and directions are implemented.

3.7 Manpower Position of NEEPCO

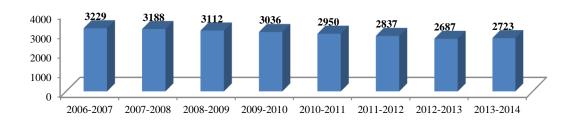
Manpower planning is an important element for any organisation. Hence, Man power report of NEEPCO is concerned with the 'employee' dimension in the management. Department of Human Resource Development (HRD) is striving continuously to put right number of people, right kind of people at the right place, right time, doing the right thing for which they are suited for the achievement of goal. Manpower planning takes into account various activities like analysing the current manpower inventory, making future manpower forecast, designing training programme etc (Aquinas). The manpower position of the Company can study, by considering the $(31^{st} - 38^{th} Annual Reports of NEEPCO)$

Table: 3.3 Manpower Report for the Year 2006 to 2014

Year	Manpower	Manpower Division (based on Gender)			
		Male	Female		
2006-2007	3229	NA	NA		
2007-2008	3188	NA	NA		
2008-2009	3112	NA	NA		
2009-2010	3036	NA	NA		
2010-2011	2950	2616	334		
2011-2012	2837	2513	324		
2012-2013	2687	2367	318		
2013-2014	2723	2349	374		
Source: $31^{st} - 38^{th}$ Annual Reports of NEEPCO					

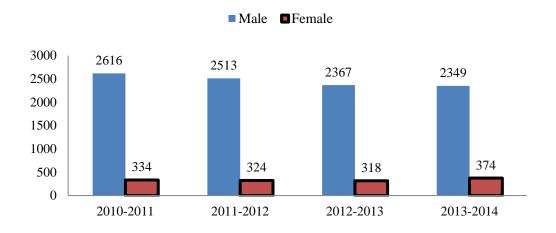
From the report of NEEPCO compiled as in the table 3.3, the figure 3.3(a) is portrayed below, which shows the declining trend of manpower over the years. There is a sharp decline of manpower from 2009-2011. This is the result of sudden stoppage of recruitment process during the year 2007-2008, retirement of upper level executives, remaining organisational hierarchal gaps, cost cutting exercise and profitability through manpower reduction

Figure: 3.3 (a) Manpower Report for the Year 2006 to 2014



Source: 31st – 38th Annual Reports of NEEPCO

Figure: 3.3(b) Gender wise Manpower Division for the Year 2010-2014



Source: 31st – 38th Annual Reports of NEEPCO

Figure 3.3(b) shows that, the gender wise division of manpower of NEEPCO for the year 2010-2011 to 2013-2014. The manpower trend shows that number of male employees is decreasing whereas the numbers of female employees are intermittent in nature as we can see a sharp increase of female employees the year 2013-2014.

3.8 Employee Benefits Provided by NEEPCO

Harnessing employees' creativity and ability is rapidly becoming the most important ingredient in achieving business excellence in almost all aspect of business. Harnessing creativity to gain competitive advantage is not a matter of waiting for inspiration but a deliberate process and capability that is institutionalised in the organisation (Tschiesche, 2012). Therefore, in order to provide important insight into

how work values can be used to predict the type of activities or goals employee would most enjoy within their workplace (Page, 2005).

Thus, as a responsible corporate citizen of the country, NEEPCO has been playing a significant role to motivate its employees through providing a mixture of benefits not only for organisational survival but also for the employee's prosperity and growth. The employee benefits pay a crucial role for running a business successfully and providing them with enough incentivise to increase their productivity. Other than running a successful business and motivating employees, the Company also provide various employee benefits in order to minimised turnover rates, developing better morale, bringing job satisfaction among the employees. Therefore, NEEPCO provides various wage and non-wage compensation to employees in addition to their normal wages or salaries.

