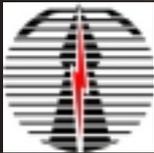
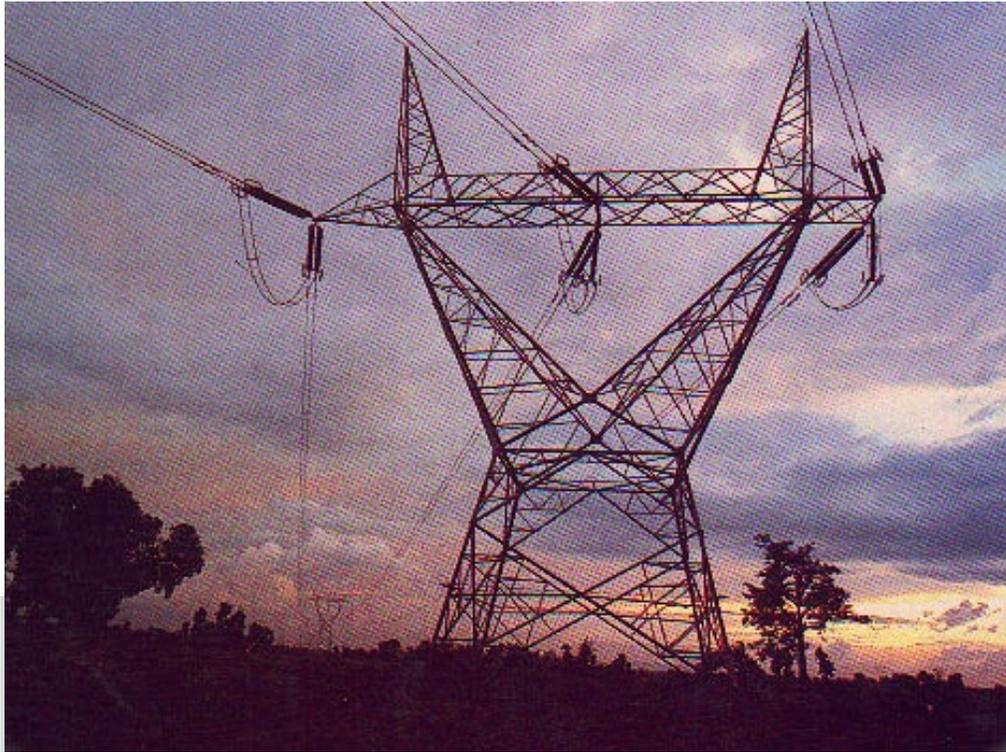


First Annual Report

1989-90



**NATIONAL POWER TRANSMISSION
CORPORATION LIMITED**

(A GOVERNMENT OF INDIA ENTERPRISES)



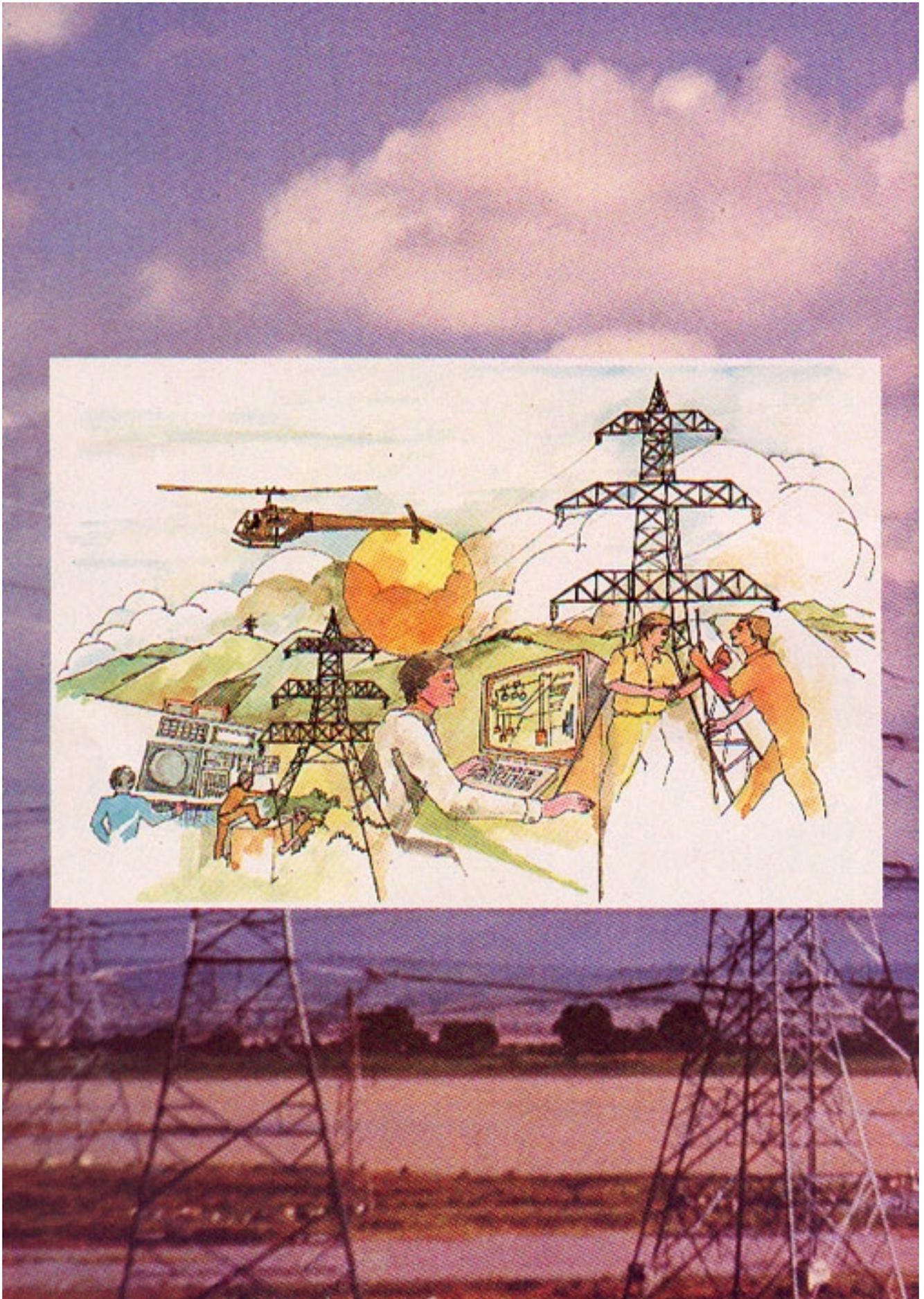
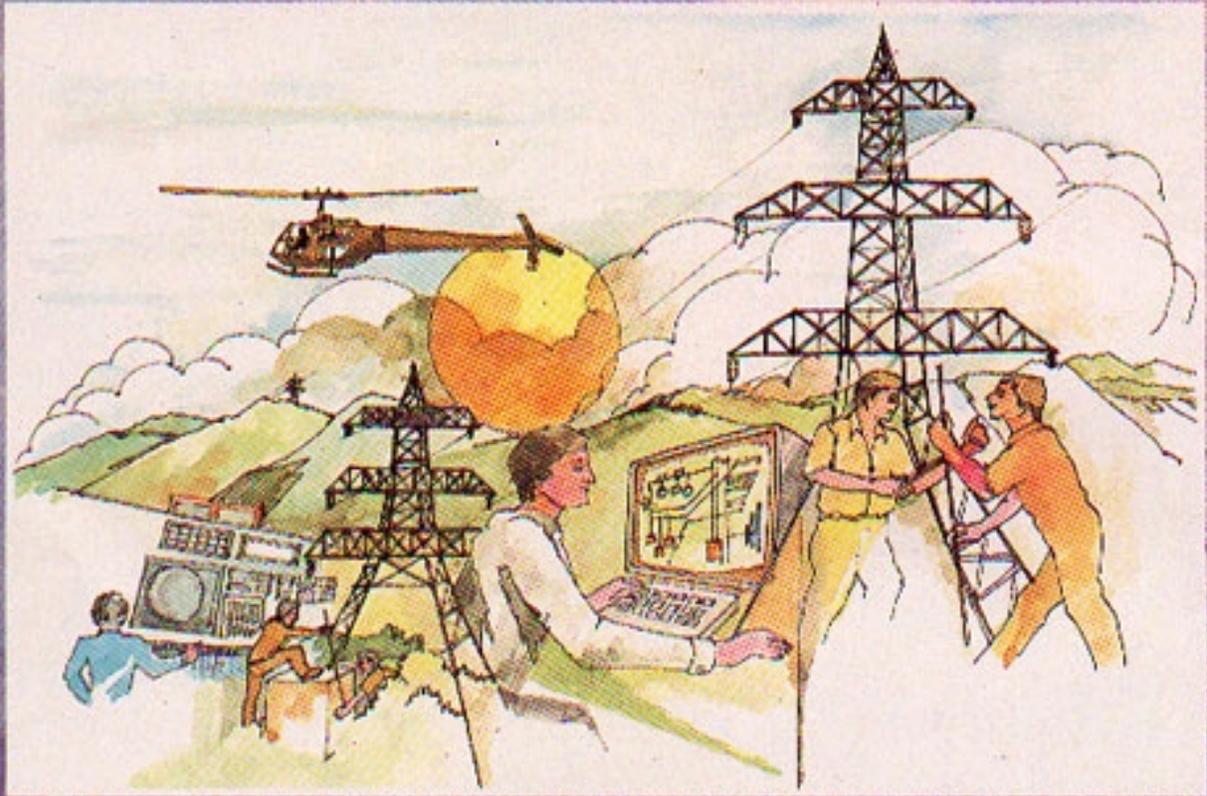
HIGHLIGHTS

1. NPTC was incorporated on 23rd October, 1989 with an authorised capital of Rs. 5000 crores
2. The Head Office of NPTC is situated in New Delhi. Its Regional Offices will be opened in phases in different regions of the country on need basis.
3. The setting up of the Corporation would :
 - i) help in pooling all the expertise in this field under one Central Organisation and keeping abreast of the latest technology development;
 - ii) bring about economies of scale in the design, construction, maintenance and operation of EHV lines;
 - iii) ensure timely and economical implementation of the massive programme of transmission line construction in the 8th and 9th plans;
 - iv) provide the institutional mechanism for creation of a communication network in the power sector and the computer hardware and the software for load despatch, automatic generation control, etc.
 - v) provide missing links which will strengthen the grid and facilitate grid operations with greater security and reliability;
 - vi) facilitate the growth of the economic exchange of power by taking up construction of the inter-regional links. This would ultimately lead to the formation of the National Power Grid and ensure better utilisation of the available generation resources;
 - vii) ensure delivery of the entitled share of power from the central generation;
 - viii) release the central generation companies of the work of the construction of the transmission lines, enabling them to concentrate on the massive new capacity additions programme in the 8th plan and bring up the same in the prescribed time schedule.
4. The work relating to transmission lines and associated sub-stations, load despatch and communication facilities and buying / selling of power will be transferred from the public sector power utilities to the NPTC in a phased manner.
5. A provision of Rs. 4.5 crores was approved for the financial year 1990-91 and Rs. 6 crores for the financial year 1991-92 mainly for expenditure on setting up of the Corporate Office.



