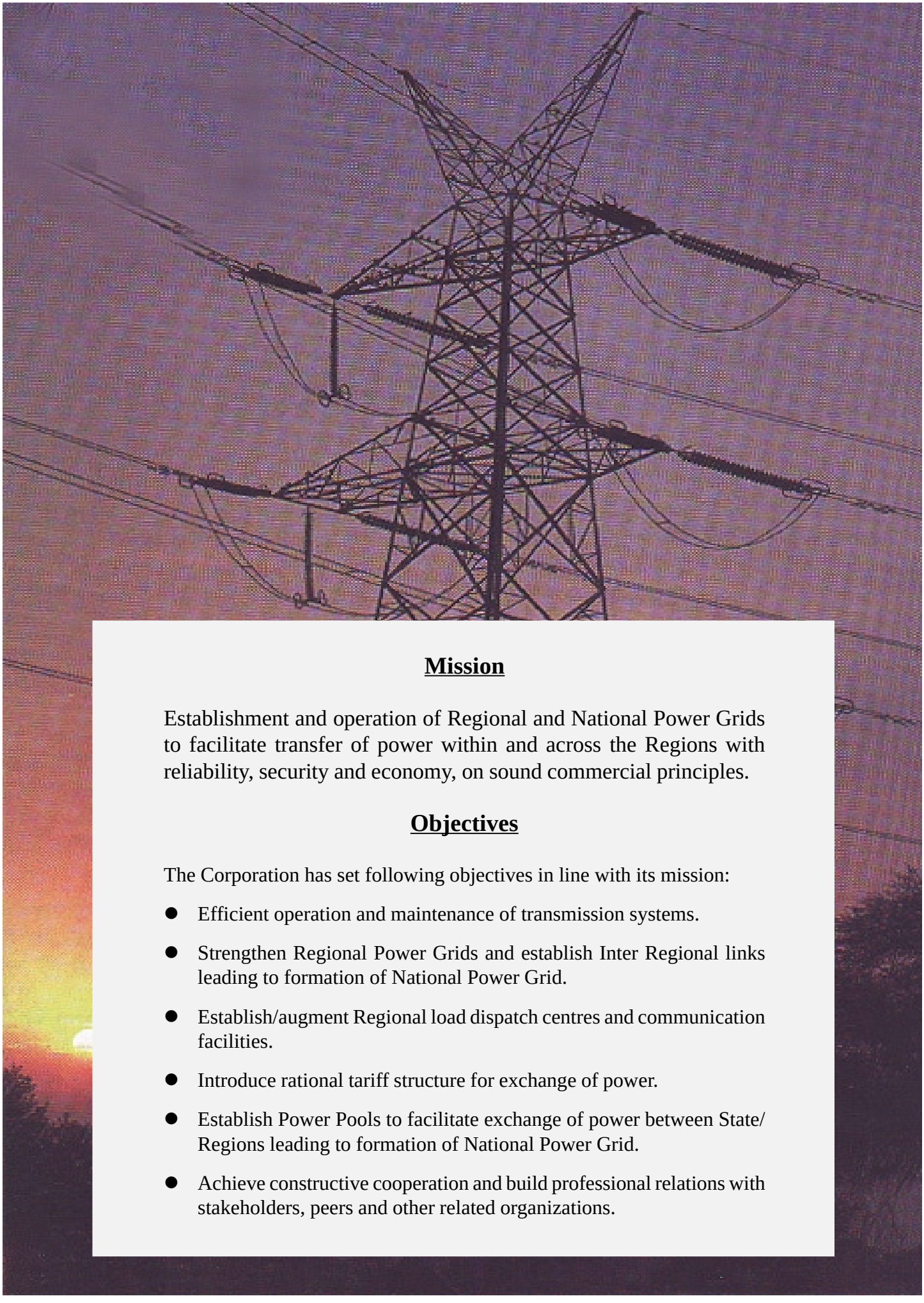
ANNUAL REPORT

1997-98

POWER GRID
CORPORATION
OF INDIA
LIMITED

C O N T A N T S



Mission

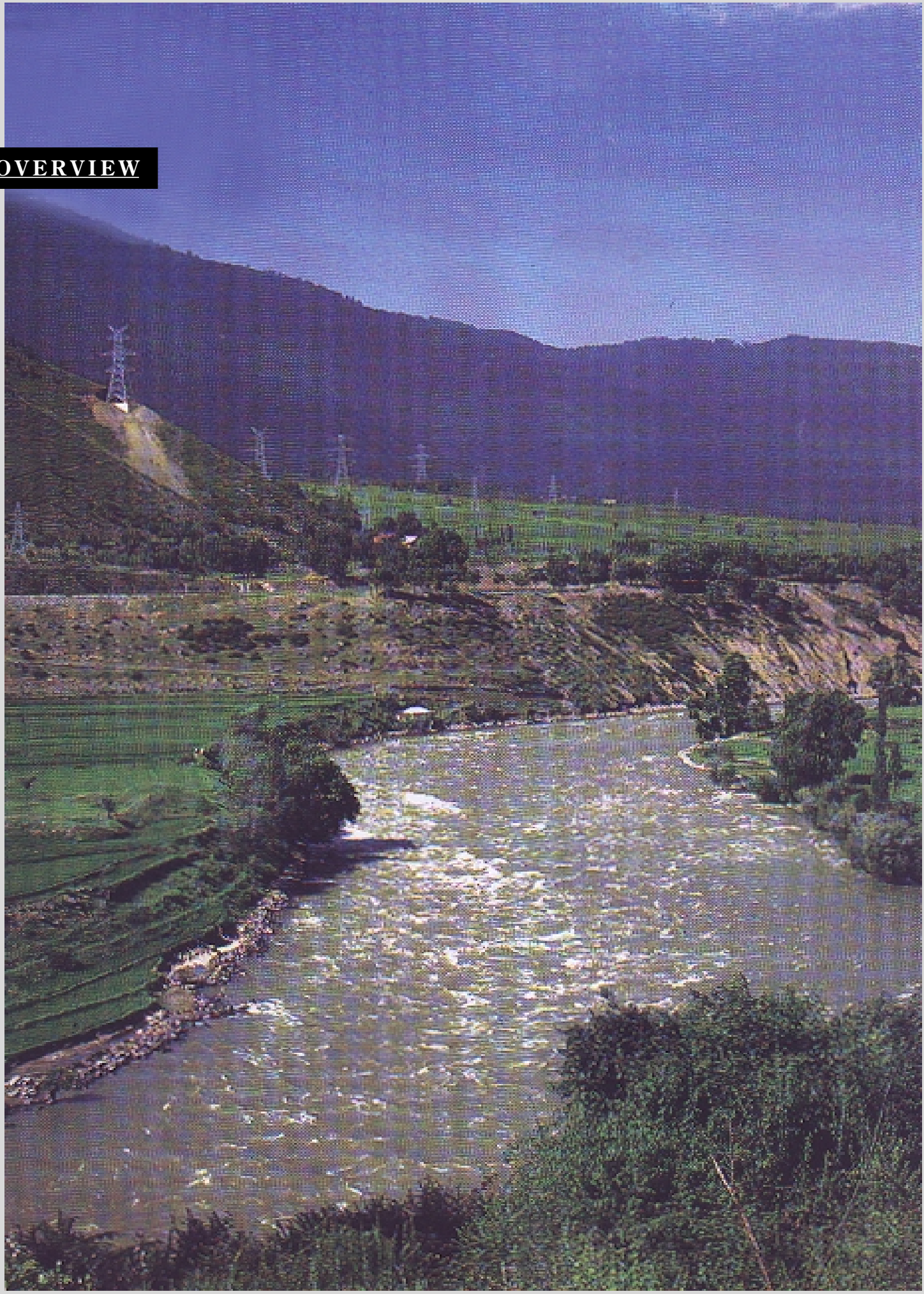
Establishment and operation of Regional and National Power Grids to facilitate transfer of power within and across the Regions with reliability, security and economy, on sound commercial principles.