- **Provident Fund:** The main purpose of the provident fund to provide financial support for the employees who meet the plan's required retirement age. Government set the age limit at which withdrawals are allowed to begin (penalty- free), through some pre-requirement withdrawals are allowed during some special circumstances such as medical emergencies. NEEPCO pays fixed contribution at predetermined rates to the Provident Fund Trust, which invests the fund in permitted securities as per Government guidelines. The investment has earned sufficient interest to pay the same to the members as per the rate specified by the Government of India. The Company contribution to the fund for the period of 2012-2013 was Rs. 2327.50lakhs.
- Pension: Pension plan is a method in which an employee transfers part of his or her current income stream towards his retirement income. NEEPCO in terms of Guidelines of Department of Public Enterprise (DPE), Government of India (GOI) issued vide O.M. no. 2(70)/08-DPE (WC) / GL-xiv/ 08 dt. 26.11.2008 and OM. No. 2(70)/08-DPE (WC) / GL-vii/ 09 dt. 02.04.2009, the Company has formulated the NEEPCO Employees Defined Contribution Superannuation Benefit Scheme.
- **Gratuity:** The Company has defined benefit gratuity plan. Every employee who has rendered contribution service of five years or more is entitled to get

gratuity at 15 days salary ($15/26 \times 1$) last drawn basic salary plus dearness allowance) for each completed year of service subject to a maximum of Rs. 10.00 lakes or superannuation, resignation, termination, disablement or on death. The liability for the same is recognised on the basis of actual valuation.

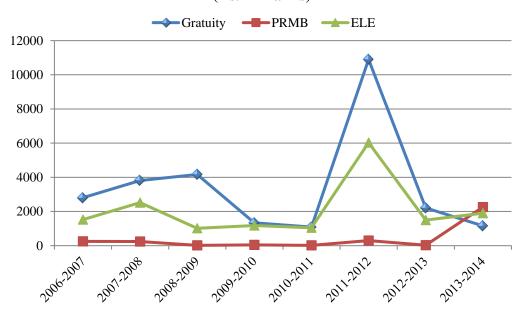
- Post Retirement Medical Benefit Scheme (PRMB): NEEPCO has a Retired Employee Health Scheme, under which retired employee and spouse of retiree, spouse and dependent children of deceased employees are provided medical facilities in the empanelled hospitals. They can also avail treatment as outpatient subject to a ceiling fixed by the Company. The liability for the same is recognised on the basis of actual valuation.
- Earned Leave Encashment (ELE): Company provides for earned leave benefits (including compensatory absences) and half pay leave to the employees of the Company which accrue at 30 days and 20 days respectively. 50% of the earned leave is en-cashable while in service and a maximum of 300 days on superannuation. Half pay leave is en-cashable only on superannuation up to maximum of 240 days as per the rules of the Company. The liability for the same is recognised on the basis of actuarial valuation.
- Social Security Scheme: The Company has a Social Security Scheme in lieu of compassionate appointment. The Company makes a matching contribution to the scheme. The objective of the scheme is to provide cash benefits to the dependent beneficiaries in the event of the death of an employee of the Company while in service including permanent total disablement leading to cessation of employment.
- Leave Travel Concession (LTC): The Company provides Leave Travel Concession to the employees subject to the one year completion of the service from the date of journey. The Company provides 1 time all India tour and 2 times home town (announced at the time of joining) tour within a block of four years. The fares of journey are admissible only for the mode of transportation depending on the job position.

Therefore, the employee benefits provided by the NEEPCO is helping us to visualise the amount of liability paid for the financial year 2006-2007 to 2013-2014.

Table: 3.4 Liabilities Provided by NEEPCO (Rs. In Lakhs)

Sl. No.	Year	Gratuity	PRMB	ELE	
1.	2006-2007	2808.62	252.78	1523.36	
2.	2007-2008	3809.01	246.15	2519.97	
3.	2008-2009	4165.80	19.81	1017.04	
4.	2009-2010	1340.60	44.84	1180.00	
5.	2010-2011	1089.79	19.91	1052.67	
6.	2011-2012	10899.14	294.94	6028.44	
7.	2012-2013	2210.24	27.37	1501.41	
8.	2013-2014	1160.62	2258.07	1901.50	
Note: PRMB- Post Retirement Medical Benefits, ELE- Earned Encashment Leave					

Figure: 3.4 Liabilities Provided by NEEPCO for the Year 2012 to 2014 (Rs. In Lakhs)



Source: 31st – 38th Annual Reports of NEEPCO

The figure 3.4 respectively illustrates the liability provided by NEEPCO during the years 2006-2014. It seems that, the gratuity paid is highest during the year 2011-2012 whereas, it is lowest during the year 2013-2014. The Post Retirement Medical Benefits (PRMB) is more or less consistently paid, whereas we can see a sharp increment during the year 2013-2014. The Earned Encashment Leave (ELE) also shows a similar trend like gratuity where there is a sharp increase during the year 2011-2012.