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BOARD OF DIRECTORS



R. K. Narayan

R. K. Narayan

Chairman & Managing Director
(From 1.11.1990)

T. V. Subramanian

Director (Finance)
(From 28.9.1990)



P. S. Bami

P. S. Bami

(From 9.11.1989)



Krishna Swarup

Krishna Swarup

(From 9.11.1989)



U. V. Bhat

M. M. Goyal

(From 9.11.1989)



M. M. Goyal

U. V. Bhat

(From 9.11.1989)

J. C. Gupta

(Till 1.5.1990)

T. L. Shankar

(Till 17.4.1990)

Co. Secretary

P.D. Tuteja
(From 22.1.1991)

Statutory Auditors

Prem Gupta & Co.
Chartered Accountants

Bankers

Canara, Bank
Oriental Bank of Commerce
Indian Overseas Bank
Indian Bank

Regd. Office

10th Floor, Hemkunt Chambers,
89, Nehru Place
New Delhi - 110 019



T. V. Subramanian

This Report was adopted at the First Annual General Meeting of the Company held on 31st December, 1990



CHAIRMAN'S STATEMENT



Dear Shareholders,

I have great pleasure in welcoming you to the First Annual General Meeting of National Power Transmission Corporation (NPTC) to present the Annual Report of the Company together with the Audited Accounts for the year ended 31st March, 1990.

It was in August, 1989 that the Government of India took a decision to constitute NPTC with the following objects :

- a) To plan, promote and build an integrated and efficient power transmission system network in all its aspects including investigations, planning, engineering and design.
- b) To prepare preliminary feasibility and detailed project reports.
- c) To construct, own, operate and maintain transmission lines, sub-stations, load despatching and communication facilities and appurtenant works.
- d) Wheeling of power generated at various power stations in accordance with the policies and objectives laid down by the Central Government from time to time.
- e) Keeping abreast of Technology development in the transmission, load despatching and communication system.



Subsequently, NPTC was incorporated on 23rd October, 1989 under the Companies Act, 1956 as a Public Limited Company with an authorised capital of Rs. 5000 Crores, wholly owned by Govt. of India. In the first Board Meeting of the Company held on 21st November, 1989, Shri M.M. Goyal, Joint Secretary (Systems), Deptt. of Power was empowered as Authorised Director to look after the day-to-day affairs of the Company. I assumed the charge of Chairman and Managing Director on 1st November, 1990 and Shri T.V. Subramanian joined as Director (Finance) on 28th Sept. 1990. Within a short period of our joining, the Company could obtain the Certificate for Commencement of Business on 8th November, 1990. The Govt. has also created the posts of Director (Projects) and Director (Operation) for which appointments are yet to be made.

NEED FOR THE ORGANISATION

Its Advantages and Future Prospects.

The National Power Grid being the ultimate goal, the need for a central agency solely catering to transmission needs is dictated by the inadequacies of the present system to cope with the needs of the National Power Grid. In spite of the best efforts of the Central Agencies and State Electricity Boards, the growth of the T&D System has not been commensurate with the addition to installed capacity and its utilisation. Developments have been handicapped by :

- Too many agencies in the fray each having transmission development as more or less secondary activity;
- Planning being based on only individual needs and perception of the system as a whole being absent militating against the concept of National Power Grid.

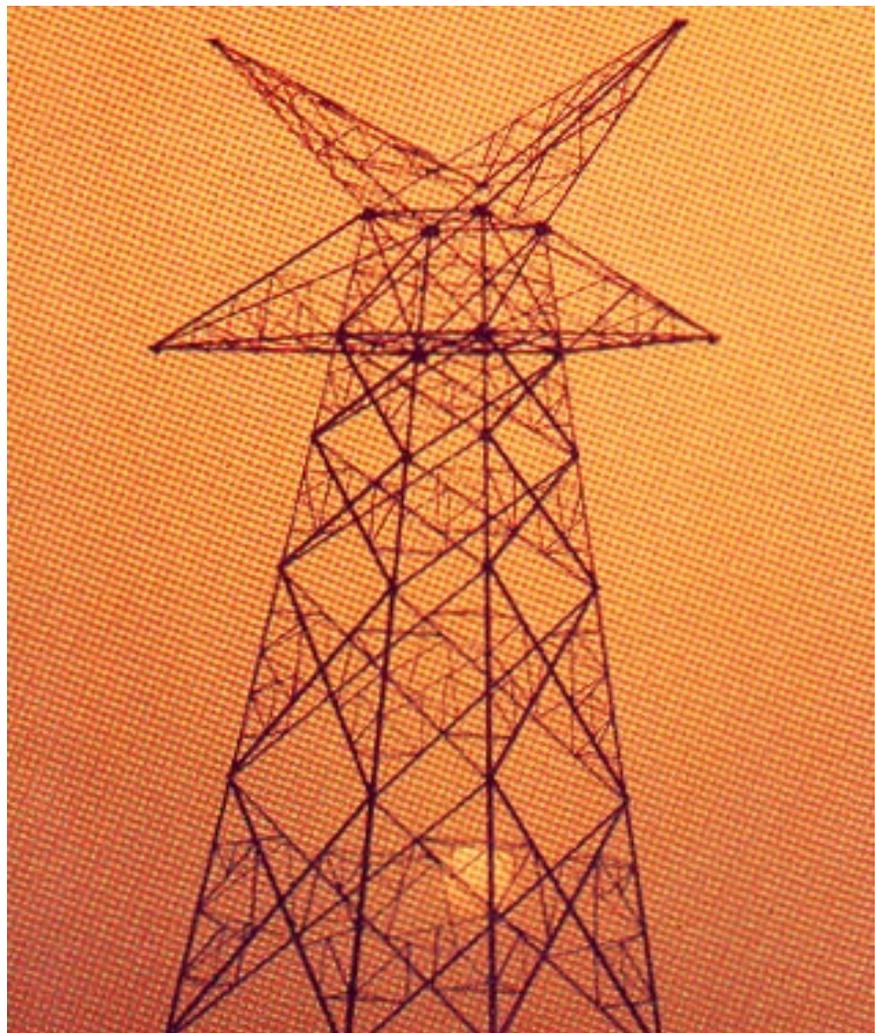
- Inadequate appreciation of the need for T&D augmentation alongwith capacity additions;
- Technical expertise scattered in different agencies being not put to optimum use.

Its Advantages accruing from formation of NPTC

- As a single agency it will be responsible for the entire EHV network, there will be better co-ordination between generating and power purchasing agencies.
- Better grid management is possible because of central schedul-

ing of generation and power flows. This implies better utilisation of available resources by regulated interregional exchanges.

- With inter-connected operation, system strength increases, Frequency deviation due to load generation, mismatch, reduces. Amount of reserves to be maintained by each constituent agency reduces.
- By optimising generation, reliability and system performance increase, loss reduction can be achieved by optimal loading of lines.
- Wide scope for absorption of lat-



The sun rises-And so do the HVDC system on the horizon of country's power scenario.



est technology into a single organisation as opposed to each agency acquiring the same technology independently.

- Uniform tariff structure will put an end to most of the existing commercial disputes.
- Transmission constraints will be alleviated not only in Central Sector, but also in SEBs System.
- This will bring about optimal utilisation of power generated by various agencies to the ultimate benefit of the country.

ACTION PLAN OF NPTC :

I would like to divide the action plan of the new Corporation on the following lines :

- a) Taking over of the work from the existing organisations that is, NTPC, NHPC, NEEPCO, NLC, NPC, DVC and BBMB. For this, the performance budget of Dept. of Power for the year 1990-91 indicates the Govt. thinking about the modus operandi for transfer of

work relating to transmission, load despatch and communication facilitates and buying and selling of power from public sector utilities etc., in a phased manner as under :

First Phase

In the first phase, the NPTC would take over the following from the Central / Centre-State joint venture organisations, namely, NTPC, NHPC, NEEPCO, NLC, DVC, BBMB, THDC, NJPC, CEA etc.

- (i) Transmission systems and associated sub-stations presently owned and operated by these organisations;
- (ii) Construction of transmission lines and associated sub-stations presently under execution and planning by these organisations;
- (iii) Setting up augmentation of load despatching and communication facilities at the state-level, regional level and then national level;
- (iv) Executives and staff engaged in

Transmission line planning, engineering and design contracting, procurement, finance, construction, operation and maintenance etc., on deputation for three years. The executives and staff would be given option for absorption in the NPTC or reversion to their parent departments before expiry of their deputation;

- (v) All assets and liabilities etc., associated with the transfer of above mentioned works; and
- (vi) The NPTC would take up the work of wheeling power from the participating power stations to the beneficiary States, charging relevant transmission charges keeping in view the existing agreements/MOU entered into by various generating organisations with the beneficiaries. NPTC is very keen on living within the existing norms for tariff fixation based on reasonable standards of efficiency and there will not be any increase in tariff on account of establishment charges which will be more than

Saving the Right-of-way-two double circuit 400 kv Transmission Liners run together.





Up in the sky-Men at work on a 400 kv Transmission Tower.

compensated by economies of scale / rationalisation of tariff structure.

Second Phase

In the second phase, the existing Regional Electricity Boards and the Regional Load Despatch Centres together with the associated communication facilities would be transferred to the NPTC for integrated operation of the regional grid systems and overall co-ordination between the constituent systems.