Objectives

The Corporation has set following objectives in line with its mission:

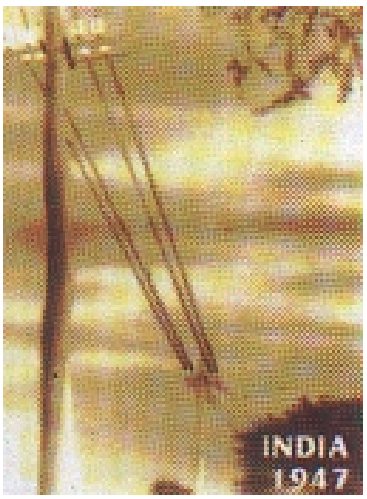
- Efficient operation and maintenance of transmission systems.
- Strengthen Regional Power Grids and establish Inter Regional links leading to formation of National Power Grid.
- Establish/augment Regional load dispatch centres and communication facilities.
- Introduce rational tariff structure for exchange of power.
- Establish Power Pools to facilitate exchange of power between State/ Regions leading to formation of National Power Grid.
- Achieve constructive cooperation and build professional relations with stakeholders, peers and other related organizations.

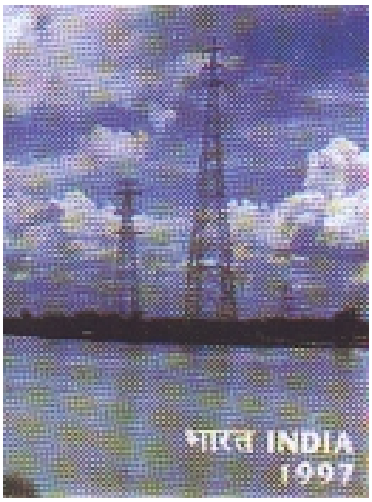
OVERVIEW



POWERGRID : THE CHANGE AGENT

Power Sectors has come a long way in the last 50 years. The installed generation capacity has grown from a meagre 1,300 MW after independence, to about 90,000 MW at present. This distinct growth has been





accomplished by concerted efforts of various utilities in public & state sector by establishing super thermal plants complimented with Hydro stations for optimal utilisation of resources. However, per capita consumption of electricity is ever increasing. The upward looking liberalised Indian economy demands a greater momentum from the power sector which alone through Public/State sector is not feasible. As a result, sectoral reforms and private participation in various facets of power sector have been initiated.

As a stepping stone, generation sector was thrown open to the private sector in 1991. To facilitate the same in the transmission sector, the constitutional framework has also been put in place recently. The decks were cleared to set up Regulatory Commissions at State and Central level. Electricity Laws (Amendment) enacted also acknowledge POWERGRID as the Central Transmission utility.

POWERGRID'S ACHIEVEMENTS

POWERGRID'S performance track record reinforces its competence to meet the chal- lenges. During the span of last 7 years in business, the company has added around 13,000 ckt km EHV transmission lines to the national network. Asset base of the company grew from Rs. 3,521 crores in 1992-93 to Rs. 8,096 crores. Turnover went up from a modest Rs. 634 crores in 1992-93 to Rs. 1,434.68 crores in 1997-98, registering an average annual growth rate of 21%. Profit netted at Rs. 337.16 crores in 1997-98 marking a growth of 43% compared to 1992-93.

Today, POWERGRID operates over 31,000 ckt. Kms of transmission lines comprising 400 KV, 220 KV, 132 KV AC transmission lines and HVDC transmission system, crisscrossing the entire length and breadth of the country with a total installed transformation capacity of around 28,000 MVA distributed over 55 sub-stations and maintained at a persistent level of over 98% of line availability, which is comparable with the best of international standards. POWERGRID's achievement is further substantiated by "Excellent" MOU rating consistently.

DEVELOPMENT OF NATIONAL GRID

POWEGRID has initiated an action plan, in phased manner, to establish inter-regional links connecting all the five regions to establish a strong National Grid and integrated operation of Indian power system, as a whole.

In phase-I, all regional grids are planned to be interconnected asynchronously (through HVDC Back-to-Back links), which are comparatively robust and through which controlled exchange of power is feasible even under varied system operating conditions of the connecting regions, National grid would be further strengthened in phase-II and phase-III with large inter-regional links planned with mega size multi state projects.

At present, POWERGRID has inter-connected Northern and Western Regions through a HVDC B/B link of 500 MW at Vindhyachal and inter-connected Western and Southern Regions through HVDC B/B link of 1,000 MW at Chandrapur, While the former has been generally used to exchange power to the extent of 400-500 MW in off peak hours, the later has enabled transfer of about 600-700 MW to Southern Region from Western, Eastern and Northern Regions.

Further, during phase-I, POWERGRID intend to connect all the Regional grids with HVDC back-to-back links that would constitute the basic structure of National Power Grid. To Complete the Basic structure, POWERGRID is implementing two HVDC B/B inter-regional links in next few years. These include Gazuwaka HVDC B/B link (500 MW), inter-connecting Eastern and Southern Regions (through Jeypore-Gazuwaka 400 kv D/C line) and Sasaram HVDC B/B link (500 MW), inter-connecting Eastern and Northern Region (through Sasaram-Biharsariff 400 KV, D/C line).

Under Phase-II, POWERGRID proposes to further strengthen HVDC links with AC inter-regional links and creating Transmission Highways through mega size multistate projects (HVDC links) in next 5 to 7 years time.

While Phase-II would put in place the missing links, under Phase-III, the huge hydro potential in North-Eastern Region and concentration of coal reserves in States of Orissa, Bihar and Madhya Pradesh would be optimally utilised. POWERGRID proposes to create very strong AC 800 kv trunk network. The systems envisaged during this phase are likely to be implemented during next ten years time.

The above plans would synchronize operation of Northern Region, North Eastern Region, Eastern Region and Western Region and while Southern Region is preferred to be operated in asynchronous mode to avoid very large synchronous grid.