In addition to the above benefits, Employees Remuneration and Benefits also include Salary and Allowances (as newspaper), the whole-time Directors have been allowed to use Corporation's Car including for Private Journey on payment of fixed monthly amount in accordance with provision of the Company Circular as amended from timeto –time. The Company contribution for Salary and Allowances for the period of 2011-2012 and 2012-2013 is Rs. 136.00 lakhs and Rs. 131.22 lakhs respectively.

The present section of chapter-3 provides an intense introduction of NEEPCO and thus, gives us a crystal view of corporation's rules and policies, mission and vision, working strategies, existing man-power, diverse of wings or departments supporting the corporation and various employee benefits to motivate them for self growth and organisational success at large. Hence, it would be valuable to focus upon the corporations' external and internal strengths and opportunities. For this the SWOT analysis has been drawn.

3.9 SWOT Analysis of NEEPCO

The SWOT analysis of NEEPCO is presented to assess the practical scenario of the organisation existing within the North-Eastern Region of India. The analysis will provide the areas of strengths that NEEPCO maintains for employees and as well as areas of development have to be done to maintain its supremacy within the region.

Strengths

- Strong Position in North-Eastern Region (NER) NEEPCO is the largest electricity producing company within the NER. It has 55% of total installed capacity within the north-eastern region, which is 1130MW (Hydro 755MW & Thermal 375MW). It has been estimated that the projected energy requirement of the NE region by the year 2021-22 stands at 22421 Million Unit (MU) with the peak demand touching 3905 Mega Watt (MW). Thus, with such ambitious growth plan NEEPCO holds a strong foot hold within the region.
- Government Affiliation- NEEPCO is a Government of India Enterprise which is owned by Indian government and undertakes all the commercial activities on behalf of the government. The corporation is an unlisted company with 100% shares held in the name of President of India. Thus, NEEPCO works as joint stock Company which enjoys the financial autonomy due to government initial investments and easy to incorporate changes through amendments to articles. NEEPCO is also authorised to spend the earned profit for the all round

- development by taking up projects in the neglected areas of the North-Eastern Region and therefore giving a healthy competition to the private sectors.
- Pool of Skilled Manpower- NEEPCO has a substantial advantage of over the other players to harness and exploit the skilled manpower mainly drawn from the NE Region of India. It has been the greatest endeavour of the Company to develop employees through Various HRD interventions. Over the years, the employee of NEEPCO plays a pivotal role for the continual improvement of the company through immense dedication and support. Today, NEEPCO has sufficient manpower in all its wings that are skilled enough to operate the new high-tech power generation gadgets, upgrading the existing systems, meet the power requirement of the region and ultimately managing the employees by the HRD department.

Weaknesses

- Poor Economic Environment- One of the major weaknesses which are constantly faced by NEEPCO in the path of its progress is the poor economic environment of the North-East Region of India. Due to the pitiable pace of economic development, region lacks the industrial setups, failing entrepreneurial ecosystem, large scale deprivation of local needs, lack of primary facilities as proper medication methods, lack of schooling, poor transportation facilities etc. Therefore, NEEPCO relentlessly fighting against decreased revenue, slow profit, long term viability, limited finance for capital expenditure and operation, downsizing workforce etc. All these lead to limitation of ability and further slow economic development.
- Geographical Isolation- Another, primary constraint is the geographical isolation of North-Eastern Region due to the difficult terrain consisting of Eastern Himalaya ranges and Northeast Hills. Despite the huge potential for the development of the power sector within the NE Region, the pace of the development in the power sector in the region has so far not been able to keep up with the pace of development as in rest of India. Primarily, poor geology, natural hindrances as thick forest covers, tricky excavation process due to shaky topography etc, proved to be more challenging task for NEEPCO.

• <u>High Cost Structure-</u> Due to the poor economic development and natural hindrances of the North-Eastern Region, NEEPCO has to bear the high cost for set up of any project irrespective of the presence of vast natural resources. Fabrication of erection of steel liner, Boring of division tunnel, surge shaft, Excavation of dams, setup of Power House etc, lead to Rs. 375.34 crores against the Revise Estimation of Rs. 363.92 crores, where as the cumulative expenditure came to be 1800.28 crores during the financial year of 2011-2012.