Third Phase

In the third phase, the NPTC would be made responsible for buying power from the Central generating organisations as well as surplus power from the State Electricity Boards and other utilities, pooling it and then selling it to different States in the country.

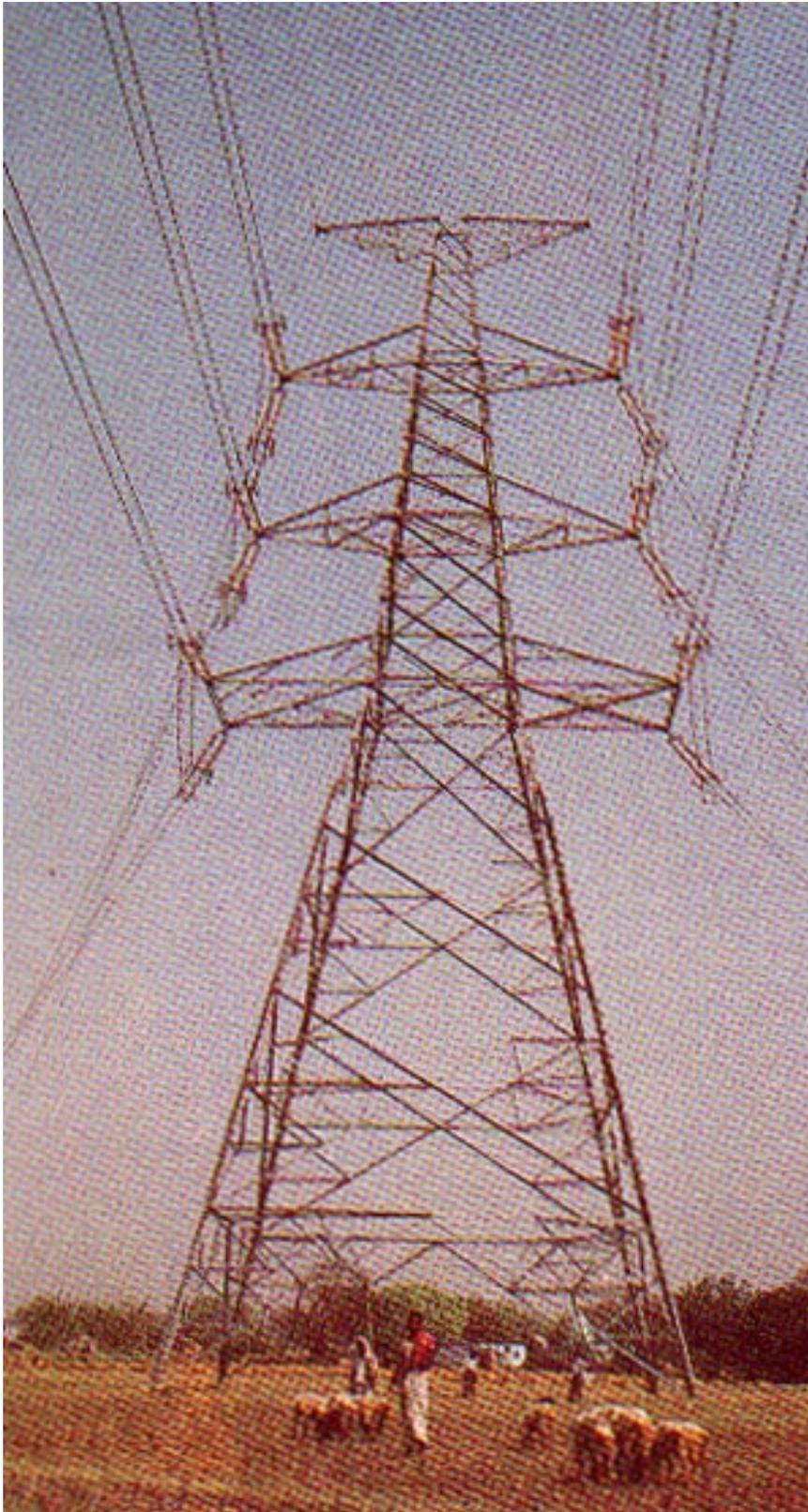
b) Follow-up action for transfer of work :

With a view to ensuring smooth transfer of work, NPTC proposes to take up the transfer of work from one organisation at a time. In the first instance, it is proposed to get the transmission lines in operation, under construction and projects in pipeline from NTPC and NHPC as these two organisations account for 90% of transmission line assets at present. Moreover this gives accessibility to NPTC in five regions and immediately help NPTC for gearing up for the ultimate task of developing national grid. Approach paper for such transfers indicating the broad steps to be taken for ensuring smooth change of management have been prepared and submitted to both these organisations and discussions are also being held at various levels to sort out the issues involved. Draft MOU for taking over the assets of other organisations like NEEPCO, NLC, NPC etc. have also

been prepared and submitted to these organisations. We have also written to Electricity Boards/REBs with whom NPTC have to work in very close cooperation, about the NPTC plan of action for taking over the transmission lines and also eliciting their views on priorities to be accorded by NPTC. I have great pleasure in informing that excellent response has been received from Electricity Boards who have given us valuable suggestions in this regard and have also offered the services of transmission line engineers working in the State for deployment in NPTC.

c) Load despatch & communication:

However, for ultimate aim of establishment of national grid, integrated power system management is very important and there is a dire necessity for building state of art Regional and State Load Despatch Centres. Your company has already been assigned the job of installation and maintenance of unified load despatch and



Quietly co-existing-Two circuits of a 400 kv Transmission Lines pass over the country side.

communication system for north eastern and northern regions. The establishment of similar systems in southern region as well as upgrading of system already in existence in western region and eastern region have also to be taken up shortly by the Company.

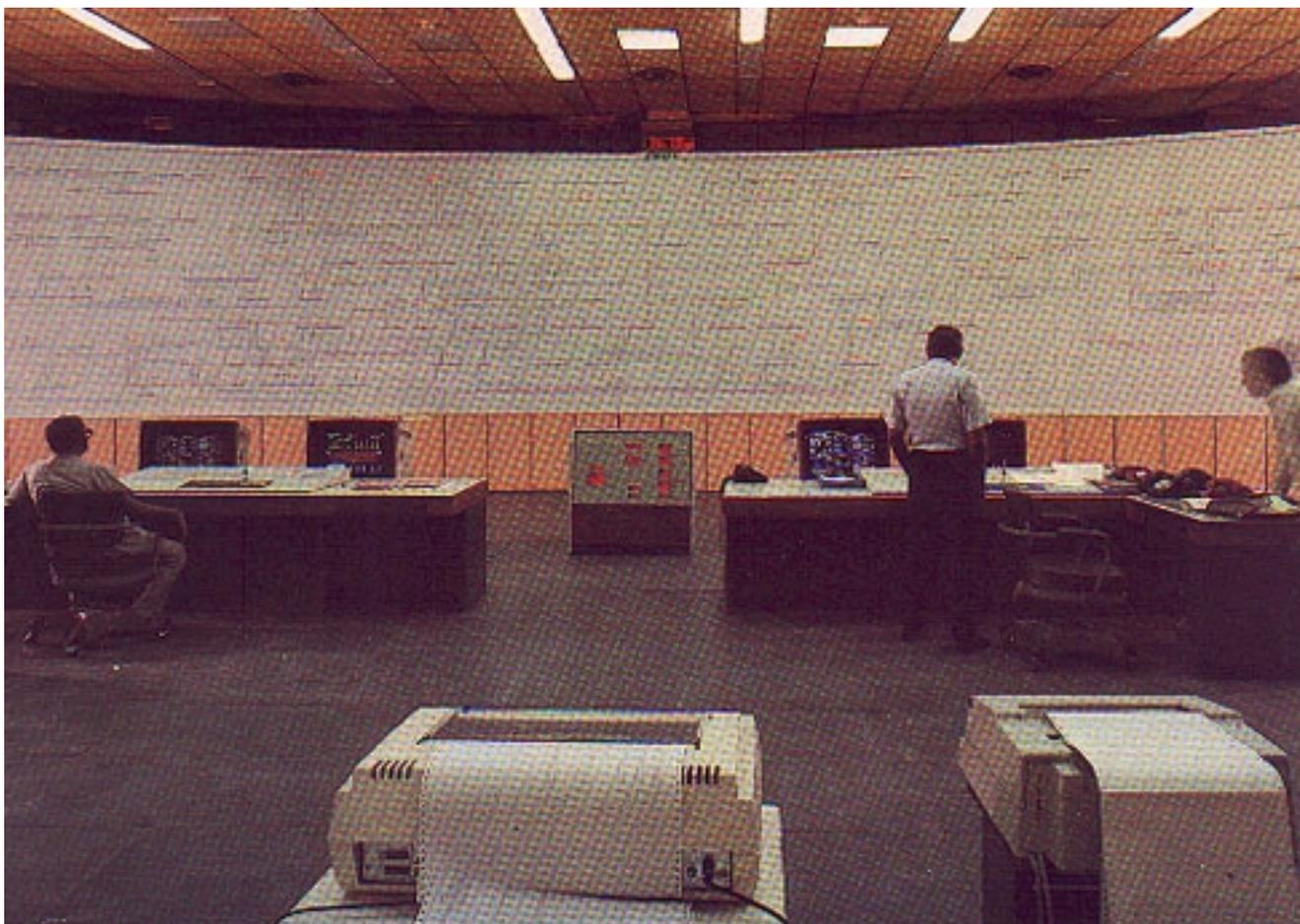
d) System Improvement :

In the past, a number of failures have been reported because of non-availability of redundancy in the power system and small imbalance or fault in the system have many times resulted in complete break-down of power system. Therefore, NPTC is planning for detailed study of various regional power system to take remedial measures to augment the system by installation of additional switching station and for providing additional starting power compensation at existing substations.

e) Inter-regional tie lines:

In order to have optimum utilisation of the national power resources, it will be necessary to have integrated operation of all the regions and to build up strong inter-regional tie lines. The company has already suggested a number of such tie lines to CEA in addition to existing HVDC back-to-back at Vindhyachal between western region and northern region and have requested Dept. of Power/Planning Commission to make necessary funds available for such tie lines as they will go a long way to ensure establishment of the national grid as well as transfer of power from one region to other region in case of availability of surplus power in one region as well as at the time of emergency.

f) The company is also planning to install time of day metering system at various generating stations as well as tie lines in order to work out a tariff system based on time of the day, i.e. peaking power or off-peak power as well as on the basis of frequency and VAR. Establishment of proper metering system will also help in bringing



The Brain of a power system-A load Despatch Centre.

operational as well as fiscal discipline in the operation of the regional grids. It is planned to discuss shortly this issue with various generating companies as well as Electricity Boards. One area in which the company would like to immediately concentrate is improvement in the maintenance management of the transmission system and therefore may like to introduce use of helicopters with thermovision cameras for carrying out on-line monitoring of the lines as well as maintenance. The helicopters will also be

useful in carrying out the detailed survey and investigation as well as the erection of new transmission system.