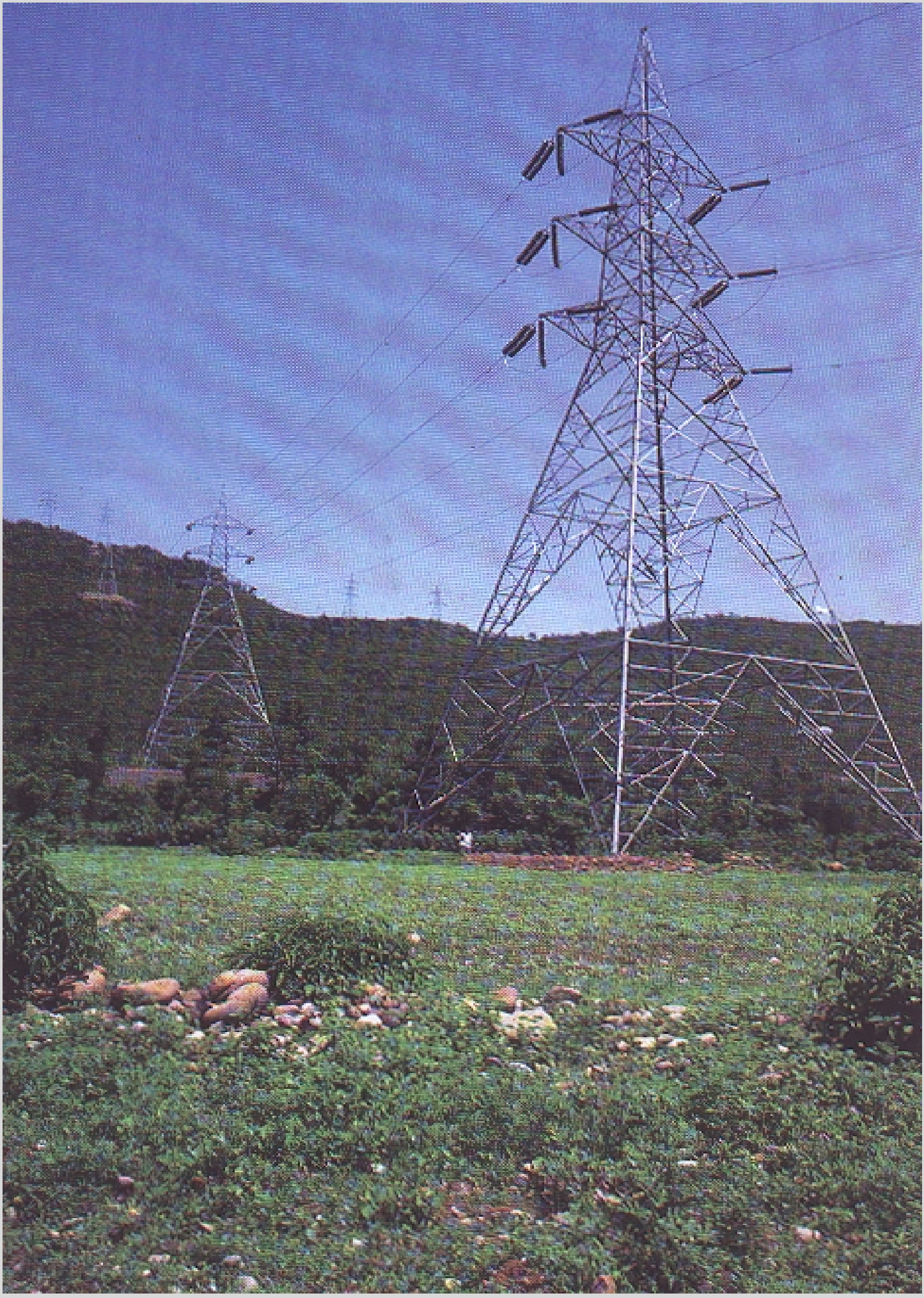
TECHNOLOGY

In a business like Power transmission, especially in a market characterized by demand-supply imbalances, technology plays a major role in ensuring reliable transmission system availability and in reducing grid failures. POWERGRID is constantly striving to improve its technology and technological know how. POWERGRID has also established a chair at IIT Delhi for POWERGRID system study and thus has endeavoured to link industry and academics.

To cater to the diverse geographical and climatic conditions of India, POWERGRID has designed transmission towers for different wind/ice conditions, marshy/water logged and midstream locations besides special towers for river and power line crossings. Engineering expertise includes implementation of 400 KV AC transmission system and highly specialised areas of 800 KV AC systems, 500 KV HVDC bipole and Back-to-Back systems.

POWERGRID employs state-of-the-art techniques like Hotline Maintenance, Condition Monitoring of EHV equipments, Thermovision Scanning to ensure maximum line availability without interruptions which reflects excellence in operational and maintenance expertise of the organization, as transmission system availability is over 98% comparable to international standards.

Transmission systems are vulnerable to natural calamities like storm, tornado, landslide, flashflood, etc. In such circumstances maintaining availability of transmission system is a task in itself. Recent devastation caused by cyclone in Gujarat in June 1998 which disrupted the power supply network across the state was attended by POWERGRID on war footing. Power supply was restored to major cities including supply of power to Kandla port, GAIL, IOL, etc., which otherwise would have taken a few months time. This has added phenomenal value to the national economy and demonstrated POWERGRID's capabilities in disaster management using Emergency Restoration System.



TOWARDS GREEN ENVIRON

POWERGRID is sensitive to environmental issues and social concerns. It has evolved Environmental and Social Policy and Procedures (ESPP) within broad framework of laws, policies, constitutional-commitments and responsibilities.

POWERGRID is the only organization in the power sector which has finalised its ESPP policy in consultation with public. POWERGRID, inter-alia, carries out social and environmental assessment of its projects to evolve an appropriate project specific Environmental and Social Management Plan and make it an integral part of the project execution process. The three key principles of POWERGRID's ESPP are Avoidance, Minimisation and Mitigation.

POWERGRID'S LONG TERM PERSPECTIVE

The long term perspective of POWERGRID entails that it will be acting as a “Facilitators-cum-Change Agent” in growth and ongoing restructuring of the Indian Power Sector. An ambitimes investment plan of Rs. 13,000 crores has been chalked out for its identified projects during the IXth plan. Additional provision of Rs. 5,000 crores has been earmarked for transmission lines associated with Mega IPPs. POWERGRID has already planned to fund this massive investment through domestic and international borrowings as well as its internal resources.

Some of the other facets of POWERGRID's long term perspective involve conceptualisation and implementation of Power Trading Corporation and diversification into telecommunication business. POWERGRID is assigned the role of playing a facilitator's role in establishing the Mechanism for power trading through institutionalising Power Trading Corporation. This will lead the way for providing the much needed confidence to investors in the power sector on a single window basis.

POWERGRID also plans to extend the power grid to the SAARC region. In a recent meeting of the SAARC countries in Dhaka, this view was re-endorsed. In this endeavour, POWERGRID has acted as a catalyst to mobilise popular consent. Countries like Nepal & Bhutan are already been assisted by India for the past many years. Constant interactions are also taking place between India and Bangladesh to interconnect the countries for mutual benefit by economic exchange of power.

Last but not the least, POWERGRID will not be limiting its role to that of being only a bulk power mover but will embark onto synergic areas for diversification to sustain its growth. It commits itself for playing a pivotal role in economic growth of the country by continuing to act as a dominant force in change management and as a facilitator to motivate and catalyze development in all facets of power sector.