Opportunities

- <u>Huge Hydro Power Potential</u>- The entire North-Eastern Region is bestowed with a huge hydro power potential, particularly the state of Arunachal Pradesh. India's 40% hydro potential lies in this region only and only 2% have been so far explored. The total identified hydro power potential in the region is estimated to be around 58971MW (Mega Watt). Low Carbon Growth Strategy is another major factor which provides more opportunity to harness the use of clean hydro-electric plants to meet the peak loads. Thus, it can be estimated that NEEPCO has huge role to play in the economic development of the Region.
- Vast Quantity of Natural Gas- The NE Region also has a vast quantities of natural gas measured in Billion Cubic Metres (BMC). Maximum quantities of natural gas are found particularly in the state of Assam (93.64BCM) and Tripura (33.09 BCM). NEEPCO has upgraded the power generation systems through the installation of modern Combined Cycle Gas Turbines (CCGTs) which has a high efficiency of around 55% compared to coal based plants. This CCGTs thermal power machines helps to minimize the requirement of a transmission system and could be operated in a manner so as to maximize the output during peak hours and minimize during off peak hours.
- Positive Attitude towards Solar Power- Being an important source of renewable energy or genesis for all forms of energy, NEEPCO gives at most importance to exploit the solar energy for future power generation. The solar power being the pollution free nature and virtually inexhaustible in supply is one of the attractive source of energy. One of the most ambitious power

projects worked out between Tripura Government and NEEPCO called Grid Interactive Solar Project (5MW) at Monarchak is an excellent burning example of Solar based power station.

Threats

- Adverse Law and Order Situation- With the existing socio-economic factors such as ethnicity, tribal rivalry, migration, control over local resources and wide spread feeling of exploitation and alienation have resulted in a fragile security situation in the North-Eastern Region. Moreover, the existing disparity between hydro and thermal power policies adopted by the State Government and Central Government which are governed by the statutory guidelines, affects the speedy implementation of the projects and ultimately NEEPCO may lose out to the private sectors.
- Poor Surface Communication- One of the primary bottlenecks in front of NEEPCO is the poor surface communication system of the NE Region of India. Though, road plays the dominant mode of transportation within the region, but most of the roads are congested and of poor quality. Most of the hilly states of the region do not access to all weather roads and remain cut off during the monsoon season. Therefore, a daunting situation arises for project sites to progress with power generation activities.
- <u>Unfavourable Working Season-</u> The working season with the NE Region is of very short duration. The rapid changes in topography result in climatic changes within short distance, thus, provides on an average of 6-7 months in a year. Due to this climatic variation it becomes formidable to continue the work for the employees of NEEPCO and results in slow work progress.

SWOT Results in Well-Being- From the above SWOT Analysis of NEEPCO, while assessing the internal factors (strengths and weaknesses) it seems that the Company has the holistic outlook for the future with its clear mission to harness the vast Hydro and Thermal Power Potential of the NE Region. NEEPCO is committed to bring about a significant social and economical development of the region in a planned and sustainable manner keeping in mind the rich bio-diversity and fragile eco-system of the region.

On the other hand calculating the external factors that is opportunities and threats, it can be said that despite the many adversities of the region NEEPCO has setup many projects in some of remotest and most difficult areas in the Region. To exploit the unfolding opportunities NEEPCO is continuously upgrading the technology and adopting newer methodologies, and as well as constantly expanding its domain of expertise in the industry in order to cope up with changing environment.

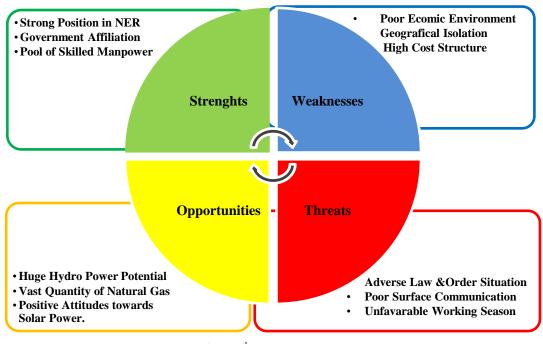


Figure: 3.5 SWOT Analysis of NEEPCO

Source: 31st – 38th Annual Reports of NEEPCO

Therefore, to confront the above stated weaknesses and threats and as well as to take the advantage of existing strengths and opportunities, NEEPCO is trying to maintain its employees' health and wellness. Thus, employee' well-being is considered important in NEEPCO.

3.10 Activities Promoting Well-Being in NEEPCO

Well-Being is a complex phenomenon that assumes greater importance in today's corporate sector. Well-Being is not one but a realm of different potential meanings and dimensions. This different realm requires divergent strategies and policies to implement them within the company. Moreover, the implementation is also different because each individual within the organization attach different meaning to different

policies. Therefore, company will need to be concerned while putting the strategies into practice and avoids the confusion which may result into unintended outcome.