In the end, I would like to emphasise that your Company have to work in a very close co-ordination with all the generating companies as well as the Electricity Boards and to work very dedicatedly for establishment of integrated power system in the country in order to make available reliable and quality power supply in the most economical fashion to various

constituents of Regional Electricity Boards and, therefore, to the general public of the country.

(R. K. NARAYAN)
Chairman & Managing Director

New Delhi
31st December, 1990

DIRECTORS' REPORT



To the Members,

I have great pleasure in welcoming you on behalf of the Board of Directors to the First Annual General Meeting of National Power Transmission Corporation to present the Annual Report of the Company together with the Audited Accounts for the year ended 31st March, 1990.

2. PRESENT STATUS

Need for setting up a separate exclusive organisation for planning and construction, operation and maintaining transmission system in order to ultimately achieve building-up National Transmission Grid was long felt. In August 1989, the Government of India decided to constitute NPTC for undertaking the programme of laying EHV and HVDC transmission systems and associated sub-stations as well as construction of load despatch and communication facilities, with a view to transmitting large blocks of power from various generating sources in the central sector to beneficiary states. NPTC was subsequently incorporated on 23rd October, 1989 under the Companies Act, as a public limited company, with an authorised capital of Rs. 5000 crores, wholly-owned by Government of India. In the First Board Meeting of the Company held on 21st November, 1989, Shri M.M. Goyal, Jt. Secretary (Systems), Department of Power was empowered as Authorised Director to look after the day-to-day affairs of the Company.

I assumed charge as Chairman & Managing Director on 1st November, 1990 and Shri T.V. Subramanian joined as Director (Finance) on 28th September, 1990. On 8th November, 1990, the Company obtained the Certificate for Commencement of Business. The Government has also created the posts of Director. (Projects) and Director (Operation) for which appointments are yet to be made. Shri M.M. Goyal as Authorised Director and the other Directors Shri

Krishna Swarup, Member (PS), CEA, Shri U.V. Bhat, JS & FA, Department of Power and Shri P.S. Bami, CMD, NTPC, have been managing the initial activities of the Company till the appointment of the full time Directors and we are really thankful to them for the efforts put in for establishment of the Company.

3. REASONS AND OBJECTS FOR SETTING UP THE CORPORATION

The performance budget of Department of Power for 1990-91 submitted by Government of India to the Parliament explains the reasons and objects for setting up the Corporation as under :

The setting up of the Corporation would :

- (i) help in pooling all the expertise in this field under one Central Organisation and keeping abreast of the latest technology development;



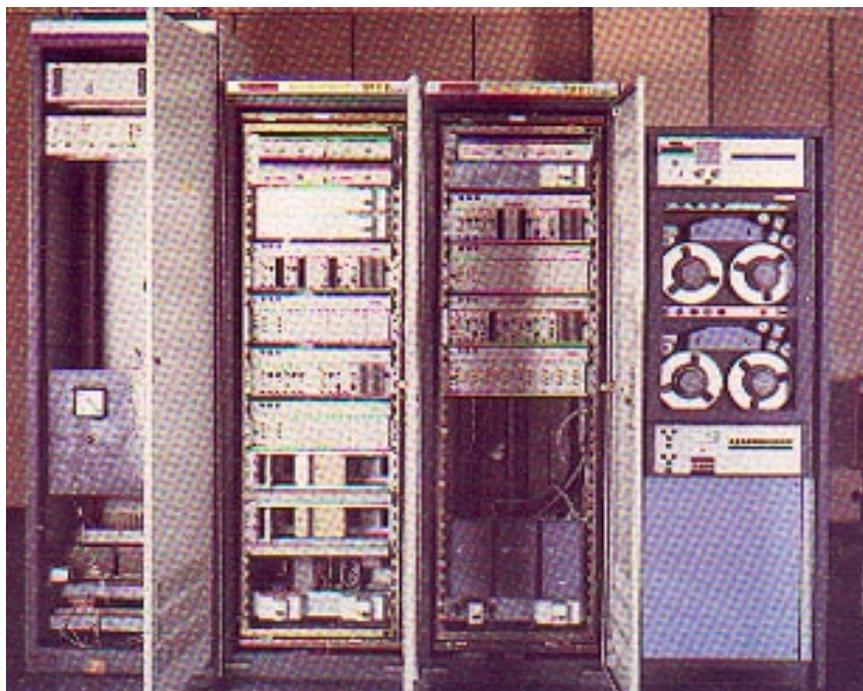
Hello there! A micro-wave tower for long distance communication.



- (ii) bring about economies of scale in the design, construction, maintenance and operation of EHV lines;
- (iii) ensure timely and economical implementation of the massive programme of transmission line construction in the 8th and 9th Plans;
- (iv) provide the institutional mechanism for creation of a communication network in the power sector and the computer hardware and the software for load despatch, automatic generation control, etc. (as this involves considerable system expertise, the NPTC will be able to take up such scheme in a cost effective manner which will lead to more efficient control of the grid operation of real time);
- (v) provide missing links which will strengthen the grid and facilitate grid operations with great security and reliability;
- (vi) would facilitate the growth of the economic exchange of power by taking up construction of the inter-regional links. This would ultimately lead to the formation of the National Power Grid and ensure better utilisation of the available generation resources;
- (vii) ensure delivery of the entitled share of power from the central generation;
- (viii) release the central generation companies of the load of the construction of the transmission lines, enabling them to concentrate on the massive new capacity additions programme in the 8th Plan and bring up the same in the prescribed time schedule.

4. MODUS OPERANDI FOR TRANSFER OF WORK

The performance budget of Department of Power for the year 1990-91 also indicates the modus operandi



Computer panels for RLDC.

for transfer of work relating to transmission lines and associated substations, load despatch and communication facilities and buying and selling of power from public sector power utilities to NPTC in a phased manner as under :

First Phase

In the first phase, the NPTC would take over the following from the Central / Centre-State joint venture organisations, namely, NTPC, NHPC, NEEPCO, NLC, DVC, BBMB, THDC, NJPC, CEA etc.

- (a) Transmission systems and associated sub-stations presently owned and operated by these organisations;
- (b) Construction of transmission lines and associated sub-stations presently under execution and planning by these organisations;
- (c) Setting up/augmentation of load despatching and communication facilities at the state level, regional level and the national level;

- (d) Executives and staff engaged in Transmission line planning, engineering and design contracting, procurement, finance, contracting, procurement, finance, construction, operation and maintenance etc., on deputation for three years. The executives and staff would be given option for absorption in the NPTC, or reversion to their parent departments before the expiry of their deputation;
- (e) All assets and liabilities. etc., associated with the transfer of above mentioned works; and
- (f) The NPTC would take up the work of wheeling power from the participating power stations to the beneficiary states charging relevant transmission charges keeping in view the existing agreements/MOU entered into by various generating organisations with the beneficiaries.



Second Phase

In the second phase, the existing Regional Electricity Boards and the Regional Load despatch centres together with the associated communication facilities would be transferred to the NPTC for integrated operation of the regional grid systems and overall co-ordination between the constituent systems.

Third Phase

In the third phase, the NPTC would be made responsible for buying power from the Central generating organisations as well as surplus power from the State Electricity Boards and other utilities, pool it and then sell it to different States in the country.

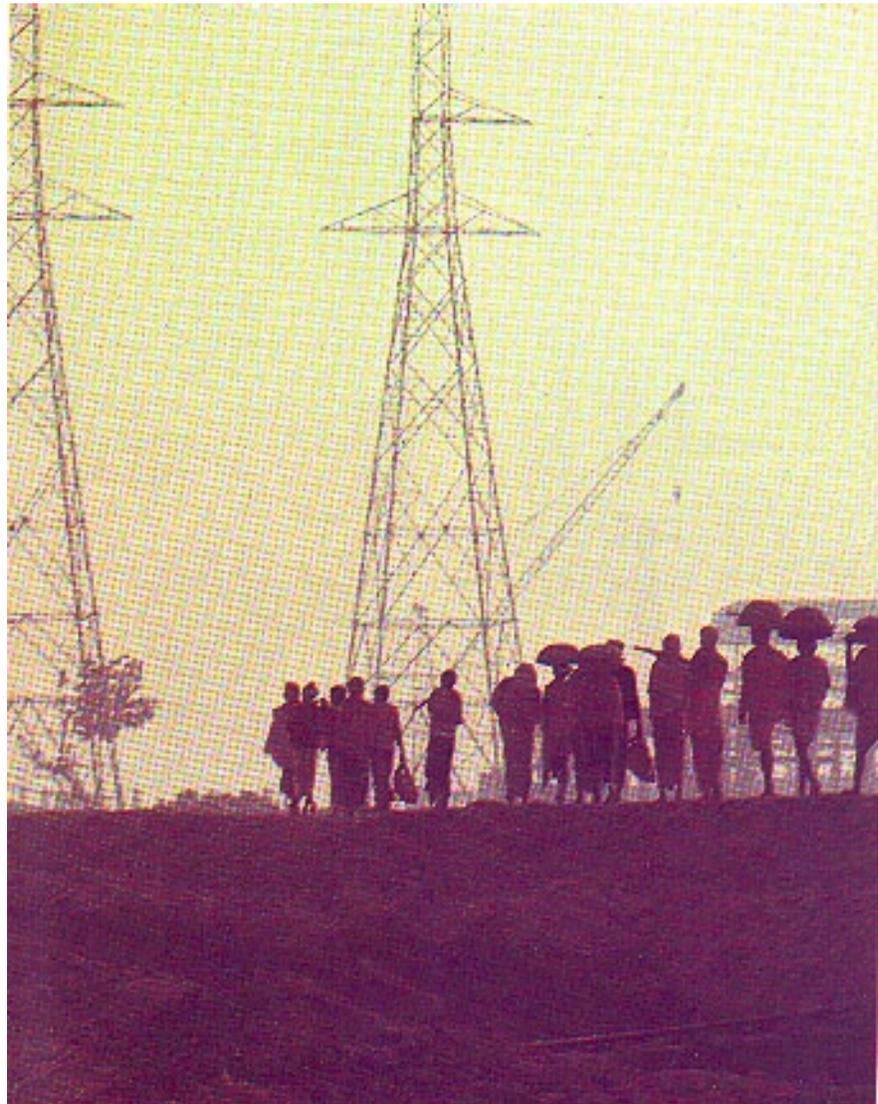
5. FOLLOW-UP ACTION FOR TRANSFER OF WORK