Shri R. P. Singh
Chairman and Managing Director
since 23.8.1997

[Held current charge of CMD from 1.11.96 to 22.8.97
in addition to the charge of Director (Personnel)]

Shri R. K. Madan
Director (Projects)
since 20.8.1996

Dr. V. K. Garg
Director (Finance)
since 17.9.1997

Shri Bhanu Bhushan
Director (Operations)
since 13.11.1997

Shri Binay Kumar
Director (Personnel)
since 7.7.1998

BANKERS

● Indian Oversease Bank ● Union Bank of INdia ● Bank of Baroda
● State Bank of Hyderabad ● State Bank of Travancore ● State Bank of India ● State Bank of Patiala
● State Bank of Bikaner & Jaipur ● Central Bank of India ● Corporation Bank
● Canara Bank ● Oriental Bank of Commerce ● Syndicate Bank ● Dena Bank
● State Bank of Mysore ● Punjab National Bank ● Vijaya Bank ● Indian Bank

Shri S. R. Shivrain
Part-Time Director
since 11.1.1995

Shri Anil Razdan
Part-Time Director
since 11.8.1998

Shri R. V. Shahi
Part-Time Director
since 27.7.1998

Shri Ravi Parthasarathy
Part-Time Director
since 27.7.1998

Dr. Ramesh Gupta
Part-Time Director
since 27.7.1998

Shri J. Vasudevan
Part-Time Director
from 28.11.96 to 11.8.98

Shri A. L. Jaggi
Director (Operations)
from 7.12.93 to 31.5.95

Company Secretary
Ms. Divya Tandon

Statutory Auditors

M/s Umamaheshwara Rao & Co.
34/A, Journalists Colony,
Road, No. 3, Banjara Hills,
Hyderabad - 500 034

M/s BM Chatrath & Co.
21, Old Court House Street
Calcutta - 700 001

M/s Rasool Singhal & Co.
R-402, Anupam Apartments
Arjun Nagar,
New Delhi.

REGISTERED OFFICE :

B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016.

CHAIRMAN SPEECH

CHAIRMAN SPEAKS AT THE 9TH ANNUAL GENERAL MEETING HELD ON 28TH AUGUST,1998

Gentlemen,

It gives me great pleasure in welcoming you to this 9th Annual General Meeting of POWERGRID. While the country celebrated 50th year of independence, POWERGRID's persistent efforts to accord the deserved priority to the transmission sector, which has so far eluded this vital sector of Indian power system, has been duly recognised, as your company has now been statutorily acknowledged as Central National Transmission Utility of the country by the Government. Further, POWERGRID has leaped a step ahead towards the vision of National Grid by commissioning 1,000 MW Chandrapur HVDC Back-to-Back Station to connect Western and Southern Regions. The other milestones accomplished during the year are equally significant, as they will in a long way contributer to enhance the Indian power system and in the nation building.

During the short period of 7 years, we have added around 13,000 ckt km EHV transmission lines to the national network. The asset base of the company grew from Rs. 3,521 crores in 1992-93 to Rs. 8,096 crores thereby registering a growth of 129%. The turnover went up from a modest Rs. 634 crores in 1992-93 to Rs. 1,434.68 crores in 1997-98, registering an average annual growth rate of 21% during the last six years of its operation. The profit netted at Rs. 337.16 crores in 1997-98 (after provision of tax of Rs. 39.57 crores for the FY 1996-97 also) has a growth of 43% compared to 1992-93. We have also met the loan utilisation targets. During the financial year, Rs. 303 crores of External Assistance through Budget and Rs.519 crores of External Commercial Borrowings were utilised.

Based on the provisional results of performance for the year 1997-98,POWERGRID is again poised to achieve "Excellent Performance" rating as per its MOU with Ministry of Power. As on March 31,1998, POWERGRID operates a total of 31,250 CKMs transmission lines distributed over 55 sub-stations with 27,875 MVA of transformation capacity. The operational performance of POWERGRID transmission system has been impressive in all the five power regions. Overall average availability of transmission lines during the year was 98.9% which is comparable with best international standards. During the year, POWERGRID has commissioned 3,397 CKMs transmission lines, while about 8,960 ckt. kms. are under construction. In the process, our capital expenditure during the year touched Rs. 1,600 crores. Paid up capital of the company as on 31st March, 1997. The debt : equity ratio of the Corporation during the financial year, has also remained satisfactory at 1.24 : 1.00 increasing only marginally over the last year's ratio of 1.14:1.00.

OPERATIONAL PERFORMANCE

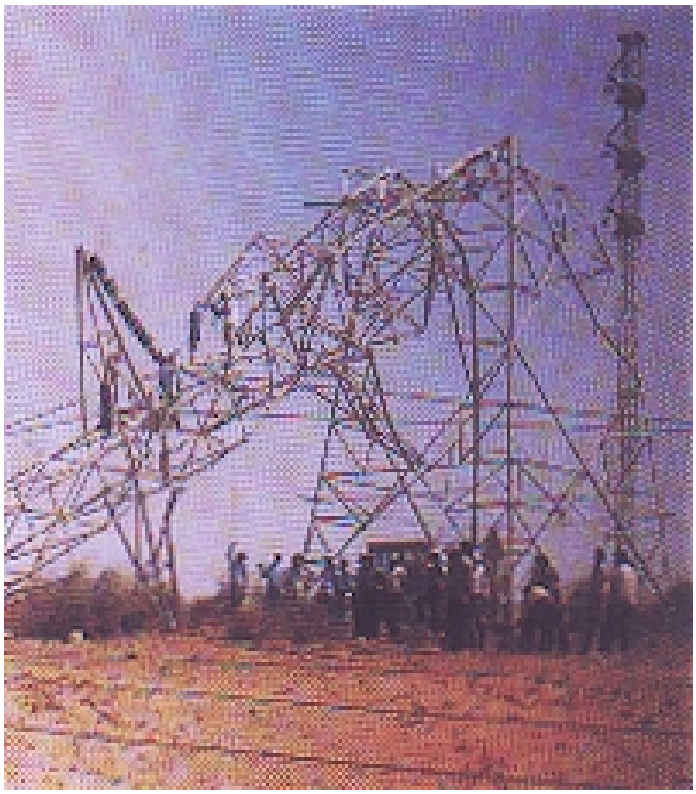
In line with the exceptionally high availability of POWERGRID's system this year also the availability

remained over 98%. This level of availability has been achieved by adopting latest state-of-the-art techniques like Hotline Maintenance, Condition Monitoring of EHV Equipments, Thermovision Scanning, Regular Patrolling.

A unique feature this year has been the proven capability of POWERGRID in **disaster management.** The transmission systems are vulnerable to natural calamities like storm, tornado, landslide, flashflood, etc. POWERGRID has successfully deployed Emergency Restoration System (ERS) to cope with these exigencies. POWERGRID has equipped itself to restore the damaged transmission lines in quickest possible time. It has developed dedicated and adequately trained teams at various strategic locations to manage such disaster stations on immediate basis. In case of Kawas-Nawsari line failure in Western Region, the conventional time required for restoration of endangered towers due to erosion by Tapi river water, could have been in the order of 6 months, as it involved special foundations, which were restored through deployment of ERS in one week's time. ERS was successfully utilised to bypass the endangered towers having river span of about 900 meters with tower structure of 50 meters and is considered to be an unique achievement.

The recent devastation caused by cylone in Gujarat in June 1998 which disrupted the power supply network across the State was attented by POWERGRID on war footing basis. The vital Panandro-Anjar 220 KV transmission line circuits I & II and 220 KV Anjar-Mehsana transmission line were restored within a few days and the power supply was restored to major cities including supply of power to Kandla port, GAIL, IOL, etc. which otherwise would have taken months of time.

Hon'ble Minister of Power commended POWERGRID's efforts in restoration of the transmission lines in Gujarat, the urgency it deserved and stated "Expeditious completion of such a herculean task under extremely difficult conditions, was possible only, due to high degree of dedication, sincerity and commitment to the cause, by POWERGRID". It is understood that an appreciation for POWERGRID was also placed on record in the Parliament in Rajya Sabha on the incredible job undertaken by POWERGRID in Gujarat.