The department of Human Resource Development make every effort to promote the well-being among the every category of employees. They believe that the heart of any successful enterprise especially in this tough economic competition is the human capital. Unlike structural capital, human capital never really belongs to the firm. People can walk out the door at any time unless companies find ways to keep them. Human capital drives every aspect of an organisations operation from technology and product design to distribution network and service delivery. Hence, one of the simplest ways to build a competitive advantage is to improve the health status and well-being of the employees (Chenoweth). In terms of measures used to promote and encourage healthy life style and improved well-being those most commonly cited as being provided to the employees are wide-ranging safety training, flexible working hours, hygienic water supply, canteen foods, washroom facilities, well-maintained and updated working equipments, appropriate fire safety measures, half –pay leave (20 days per year) during the case of emergency (Young & Bhaumik, 2011).

Thus, NEEPCO introduces an approach called 'Cafeteria Allowance' under which Company undertakes a number of well-being activities to motivate the employees and as well as perform a large number of communities development programmes for holistic growth. Some of the well-being activities can be listed as-

1. Medical Facilities

- Approved Hospitals for Medical Checkup (All India)
- Total Cost Inncured if NEEPCO employee Hospitalised
- Medical Reimbursement of Rs. 1000/- Per Month
- Presence of full time Medical Officer at all the Power Stations and Headquarter

2. Life-Style

- Magazines, News Papers and Professional Literature Allowance
- Club Membership (Membership of Gymkhana Club, Lion's Club etc)
- Non-Practicing Allowance, 25% of basic pay (for doctors only)
- Hotel Subsidy

- Conveyance Transportation Allowance (Commuting between office to workplace and back)
- North-East Allowance, 12.5% of basic pay (Considering the socio-economic situation of the region)
- Special/ Far Flung Allowance (given on the official tour for the states like Arunachal Pradesh, Assam, Meghalaya, Tripura, Nagaland and Chimptuipui district & Lunglei districts of Mizoram)
- Vehicle Repair and Maintenance Allowance
- Canteen Allowance/Meal Vouchers (Tea, Lunch eatables etc)
- Washing Allowance (Washing/ Dry clean of clothes worn to office uniform/ if any)
- Domestic Help Allowance (Wages to household maids, domestic helps hired for domestic work by the employee)
- Driver Allowance (Hiring the services of a driver by the employee)
- Gardener Allowance (Hiring the services of gardener for plants and greenery, by the employee)
- Conveyance Allowance for Blind and Orthopedically Handicapped Supervisors
- Night Shift Allowance

3. Loan Facilities

- Loan purchase of Household Goods all employees equivalent to 3 months basic which is recoverable within 12 Equal Monthly Instalment (EMI) without any interest.
- Housing loan from any scheduled bank if taken the total interest up to 4% to be subsidised by NEEPCO to the employee concern (rest to be paid by the employee)

4. Professional Up gradation Allowance

- Computers
- Net Connections
- Printers with Cartridges
- A4 Papers
- All other stationary Items

5. Saving and Protection

- Superannuation (at age of 60)
- Memento of Gold Coin (5gm) after Retirement
- Post Retirement Medical Facilities (Retired Employees + Spouse)
- If retired at the age of 58 years, he/she is eligible to get all the benefits compared to the actual age of retirement.
- **6. Sports Activities-** NEEPCO organises a lot of sports activities under the Power Sports Control Board. Sports are organised and played among the employees of different projects (Power Stations) of NEEPCO or between the other Power Corporations of the India as Power Grid Corporation of India (PGCI), National Thermal Power Corporation (NTPC), and National Hydroelectric Power Corporation etc. Some of the sports activities organised by NEEPCO are:
 - Carrom Competition
 - Cricket Tournament
 - Chess Tournament
 - Table Tennis Tournament
 - Badminton Tournament
 - Card Playing (contact bridge)
 - Kabbadi Competition

7. Education

- If any children and wards of NEEPCO employee belonging to General category or SC/ST secured 80% and 60% marks respectively and get admitted in any professional course, (e.g. engineering, medical etc.) monthly scholarship Rs. 3000/- is provided to that very student during the specific time period of course & stay of wards of the employees in Hostel
- Schooling facilities for the families residing within 1km of the project area are also provided.