By its very constitution, NPTC has to work in very close collaboration and co-operation with central power sector organisations and also with the State Electricity Boards, REBs and Central Electricity Authority. Transfer of work will involve take over of huge volume of assets for a value of Rs. 3912 crores and the associated staff. With a view to ensuring smooth change of work, NPTC proposes to take up the transfer in stages from one organisation at a time. To begin with, it is proposed to get the transmission line assets including lines/sub-stations in operation, under construction and projects in the pipeline from NTPC and NHPC. These two organisations account for about 90% of the transmission line assets to be taken over by NPTC and with such transfer, a good beginning will be made by NPTC to establish itself and to gear up the organisation for its ultimate task of developing the National Grid. Approach papers for such transfer indicating the broad steps to be taken for ensuring smooth change of management has been prepared and submitted to NTPC, NHPC and Govt. of

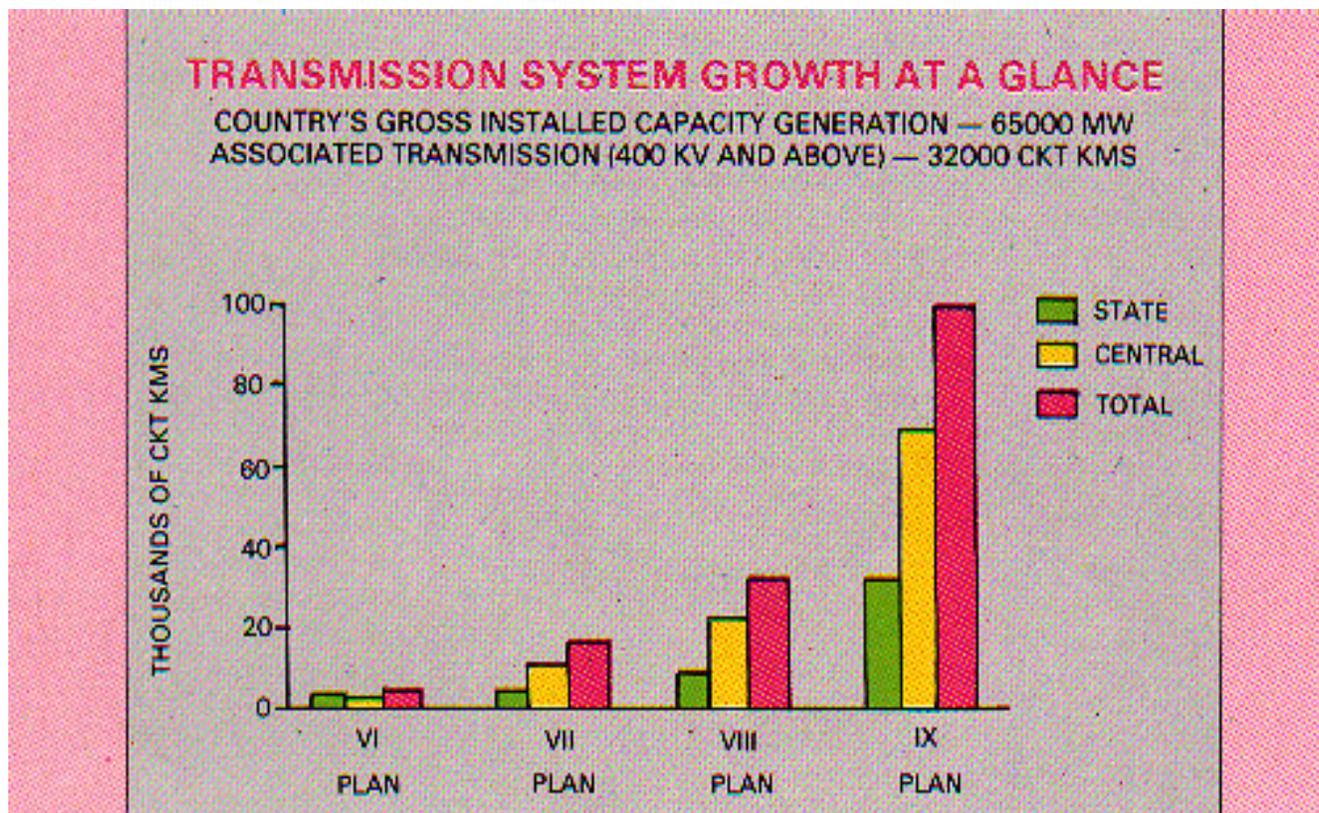
India. Draft Memorandum of Understanding for take over of assets have also been sent to NEEPCO, NLC and NPC. Other organisations like DVC, NJPC BBMB and CEA have also been informed regarding formation of new Corporation with a request to prepare necessary papers and documents to facilitate transfer of assets/liabilities regarding their transmission system at an early date. Simultaneously, circulars have been issued to State Electricity Boards briefly indicating NPTC's plan of action for taking over

the transmission lines and also eliciting their views as to the priorities to be accorded by NPTC for various transmission line works with which the States are concerned. We have received excellent response from State Electricity Boards who have given us valuable suggestions in this regard and also offered the services of transmission line engineers working in the States for deployment by NPTC.

5.1 For ultimate aim of establishment of national grid, integrated power



Transmission Tower under Construction



system management is a very complex subject which need state of art technology, adoption of on-line acquisition of power system data and its real services processing by computers. Operating decisions are supported by presentation of more complete and coherent comprehensive information and guidance about the power system. Real time computers infact have become indispensable tool for modern energy management. In this regard real challenge of NPTC shall be to build up state of art unified load despatch centre and associated communication facilities in all the regions as well as at the national level. In this regard the following projects are presently under consideration of Government of India.

(i) Regional Load Despatch Centre brought for establishing a hierarchical network of load despatch centres with one at national level, five at regional level and a num-

ber of centres in different states and system level.

- (ii) National Electricity System Operation Organisation (NESOO) for development of load despatch centres, special operational procedures and guidelines and setting up of Load Despatcher Training Simulator with UNDP assistance for training of engineers in system operation.
- (iii) Modernisation of SRLDC.
- (iv) National Load Despatch Centre (NLDC) to be established in New Delhi for linking of the five existing Regional Electricity Boards for effective communication of information of vital nature like generation from major power stations, outages of units etc.
- (v) North Eastern Region Load Despatch Centres (NERLDC); This envisages establishment of regional load despatch centres in

the North Eastern Regional and on demand display and printing facilities alongwith a well-knit telecommunication system in the North Eastern Region at Shillong.

- (vi) Load Despatch Centre in the Northern Region under unified scheme, for establishment of load despatch and telecommunication facilities within the central and state communication systems in the Northern Region to build up the regional hierarchy.

5.2 Out of the six schemes mentioned above, five schemes are under implementation/supervision of Central Electricity Authority. The Government of India has already decided that North Eastern Regional Load Despatch Centre will be constructed by NPTC on a management contract basis on behalf of the CEA and that NPTC should also maintain the facilities such as computer, data acquisition system and telecommunication



HVDC station.

and also software development and support. Similarly, work to start very soon on load despatch centre and communication system for Northern Region. Feasibility study for similar system for Southern Region is also under formulation and there is a need to expedite and implement the same at the earliest. NPTC have already started planning for recruitment and training of personnel in this technology which is hardly available at present.

6. SYSTEM IMPROVEMENT

NPTC is planning for study in detail of the various regional systems from the reliability and redundancy point of view, because in the past,

there have been a number of failures which have been triggered on because of non-availability of redundancy in the system and small unbalanced or fault in the system has resulted in complete break-down of power system. It would be necessary to augment the system by putting up additional switching station of providing additional Static VAR Compensator at the existing sub-stations as well as to provide some more additional tie lines etc.

7. INTER-REGION TIE LINES

The Power planning exercises are carried out on regional basis which requires that strong inter-region links

are developed for smooth integrated operation of regional grid systems. It is also necessary to gradually, but effectively integrate the operations of regional grids to several advantage to our power systems including improved reliability etc. These, however, in general are not receiving adequate priority. Regional concept still dominates our planning. To accelerate the growth of inter-region links, Govt. had initiated centrally sponsored schemes with 100% central loan assistance. However, in actual practice, it has been noticed that pace of implementation of inter-region transmission lines has been far from satisfactory, except in cases where they are of direct interest to the states such as providing



means for exporting power in the case of surplus states or import of power in the case of deficit states. This emphasises the need to take up all the vital transmission system links necessary for regional and inter-regional operations for construction under central sector. Two inter-regional projects linking the Northern and Western Regional grid systems and the Western and Southern Regional systems were taken up for implementation by NTPC. One link between Northern and Western region has already been commissioned. It is also proposed to construct additional inter-regional links connecting Eastern with Southern, Western and North-Eastern regions during the 8th Plan period to facilitate exchanges of power between them. However, for smooth operation of the regional grids and also for enabling inter-regional power exchanges, commercial aspects in terms of tariff for inter system exchanges would be required to be sorted out for preparing healthy regional integration and optimization. To overcome the problems of mismatch of frequencies and to improve the stability of the systems and provide controlled assistance in view of power shortage condition, inter-regional links should be asynchronous.