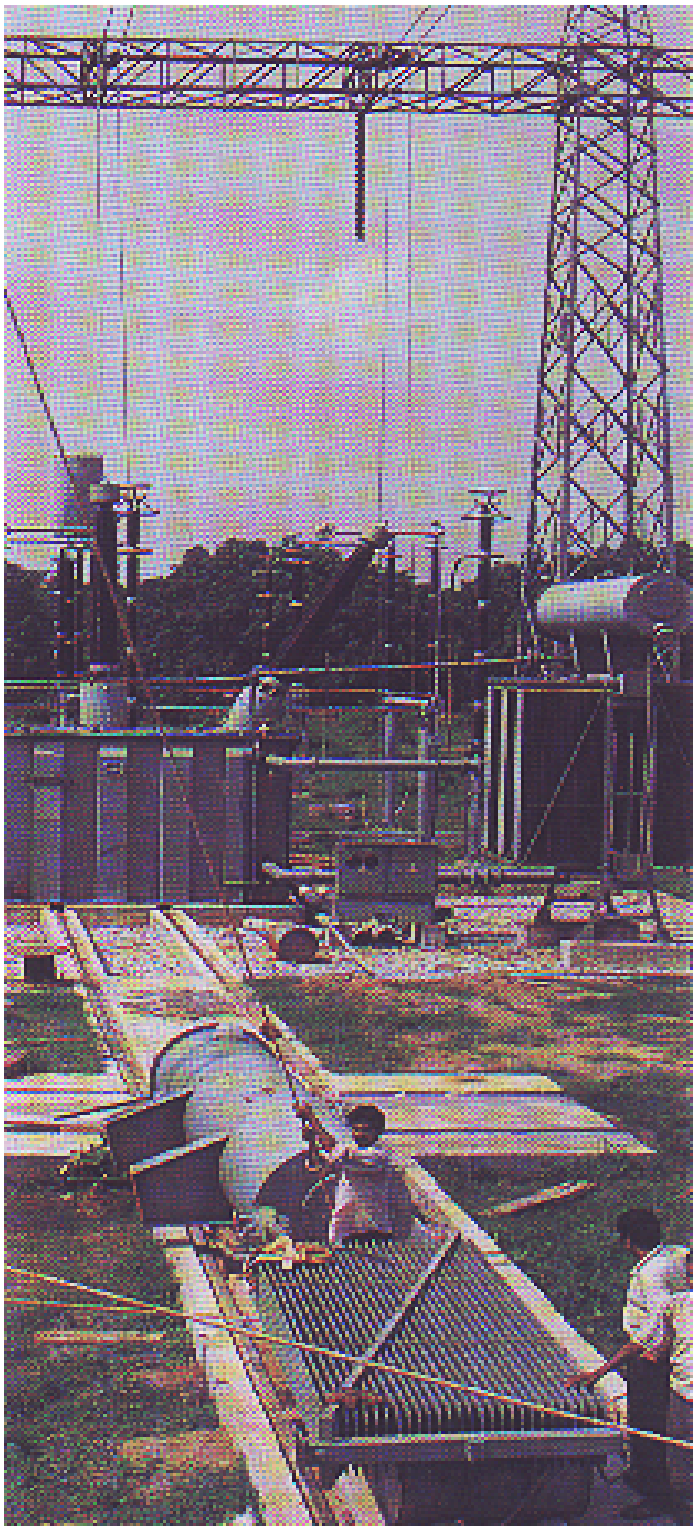


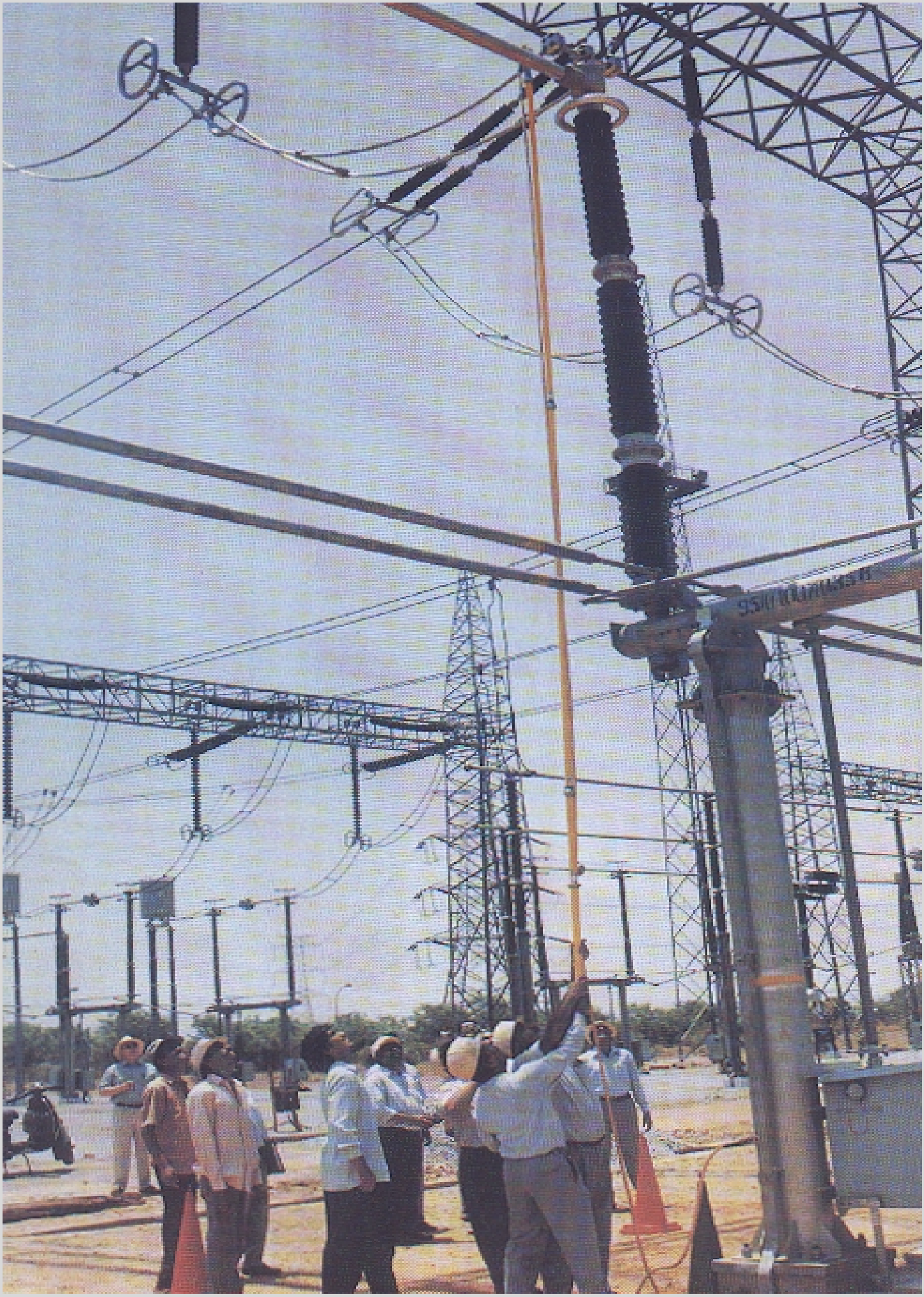
CONSTRUCTION MANAGEMENT

On construction front, POWERGID has again achieved the distinction of surpassing all the construction target in the MOU. We have constructed 2,080 ckt kms of transmission lines against the MOU target of 1,987 ckt kms. The projects have been completed in time and some even ahead of schedule, in extremely difficult terrain too and in the face of insurgency and law and order problems. This has been accomplished by monitoring and integrated project management approach and dedication of the employees working as a team across the organisation.