8. Constructions Activities

- Bus Stands
- Roads
- Bridges

- Orphan Ages
- Club House for Recreation
- School Buildings like
 - ✓ Kendriya Vidhalaya, and VKV (Vivekananda Kendriya Vidhalaya)
- Kindergarten's
- Play Grounds
- Parks
- Hospitals and Dispensaries
- Co-operative Houses (for grocery items within the project area)
- **9.** Organising Yoga Classes & Meditation and other physical exercises under the yoga specialist for regular employees.
- **10. Specialist doctors are Invited** from the field of Gynaecologist and Paediatrics for giving beneficial lectures and tips to the employees, particularly to female employees.
- **11. Arrangements for watching Documentary films** on education, to improve the power generating methods and technology etc.
- 12. Donation towards Ambulances and Mortuary Vans and to Orphan Ages
- **13. DTH** (Direct to Home) **Services** to the Working Employees.
- **14. Electricity, Water and Quarter Facilities** for the employees (10% of basic pay)
- **15. House Rent Allowance** to be provided irrespective of organisational hierarchy.
- **16. Free Treatment** to the people situated near power stations.

Table 3.5: Classifying the Well-Being Activities of NEEPCO Fitted to the Holistic Model of Subjective Well-Being

Parameters	Factors of SWB	Activities Promoting the	Item
of SWB	Persuading each	Factors of SWB	(s)
	Parameter		
PhWB	(A)Medical Facilities	A: (i) Medical Reimbursement.	9
		(ii) All India approved hospitals.	
	(B)Life-Style	(iii)Post retirement medical benefits.	
	Offerings	B: (i) Proper hygienic canteen foods,	
		water supply and washroom facilities.	
	(C)Consumption	(ii) Well maintained and updated	
	Facilities	working equipments.	
		(iii) Quarter facility.	
		C: (i) Supply of stationary goods	
		(ii) Transportation facility	
		(iii) Special allowance for official tour	
		within the NE Region.	

Parameters of SWB	Factors of SWB Persuading each Parameter	Activities Promoting the Factors of SWB	Item (s)
PsyWB	(A) Work-Life Balance (B) Positive Work Culture (C) Job Satisfaction	A: (i) Intra & Inter-power Stations sports activities. (ii) Family get together at luxurious hotels or resorts. B:(i) Opportunity to build intellectual resources at work. (ii) Greater sense of contribution. C:(i)Pleasurable working climate.	6
		(ii)Satisfactory social & economical status within society.	
SoWB	(A)Corporate Social Responsibility (B)Sustainable Development (C)Proper Communication (D)Educational Activities	A: (i) Commitment towards all-round development by various construction activities. (ii) Undertakes various community development programmes specially in the field of education, health, sports, etc. B:(i) Water management for reduction of contamination. (ii) Energy conservation. (iii) Creation of green belt C: (i) Standard and structural talks between Union and management. (ii) Regular written communication to all the employees regarding changes of organisational strategies. (iii) Employees suggestions are generated, discussed and carried out in a practical manner D: (i) Construction of school buildings and playgrounds. (ii) Schooling facilities for the children of nearby villages. (iii) Scholarships for meritorious students of wards for the employees.	11
SpWB	(A)Ethical Behaviour(B)Personal Growth(C)Life Satisfaction	 A: (i) Strong foundation as a responsible corporate citizen. (ii) Respect for the organisation and as well as for self. B: (i) Employee believe upon reward 	6
	(S)Ziie buusiuciioii	and pay structure. (ii) Accepting the growing challenges and purpose of life. C: (i) Amazing sense of work for presence of moral management. (ii) Mentally stimulating work environment having the opportunities for creative ideas and innovation.	
4	13	svWR-Psychological Well-Reing SoWR-	32

Note: PhWB=Physical Well-Being, PsyWB=Psychological Well-Being, SoWB= Social Well-Being & SpWB= Spiritual Well-Being

Overall it can be said that every organisation has some kind of health and work behaviour issues, which can be improved with the right type of planning, implementation and maintenance (Chenoweth). The main purpose of the existing well-being practices is to bring about a system of employee's overall renewable within their life style so that they can effectively cope up with the challenging workplace demands. Hence, NEEPCO in this regard consistently working to diagnose the corporation's actual work behaviour challenges which mainly includes emotions, environment, organisational culture and climate, health issues etc. Like other power sector units of India, NEEPCO, management is trying its best to focus on the employee's well-being through acting towards satisfying employees' needs in the workplace and increasing opportunity for individual accomplishment and growth which may lead to success of the entire organisation.