8. TRANSMISSION LINE OUTLAY FOR 1990-91 AND 8TH PLAN

The present position regarding the outlays provided for transmission line projects in the name of the central sector organisations is summarised below as per Annexure-I

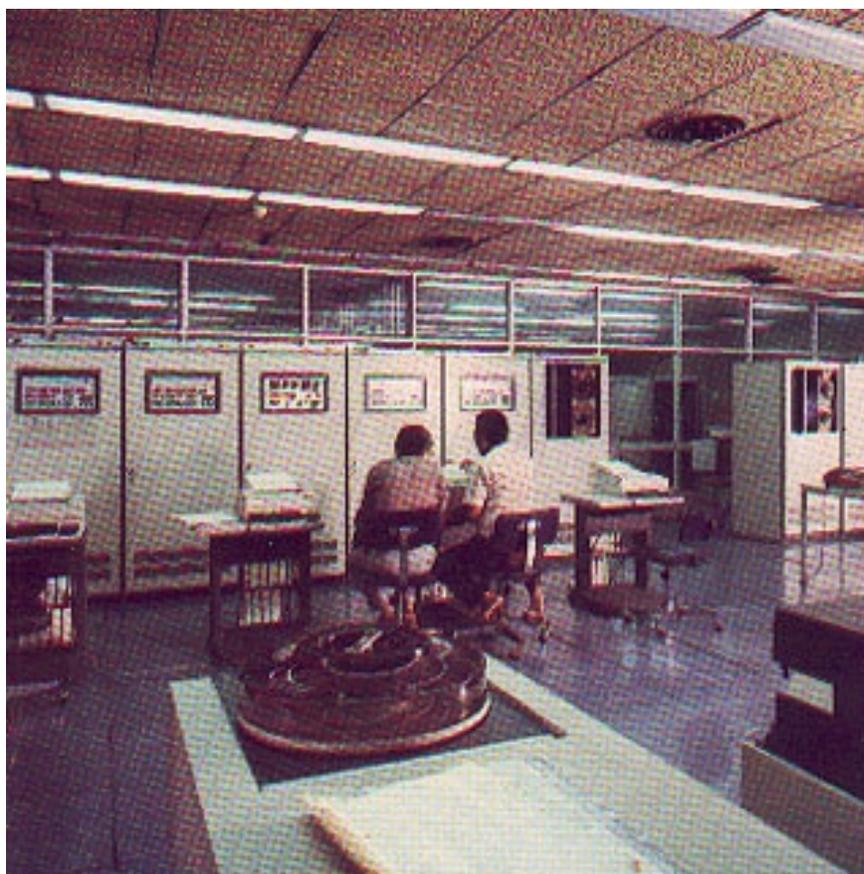
Performance Budget of the Government of India indicates that as and when the works get transferred to NPTC, the budgetary provision therefore will also get transferred. In addition to the provision made in the names of central sector organisation earmarked for transmission lines, a provision of Rs. 4.5 crores has been made in the budget for 1990-91 and

Rs. 10 crores in 1991-92 for the corporate office of the NPTC which is presently in the process of being established at Delhi.

9. PROSPECTS FOR THE EIGHTH PLAN :

The annual plan of Department of Power for 1991-92 recommended for the Eighth Plan an outlay of Rs. 5490 crores for the transmission line schemes in the central power sector. Against this, the outlay recommended tentatively by Planning Commission works out to Rs. 2675 crores only involving a massive cut of Rs. 2815 crores. According to the Rajadhyaksha Committee on Power, generation projects and transmission line outlays should be in the ration of 2:1, whereas as per tentative recommendations of Planning Commission, the outlays for generation and trans-

mission are in the ratio of 6:1. The massive cut proposed by Planning Commission is bound to affect the development of the National Grid for optimum utilisation of power. The Planning commission has also not taken into account the requirements for inter-regional and HVDC links which are intended to facilitate transmission of surplus power from one region to other for which we have asked for a provision of Rs. 100 crores for 1991-92. Besides, stringent cuts have also been effected in the case of new transmission lines provision of NPTC, Chandrapur HVDC back-to-back, Krishnapur-Moga Transmission system, Dul Hasti Srinagar line and also HVDC back-to-back station for connecting Southern Region and Eastern Region. This is bound to cause setback in transmission line programme. The matter has been taken up by us



Load Despatch Computer room.



with the Planning Commission for restoration of cuts and augmentation of outlay. NTPC in addition to the inter-regional ties already proposed in the 8th Five year Plan, have suggested some more lines for optimising the utilisation of the existing generating sources and work on preparation of feasibility report for the same has already been taken up. Some of these lines envisaged are as in the statement enclosed as Annexure-II.

10. ACCOUNTS AND AUDIT FOR THE YEAR 1989-90

The accounts for the year 1989-90 mainly deal with incorporation expenses and other expenses for setting up of the Corporation and the accounts have been audited by statutory auditors, M/s. Prem Gupta and Co. There is no qualification in the Statutory Auditors' Report and the Comptroller and Auditor General of India has also given a nil comments report. The auditors' reports are annexed with the accounts.

11. ORGANISATION STRUCTURE OF NPTC

Keeping in view the Government of India decision that NPTC should take over the transmission line/sub-stations alongwith the associated staff from central power sector organisations, it is necessary to induct executives only for the corporate set up of the Company. The posts are to be filled up as far as possible by re-deployment of the staff to be taken from central sector organisations and direct recruitment is to be resorted to only where absolutely necessary. Organisation structure proposed to be adopted by NPTC for its corporate office/regional/field offices is annexed with the accounts as Annexure-III. A training programme is also being drawn up for developing the expertise in areas of load despatch/management particularly on computer applications/maintenance and software.

12. PARTICULARS OF EMPLOYEES

There were no employees on rolls of the Company drawing Rs. 6000 and above per month, if employed for the part of the year or Rs. 72000 and above per annum if employed for the full year in the year 1989-90. Accordingly the provisions of Section 217 (2A) are not attracted.

13. ACKNOWLEDGEMENTS

On behalf of the Board of Directors, I place on record the commendable efforts put in by the officers of the Department of Power and Central Electricity Authority and CMD, NTPC in bringing up this Company in the initial stages. I am also grateful for the co-operation received from the Planning Commission, Ministry of Project Implementation, Regional and State Electricity Boards, and Ministry of Finance

For and on behalf of the
Board of Directors

(R. K. NARAYAN)
Chairman & Managing Director

New Delhi
24th December, 1990



ACCOUNTS



BALANCE SHEET
As on 31st March, 1990

(Rupees)

	Schedule No.	As on 31st March, 1990
Sources of Funds		
SHAREHOLDERS' FUND		
Capital	1	60,00,000
Application of Funds		
FIXED CAPITAL EXPENDITURE		
FIXED ASSETS		
Gross Block		4,63,764
Less : Depreciation to date		---
Net Block		4,63,764
CURRENT ASSETS, LOANS AND ADVANCES		
Cash and bank balances		14,46,259
Less : CURRENT LIABILITIES AND PROVISIONS		3,77,689
Net current assets		10,68,570
Miscellaneous expenditure (to the extent not written off or adjusted)		
Incorporation Expenses		40,13,880
Incidental Expenditure for commencement of business (net)		4,53,786
		44,67,666
		60,00,000
		Nil
Contigent Liability		
Notes an accounts	5	
Schedules 1 to 5 from part of accounts		

(T.V. SUBRAMANIAN)
DIRECTOR (FINANCE)

(R.K. NARAYAN)
CHAIRMAN & MANAGING DIRECTOR

As per our report of even date
For Prem Gupta & Co.
Chartered Accountants

Place : New Delhi
Dated : 9th November, 1990

(P. B. GUPTA)
Partner



**STATEMENT OF INCIDENTAL EXPENDITURE
FOR COMMENCEMENT OF BUSINESS
For the year ended 31st March, 1990**

(Rupees)

Expenses

Salaries & Wages	10,962
Advertisement for Recruitment	3,90,625
Legal Expenses	752
Postage	41
Conveyance Expenses	620
Audit fee (Subject to approval of Company Law Board)	5,000
Printing and Stationery	4,739
EDP Consumables	4,015
Entertainment expenses	610
Books & Periodical	2,794
Vehicle Running Expenses	3,399
Furnishing Expenses	30,665
Miscellaneous Expenses	1,180
Total Expenses	4,55,402
Less : Miscellaneous Income	1,616
Excess of expenses over income transferred to Balance Sheet	4,53,786

**(T.V. SUBRAMANIAN)
DIRECTOR (FINANCE)**

**(R.K. NARAYAN)
CHAIRMAN & MANAGING DIRECTOR**

As per our report of even date
For Prem Gupta & Co.
Chartered Accountants

**Place : New Delhi
Dated : 9th November, 1990**

**(P. B. GUPTA)
Partner**



Schedule -- 1

As at 31st
March, 1990
(Rupees)

Capital

Authorised		
5,00,00,000 Equity shares of Rs. 1000/- each	:	5000,00,00,000
Issued, subscribed and paid up 11 Equity shares of of Rs. 1,000/- each fully paid up	:	11,000
Share Capital Deposit	:	59,89,000
		<u>60,00,000</u>

Schedule --- 2

Fixed Assets :

(Rupees)

	Gross Block			Net Block		
	As at 01.04.89	Additions during the year	Sale/ adjustments during the year	As at 31.03.90	Depreciation upto 31.03.90	As at 31.03.90
1. Vehicles	---	2,83,714	---	2,83,714	---	2,83,714
2. EDP & Print room machines	---	1,80,050	---	1,80,050	---	1,80,050
TOTAL		4,63,764		4,63,764		4,63,764

Schedule -- 3

Current Assets, Loans & Advances

(Rupees)

Cash balance including postal orders in-hand	2,692
Balances with scheduled Banks in current accounts	14,43,567
	<u>14,46,259</u>

Schedule -- 4

Current Liabilities & Provisions :

(Rupees)

Sundry creditors	3,77,689
	<u>3,77,689</u>



Schedule --- 5

Notes on Accounts :

1. Since the Company has not yet commenced business, a Statement of Incidental Expenditure for commencement of business has been prepared in lieu of Profit & Loss Account.
2. Since 1989-90 is the first financial year for the Company (incorporated on 23rd October, 1989) previous year's figures have not been shown in the accounts.
3. During the year, none of the employees were in receipt of remuneration in the aggregate at the rate of not less than Rs. 72,000/- per year if employed for full year or not less than 6,000/- per month if employed for the part of the year.
4. Depreciation on fixed assets is to be provided from the year following that in which the assets become available for use at the rates determined taking into account the prescribed period as per The Electricity (Supply) Act, 1948. In respect of assets, where prescribed period has not been laid down under the aforesaid Act, depreciation is to be provided on straight line method at rates corresponding to the rates laid down under the Income Tax Act.
5. The depreciation calculated in terms of Section 205(2) (b) of Companies Act, 1956 at straight line rates works out to Rs. 12,311/- against nil depreciation under The Electricity (Supply) Act. 1948.