The major milestones and accomplishments include POWERGRID's prestigious 1,000 MW HVDC Back-to-Back project interconnecting Southern and Western Regions which was put on full commercial operation on March 1, 1998. This link has moved the nation a stepcloser to realise the dream of national grid. It is pertinent to note that this important landmark has been achieved on schedule as per the commitment made to the Government. The other memorable event is the 400 KV Jeypore-Gazuwaka transmission line which, is a part of POWERGRID's prestigious 500 MW HVDC Back-to-Back project to connect Southern and Eastern Regions, was commissioned on June 18, 1998, nine months ahead of schedule. Another significant achievement worth mentioning is the 400 KV D/C Vindhyachal Additional Stage-I transmission system, so far the largest transmission system in the country of 2048 kms, raversing difficult terrains of hills and forests has been commissioned in time on December 15, 1997 despite severe law and order problems at several locations.

POWERGRID has been facing acute law & order problems while implementing its projects in North-Eastern Region. The employees are functioning under constant threats, abduction and extortion notices including kidnappings. Despite all these difficulties, efforts are being made to complete the critical projects like Kathalguri Transmission System, Agartala Transmission System, Augmentation Schemes as per the commitment made to the Government. In case of Kathalguri Transmission System (2,400 ckt km), the portion of Kathalguri - Mariani, Mariani - Misa and Bongaigaon - Malda have been completed leaving only a small stretch (100 km) at Rowta - Bongaigaon in Assam. Similarly in Tripura only 50 km stretch is left in Manughat - Chakmaghat area. These balance works will be completed on schedule.





TOWARDS DEVELOPMENT OF NATIONAL GRID

POWERGRID has given utmost priority for exchange of power between various regions, so as to utilise the available energy in optimum manner. This has helped on one hand to meet the unserved demand in power starved states like Andhra Pradesh, Tamil nadu, Kerala, Karnataka, Madhya Pradesh etc, while on the other hand, plant load factor of generating plants in the exporting regions has improved substantially.

Presently, formation of National Power Grid is under way.As you may be aware, 500 MW HVDC link at Vindhyachal, 1,000 MW HVDC station at Chandrapur and a 220 KV link connecting Eastern and North-Eastern Regions are already under operation. The other inter-regional links being constructed viz., 500 MW HVDC link at Gazuwaka, 400 KV D/C line between Bongaigaon and Malda and 500 MW HVDC link at Sasaram would facilitate completion of basic framework of National Power Grid by turn of the century.

As on date, on an average power of about 1,000 MW (maximum upto 1,880 MW) amounting to over 22 million unit per day is being exchanged between the regions. Of late in Eastern Region, a phenomenon of substantial energy surplus has been observed after certain Central Sector generating projects, viz. Kahalgaon (4x210 MW), Farakka-I(2x500 MW) and Talcher-I (2x500 MW) have been commissioned.This is mainly because the load has not grown as originally envisaged and thus substanial amount of energy ramains unutilised which could be exported to neighbouring regions for meeting their deficits.

At present about 150-200 MW is being transferred from Eastern Region to Southern Region through existing 220 KV Balimela (Orissa)-Upper Sileru (Andhar Pradesh)line and 250 MW through Jeypore-Gazuwaka 400 KV D/ C AC line,a part of Gazuwaka HVDC Back-to-Back project which will be enhanced to 500 MW, when this project will be commissioned in Februry 1999. Through necessary strengthening of Eastern Regional Grid near Bodhgaya, carried out by POWERGRID, power transfer to the tune of 100 MW is being made through exiting two state owned links between Eastern and Northern Region,!e., Dehri-Mugalsarai 132 KV D/C and Karamnsa-Mugalsarai 132 KV D/C. An exchange of power to the tune of 250-350 MW is taking place from Eastern to Western Region by utilizing Budhipadar-Korba 220 KV D/C line on radial mode. Flow of power to the tune of 100 MW from Eastern to North Eastern Region has started from February 1997. At present, both the regions are inter - connected with 220 KV and 132 KV lines and are being operated in synchronous mode.

This exchange capacity amongst the regions will be enhanced to 4,000 MW next year. This exchange capacity will get augmented to 13,000 Mega Watt in next 5 year and will be furuther elevated to 30,000 Mega Watt level during the next 10-12 yaers to bring the country closer to the ultimate National Grid.

While the above mentioned inter-regional links would establish a well connected national grid,this grid would be further strengthened with large inter-regional links planned with mega size multi state projects. POWERGRID has plans to take up in the near future tranmission projects like 400 KV Raipur- Rourkela, 2,000 MW HVDC Bipole from Talcher to Kolar, 3,000 MW HVDC bipole from Hirma ro Jaipur which would augment the inter-regional exchange capacity.

In the long run, the scheme evolved would broadly comprise a high capacity 400 KV link in the chicken neck area, ring of two nos.of 800 KV transmission lines inter connecting Eastern Region, Western Region and Northern Region, second HVDC bipole of 2,000 MW between Eastern region and Southern region.

The above projects have been prioritized by POWERGRID taking into account the potential for generation, development of loads and requirement of various regional grids.

UNIFIED LOAD DESPATCH & COMMUNICATION FACILITIES

Unified Load Despatch and Communication facilities is one of the basis prerequisities for economic despatch of power between Regions/states leading to effective and efficient on-line management of Regional and National Power Grids.

POWERGIRD has undertaken implementation of state-of-the-art Unified Load Despatch and Communication failities throughout the country. POWERGRID will be investing around Rs. 2,000 crores for augmentation of LD&C facilities in all the five power regions. This will facilitate consistency in design, implementation, maintnance, compatible equipment & syatems and fully dedicated integrated communication network throughout the nation.

At present the implementation of LD&C facilities is in progres in Southern & Northern Regions. The technollogy being new, POWER GRID is seeking the services of pioneer international consultants to help in timely execution of such projects. Contracts for all the EMS. SCADA and Communication Packages under Northern & Southern Region Projects have now been awarded and the projects are expected to be completed by turn of the century. Other such projects for the North-Eastern, Eastern and Western regions, are to be commissioned progressively.

GRID STRENGTHENING SCHEMES

System studies conducted on network revealed certain deficiencies in the transmission system which were hampering the smooth transmission of power. Following augmentation schemes to improve the transmission system have been undertaken:

- Augmentation in the NER grid to benefit Southern Assam, Mizoram and Tripura.This scheme shall

reduce the overloading of transmission system during peak hours.

- In Northern region, 800 KV transmission is being established between Kishenpur and Moga to facilitie transfer of power pooled from Himalayan region at Kishenpur to the plains.

- 400 KV Sub-station is being constructed at Jallandhar to augment the Northern region transmission system.

- 400 KV links between Bassi, Hissar, Bawana, Bhiwani have been executed to provide redundancy in the Northern region transmission system.

ASSISTING THE SEBs

POWERGRID has endeavoured to extend its expertise and assistance to ameliorate transmission and distribution network of State Electricity Boards which on account of financial constraints have not been able to invest in improving their system due to inadequate shunt sompensation.