(T.V. SUBRAMANIAN)
DIRECTOR (FINANCE)

(R.K. NARAYAN)
CHAIRMAN & MANAGING DIRECTOR

As per our report of even date
For Prem Gupta & Co.
Chartered Accountants

Place : New Delhi
Dated : 9th November, 1990

(P. B. GUPTA)
Partner



AUDITORS' REPORT

To the Members of "National Power Transmission Corporation Ltd."

We have audited the attached Balance Sheet of National Power Transmission Corporation Limited as at 31st March, 1990 and also statement of Incidental Expenditure for commencement of business in the nature of pre-operative expenses for the period ended on that date annexed thereto. As Company is governed by The Electricity (Supply) Act, 1948 the provisions of the said Act read with rules thereunder have prevailed, wherever the same have been inconsistent with the provisions of the Companies Act, 1956.

1. As required by the Manufacturing and other Companies (Auditor's Report) Order, 1988 issued by the Company Law Board in terms of the Section 227(4A) of the Companies Act., 1956, we enclose in the Annexure a statement on the matters specified in paragraphs 4 and 5 of the said order.

2. Further to our comments in the Annexure referred to in paragraph (1) above :

- (a) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
- (b) In our opinion, proper books of account as required by law have been kept by the company, so far as appears from our examination of these books.
- (c) The Balance Sheet and Statement of Incidental Expenditure for commencement of Business dealt with by this Report are in agreement with the books of account.

In our opinion and to the best of our information and according to the explanations given to us, the said accounts read with notes, given in schedule 5, give the information required by the Companies Act, 1956 in the manner so required as applicable to Electricity generating companies and give a true and fair view.

(a) in case of Balance Sheet of the state of affairs as at 31st, 1990 and

(b) in case of Incidental Expenditure for commencement of business, for the period ended on that date.

For Prem Gupta & Company
Chartered Accountants

Place : New Delhi

Dated : 9th November, 1990

(P. B. Gupta)
Partner



ANNEXURE TO THE AUDITORS' REPORT

1. The Company has maintained proper records showing full particulars including quantitative details situation / location so far as practicable of fixed assets. The management carried out physical verification of fixed assets and no material discrepancy has been noticed on such verification. In our opinion, frequency of verification is reasonable having regard to the size of operation of the Company.
2. None of the fixed assets have been revalued during the period.
3. The Company has not commenced the commercial activities during the period under audit, hence, the clause relating to the physical verification of stocks is not applicable.
4. The clause No. : 4, 5 & 6 relating to the physical verification of stocks and of valuation are not applicable as the Company has not commenced business.
5. The Company has not taken any loan from the companies, firms or other parties, listed in register maintained under Section 301 of the Companies Act, 1956. There are no companies under the same management as defined under Sub-section (1B) of Section 370 of the Companies Act, 1956.
6. The Company has not granted any loan, secured or unsecured, to companies, firms or other parties listed in the register maintained under Section 370 of the Companies Act, 1956.
7. The Company has not given any loan or advances in the nature of loan.
8. Since the Company has not commenced the business during the period under audit, clauses No. : 9, 10 & 11 relating to the internal control procedure for the purchase and determination of stocks are not applicable.
9. The Company has not accepted any deposit from the public under section 58A of the Companies (Acceptance of Deposit) Rules, 1975.
10. The clause, relating to the maintenance of records, for the sale and disposal of scrap and by-products is not applicable.
11. Since the paid-up capital of the Company does not exceed Rs. 25 lakhs as at the commencement of the financial year concerned and not having an average annual turn-over exceeding Rs. 2 crores for a period of three consecutive financial years, the Company is not required to have an internal audit system.
12. Maintenance of cost records has not been prescribed by the Central Government under Section 209(1) (d) of the Companies Act, 1956.
13. The clauses relating to the P.F. and E.S.I. are not applicable during the period under audit.
14. According to the information and explanations given to us, there were no disputed amounts payable in respect of income tax, wealth-tax, sales tax, customs duty and excise duty outstanding as at the last date of the financial year concerned for a period of more than six months from the date they became payable.
15. According to the information and explanations given to us, no personal expenses have been charged to revenue account, other than those payable under contractual obligation or in accordance with the generally accepted business practice.
16. The clauses relating to system of recording receipts, issues and consumption of materials and stores and of allocating man-hours to the relating jobs are not applicable to the Company.

For Prem Gupta & Company
Chartered Accountants

Place : New Delhi
Dated : 9th November, 1990

(P. B. Gupta)
Partner



Comments of the Comptroller and Auditor General of India under Section 619(4) of the Companies Act, 1956 on the accounts of National Power Transmission Corporation Limited, New Delhi for the period ended 31st March, 1990.

The Comptroller and Auditor General of India has decided not to review the report of the Auditors on the accounts of National Power Transmission Corporation Limited, New Delhi for the period ended 31st March, 1990 and as such he has no comments to make under Section 619(4) of the Companies Act, 1956.

(Kanwal Nath)
Principal Director of Commercial Audit
and Ex-Officio Member, Audit Board-III
New Delhi

New Delhi
Dated : 6th December, 1990



**ANNEXURE TO THE DIRECTORS' REPORT
PROPOSALS FOR 8TH PLAN AND ANNUAL PLAN 1991-92
OF TRANSMISSION SCHEMES**

Annexure-I

(Rs. Crores)

SL. NO.	NAME OF PROJECT/ SCHEME	ORIGINAL/ REVISED COST OF PROJECTS AS PER 91-92 ANNUAL PLAN	ANTICI- PATED COST OF PROJECTS AS PER 91-92 ANNUAL @ PLAN	1990-91	1991-92	8TH PLAN OUTLAY	
				B.E.* R.E.*	OUTLAY PROPOSED RECOM- MENDED	PROPOSED	RECOM- MENDED
(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1.	NATIONAL THERMAL POWER CORPORATION LTD.	2196.26	17618.18	384.40 344.47	403.82 248.02	2357.18	1448.33
2.	NATIONAL HYDRO- ELECTRIC POWER CORPORATION	123.94	2955.05	89.10 106.81	244.69 174.19	1883.82	679.97
3.	TEHRI HYDRO DEVELOPMENT CORPORATION LTD.		605.00	3.50	105.00 22.25	570.00	200.00
4.	NORTH-EASTERN ELECTRIC POWER CORPORATION	301.38	301.38	65.00 65.00	163.00 125.00	282.48	200.00
5.	DAMODAR VALLEY CORPORATION LTD.	96.61	257.72	25.68 25.07	33.16 22.93	120.32	70.32
6.	NATIONAL POWER TRANS- MISSION CORPORATION			5.00 4.50	10.00 10.00	220.00	20.00
7.	INTER-STATE TRANS- MISSION LINES			20.00 20.61	20.00 20.00	56.42	56.42
CENTRAL ELECTRICITY AUTHORITY							
1.	REGIONAL LOAD DESPATCH CENTRES	41.09	48.00	9.92 9.61	11.18 1.04	65.46	5.93
2.	NATIONAL ELECTRICITY SYSTEM OPERATION ORG (NESOO)	3.95	4.17	0.16	0.15	1.00	0.15 0.14
3.	MODERNISATION OF SRLDC		1.58	1.32 1.30	0.32	1.32	1.30
4.	NATIONAL LOAD DESPATCH CENTRE		0.88	0.50 0.50	0.90 0.90	4.50	4.50
5.	NORTH-EASTERN REG. LOAD DESPATCH CENTRE			0.20	0.20 0.20	17.92	15.00
6.	UPGRADATION OF LOAD DESP. FACILITY-NOR. REG. BOARD			6.00 0.01	1.00 1.00	121.00	100.00
TOTAL DOP :		2763.23	21791.96	610.78 578.02	993.42 625.53	5701.42	2801.92
NEYVELI LIGNITE CORPORATION		455.30	697.15	144.25 145.24	101.92 81.25	413.06	287.90
NUCLEAR POWER CORPORATION				25.00 24.31	47.67 25.00	221.05	100.00
GRAND TOTAL :				780.03 747.57	1143.01 731.78	6335.53	3189.82

* Budget Estimate** Revised Estimate
@ Anticipated cost includes the cost of new starts
in 8th plan for benefit in 9th plan.



Annexure-II

ANNEXURE TO DIRECTORS' REPORT INTER-REGIONAL LINKS

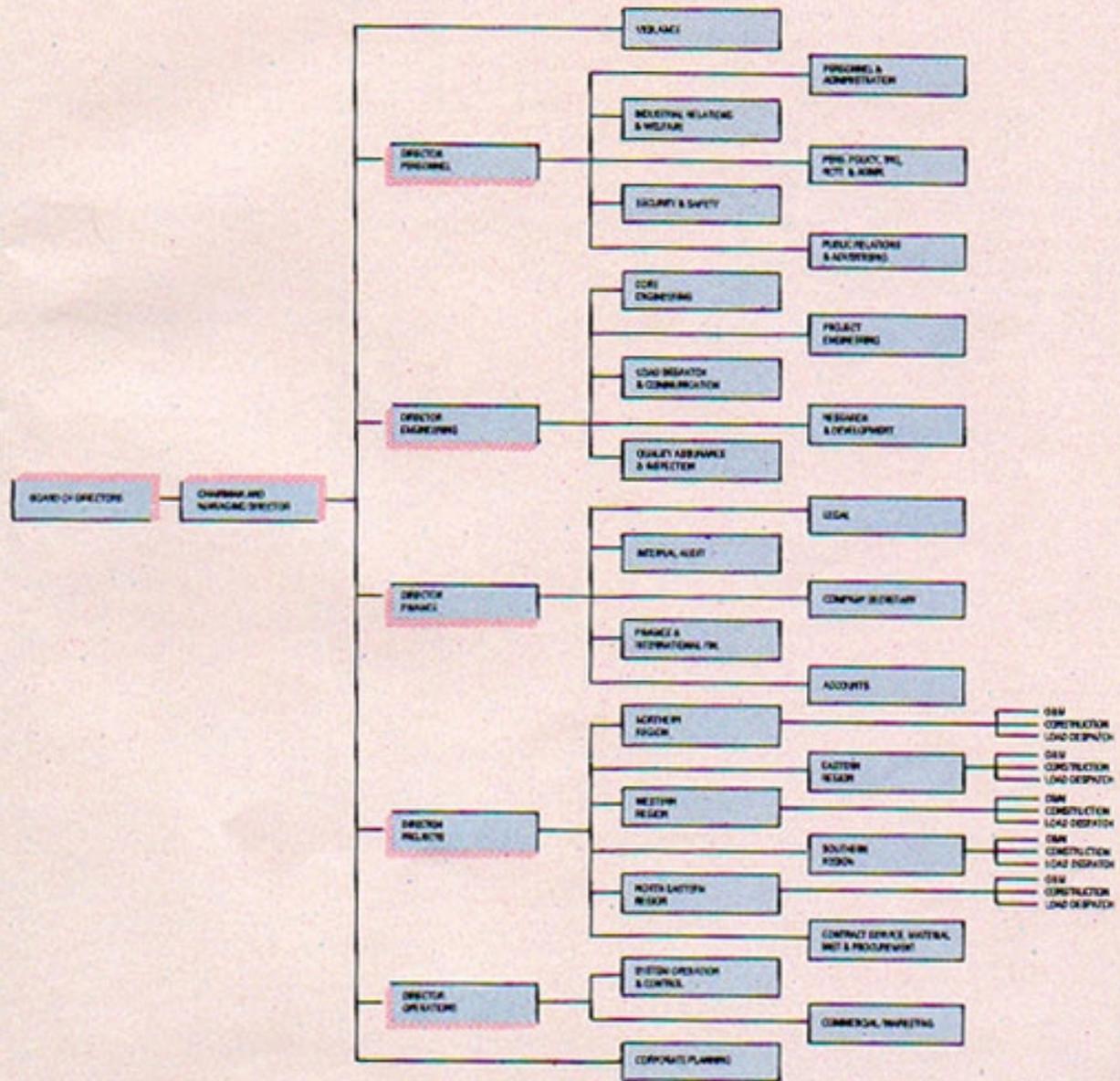
Sl. No.	Name of the Project	Capacity	Purpose
1.	HVDC Back-to-Back at Korba (along with 400KV D/c line between Korba & Rourkela)	2x500 MW	Inter-link Eastern and Western region for facilitating inter-regional transfer of power
2.	HVDC Back-to-Back at Azamgarh (alongwith 400 KV D/c line from Biharshariff to Azamgarh)	2x500 MW	Inter-connection Eastern and Northern region on asynchronous mode. Inter-regional transfer of power not only between Eastern and Northern region and convenient flexibility even for transfer of power between Eastern and Western region via Northern region and onwards to Southern region.
3.	HVDC Back-to-Back at Gwalior (alongwith 400 KV D/c line between Auraiya and Gwalior)	2x500 MW	On account of its geographical location, the Western Region would eventually assume the role of pooling of surplus power from various regions as well as "clearing-house" for transfer of power to the other neighbouring system HVDC Back-to-Back station at Gwalior, as proposed would provide another asynchronous tie (besides HVDC back-to-back at Vindhyachal).
4.	HVDC Back-to-Back at Hyderabad (alongwith 400 KV D/c line between Parli and Hyderabad)	2x500 MW	Another asynchronous tie (in addition to HVDC back-to-back at Chandrapur) for inter-connecting Western and Southern region for transfer of surplus energy.
5.	HVDC from Balipara-Talcher-Cuddapah	6000 MW	A number of Hydro & Gas Projects are on the anvil in the North-Eastern region. Most of the power will have to be transported out to other regions mainly the Southern Region. Prima-facie HVDC bipole for point-to-point transmission would be required pending detailed studies.



ANNEXURE TO THE DIRECTORS' REPORT

Annexure- III

ANTICIPATED ORGANISATION CHART OF NPTC

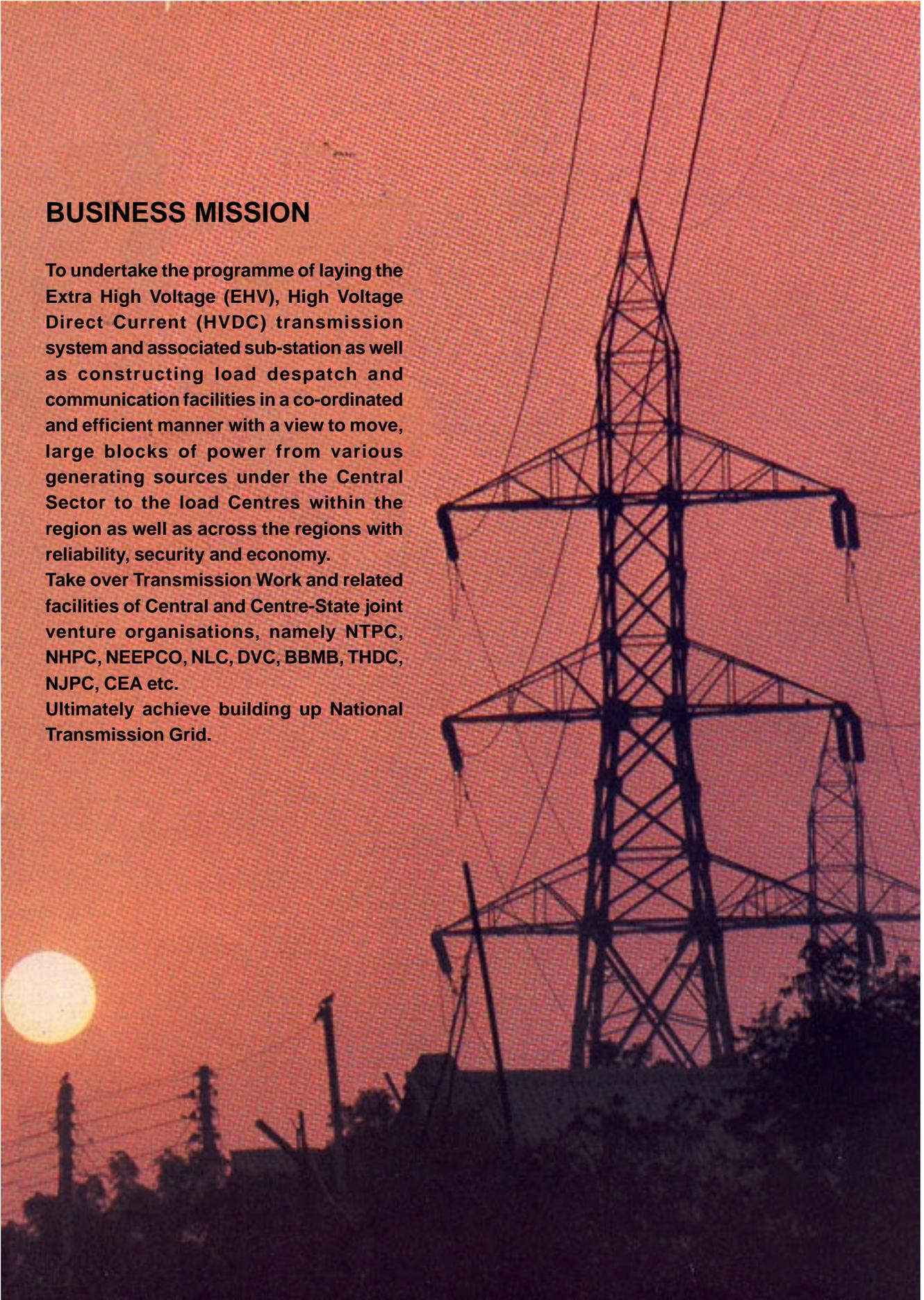


BUSINESS MISSION

To undertake the programme of laying the Extra High Voltage (EHV), High Voltage Direct Current (HVDC) transmission system and associated sub-station as well as constructing load despatch and communication facilities in a co-ordinated and efficient manner with a view to move, large blocks of power from various generating sources under the Central Sector to the load Centres within the region as well as across the regions with reliability, security and economy.

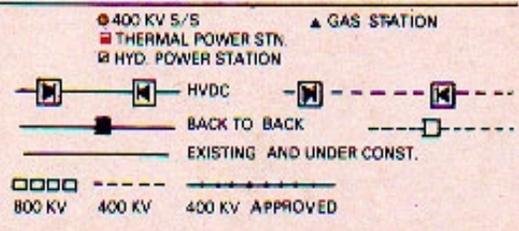
Take over Transmission Work and related facilities of Central and Centre-State joint venture organisations, namely NTPC, NHPC, NEEPCO, NLC, DVC, BBMB, THDC, NJPC, CEA etc.

Ultimately achieve building up National Transmission Grid.



INDIA TRANSMISSION SYSTEM 400KV AND ABOVE

LEGEND



- | | | |
|------------------|-------------------|-----------------|
| 1. KOLDAM | 11. MURAD NAGAR | 21. SINGRAULI |
| 2. ABDULLAPUR | 12. NCTPP DADRI | 22. VINDHYACHAL |
| 3. SHAHBAD | 13. BALLABGARH | 23. ASOJ |
| 4. MUZAFFARNAGAR | 14. JAIPUR | 24. GANDHAR |
| 5. PANIPAT | 15. FARRUKHABAD | 25. BARUCH |
| 6. MANDULA | 16. GURSAHAJ GANJ | 26. MALTHAN |
| 7. BAWANA | 17. KANPUR (NTPC) | 27. SIRSI |
| 8. FARIDABAD | 18. OBRA | 28. N.K. STPP |
| 9. BAMNOLI | 19. ANPARA | 29. PATRIATU |
| 10. MEERUT | 20. RIHAND | |