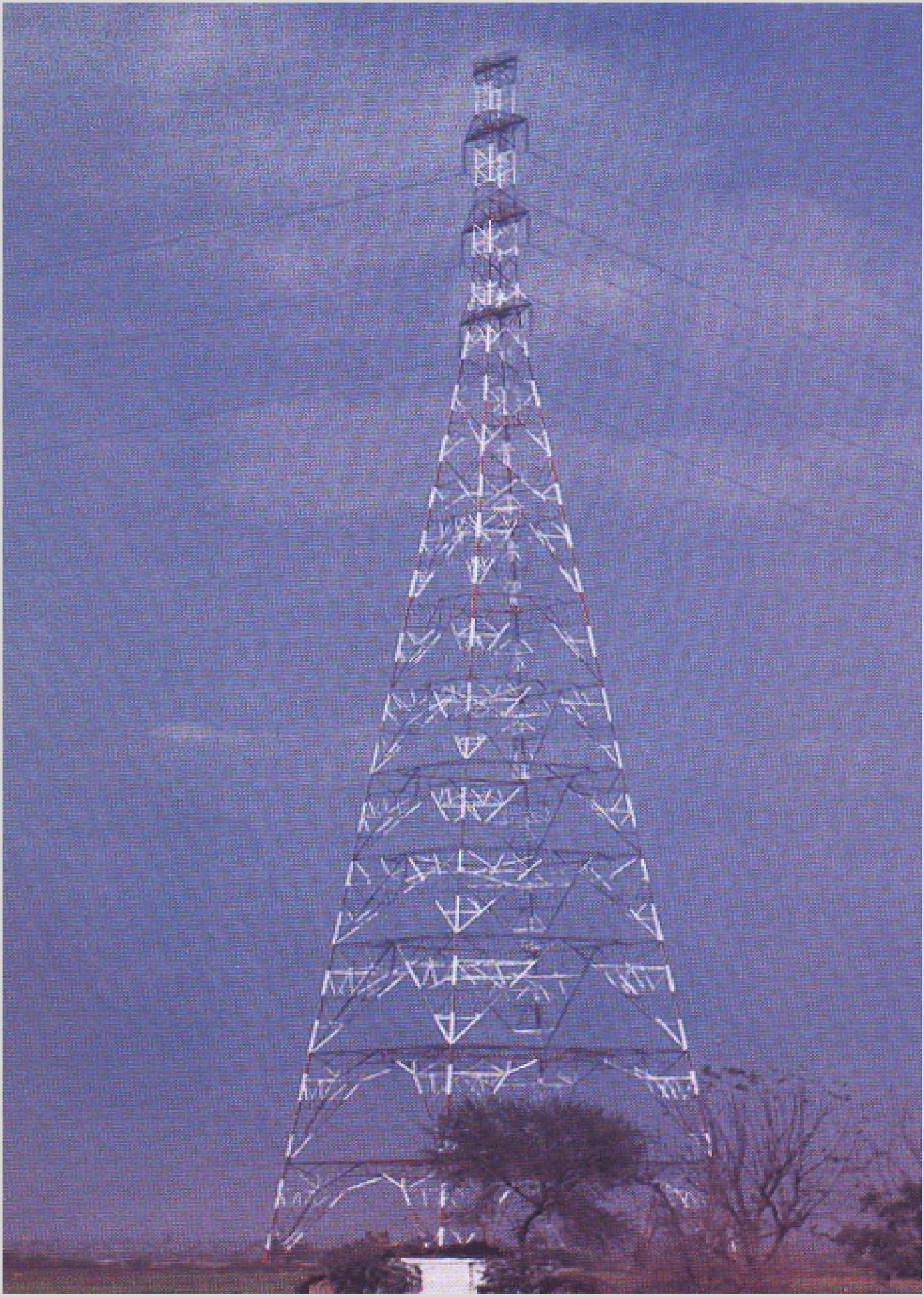
POWERGRID has tied up financial assistance for procurement and erection of shunt Capacitors in the state network so as to help them in overcoming the existing deficiencies. This offer has been extended to all the SEBs in the country and procurement actions have been initiated for iplementation of such schemes in different states in a phased manner.

Rising to the expectations of Government of India, POWERGRID has undertaken maintenance of Delhi Vidyut Board Sub-stations on Management basis from May 1998. The substations include Okhla 220 KV, Mehrauli 220 KV and Masjid Moth 33 KV. Further, Capacitors to the tune of 150 MVA have been installed in 11 substations which will substantially improve the voltage and regular supply of power being fed by these substations.

Actions are being initiated to meet the capacitor requirements of Punjab, Haryana and Rajasthan State Electricity Board by way of procuring around 1,000 MVAR capacity on their behalf. While shunt Capacitors shall continue to be under the domain of SEBs, POWERGRID's endeavour is to overcome the prevailing backlog on no profit-no loss basis.

SHARING EXPERTISE FOR NATIONAL BENEFIT

POWERGRID is consciously working on disseminating its experience and expertise in various facets of transmission system management to various SEBs and Electicity Departments including other bodies in power sector through conferences, seminars and tailor-made training programmes/ workshops directed towards addressing specific technological and O&M areas. Some



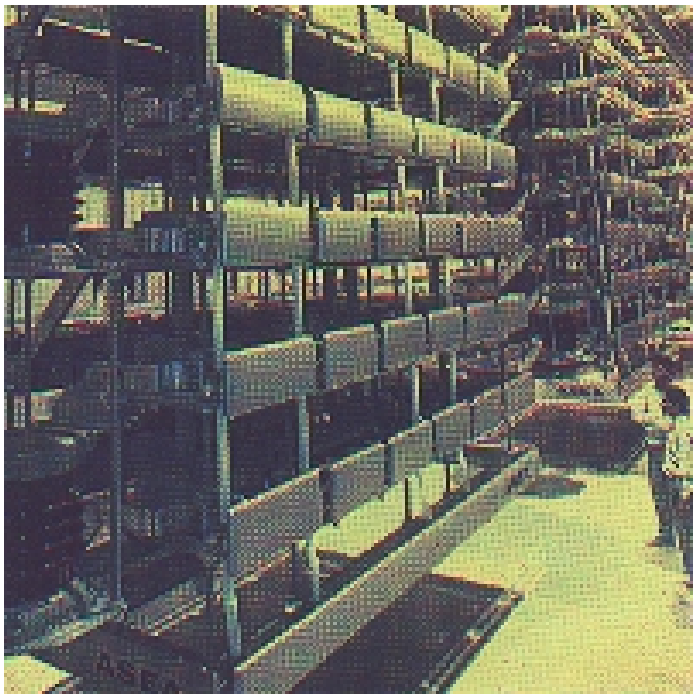
of the recent programmes arranged at Ballabhgarh, Delhi and Hyderabad were attented by various SEBs including representatives from Malaysia, Nepal,Bhutan, Mauritius etc. Specialised testing facilities available at POWERGRID's Central Oil Testing Labotatory at Hyderabad and developmental activities carried out have resulted some of neighbouring countries like Mauritius to seek co-operation/ support from POWERGRID. Moreover, our testing facilities are being regularly utilised by various SEBs, Generating Companies and even Railways.

IXTH PLAN PROGRAMME AND FUND MOBILISATION

POWERGRID envisages an investment of about Rs. 13,000 crores during the 9th Plan for its identified ongoing and new schemes. This would rise to Rs. 18,000 crores for executing transmission systems associated with mega IPPs.

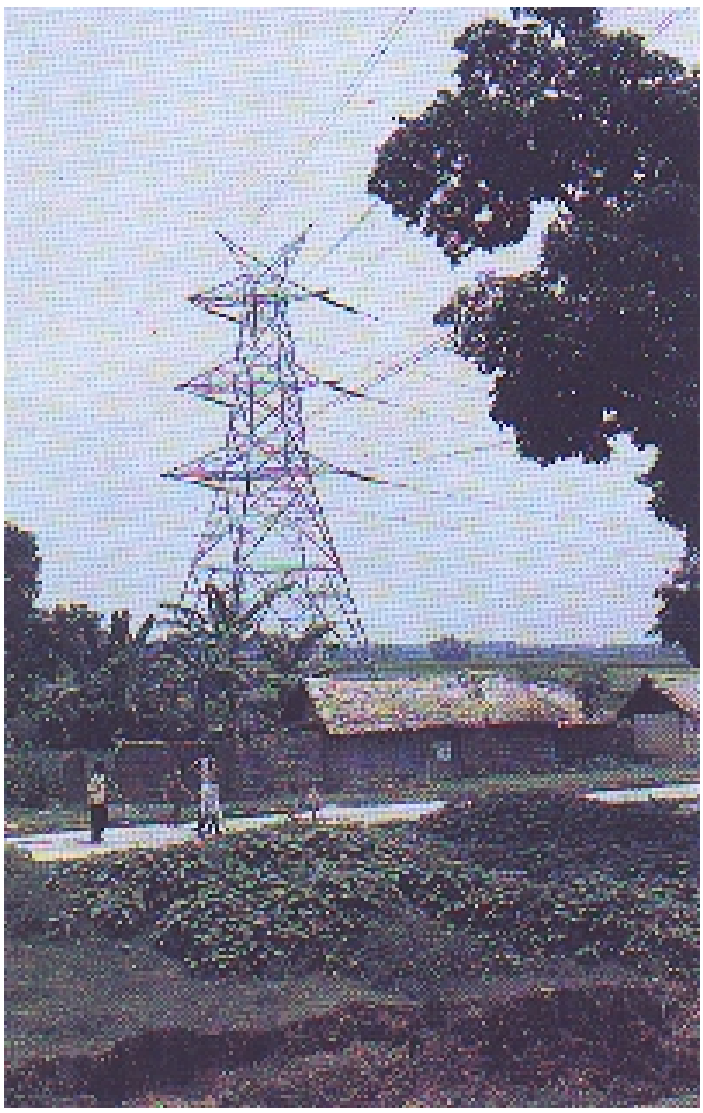
Some of the major ongoing projects contributing to the 9th Plan outlay substantially are Nathpa-Jhakri 400 KV Transmission line, Vindhyachal Stage-II 400 KV, Jeypore-Gazuwaka Back-to-Back system, Regional LD&C schemes in Southern and Northern region etc. Likewise major new projects during this plan period are North-East and East-South HVDC stations, Talcher-II, Gas Based projects of Gandhar-II and Kawas-II,LD&C schemes for other remaining regions etc.

A significant portion of fund requirement for executing the investment programme during the 9th plan period is to be met through financial assitance from leading multilatera/bilateral funding institutions like World Bank, ADB, OBCF, Japan, etc. These multilateral institutions generally finance a project to the tune of 50-55% of the total project cost and the borrowea is expected to deploy its internal resources to the extent of 20%. The rest of the funds and term loans along with commercial borrowing from international market.



POWERGRID during the current year has accomplished singnificant success in typing-up financial resources to the tune of Rs. 6,000 crores from leading bilateral/ multilateral agencies for implementing its new transmission schemes which are vital for developing the National Grid and for providing missing links to strenghtern the regional grids. It has successfully negotiated a loan of US$ 450 million with World Bank and US$ 275 million through J-Exim, Japan. OECF,Japan and ADB have already appaised POWERGRID and Have agreed to extend a loan of Yen 50 billion and US$ 250 million espectively.

The impact of economic sanctions resulting into uncertainty in respect of receiving financial assistance from international leading community is primarilly linked with new loans under negotiations with these agencies. POWERGRID, however, is confident to implement its envisaged programme of Rs. 3,000 crores during 9th plan through restructuring its capital base which is under consideration by goverment of India, tapping the Supplier's Credit facility, enhanched additional domestic bonds & loans and external commercial borrowings. However, to implement the outlay of Rs. 18,000 crores which includes evacuation arrangements for mega IPPs, it may have to resort to new additional avenues like private investment route, joint ventures and rescheduling the implementation plan in consultation with generating companies.



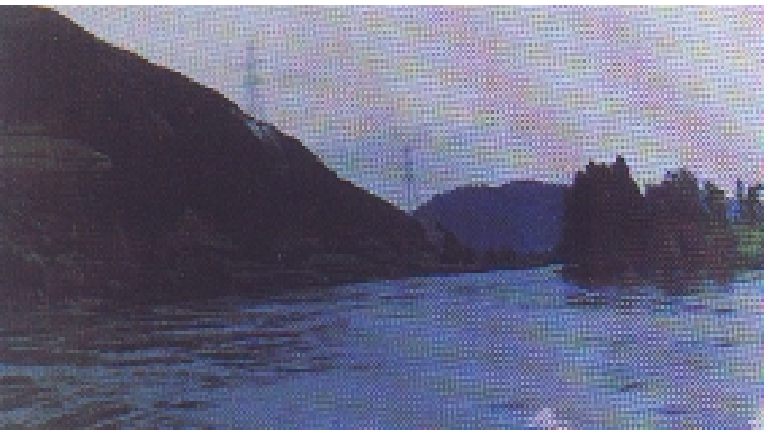
REINFORCING COMMERCIAL EFFECTIVENESS

The turnover of the corporation has increased by over 125% compared to 1992-93. This remarkable landmark exudes the strength of our commercial effectiveness. We are in the process of liquidaing the substantial amount in the form of outstanding dues, inherited from the defaulting SEBs as well as through Central Appropriation. The New transmission tariff parameters for POWERGRID were notified for the first time by Ministry of Power which enhanched Return on Equity from 12% to 16% along with other financial incentives for better operational performance. This brings transmission business activity return at par with the generating companies which were earlier enjoying these benefits. Despite financial constraints of various SEBs, POWERGRID realised Rs. 1,212 crores against the billing of Rs. 1,206 crores. The payment through Letter of Credit also improved from Rs. 59 crores to Rs. 73 crores during the year through constant interaction with SEBs. Further, POWERGRID with its concerted efforts got sanctioned Rs. 346 crores arrears realisation from Goverment of India through Central Plan Assistance (CPA-II) given to various defaulting States.

REDEFINING THE GREEN BOUNDARIES

Today when virtually every environment conscious citizen is decrying the indiscriminate degradation of the natural resources and showing indiscretion to socio-cultural issues, POWERGRID is taking utmost care to be environment friendly. However, keeping in mind the importance of sustaining development on one hand and being environmental sensitive on the other, it has decided to address potential environmental and social implications through a well defined policy and procedures called "Environmental and Social Policy & Procedures" (ESPP). The three key principles of POWERGRID's ESPP are Avoidance, Minimisation and Mitigatation.

Your Company took another bold initiative by organising a first ever National Consultation in Asia on 12th June, 1997, in which ESPP was put-forth to public and invited representatives from Ministry of Power,MOE&F,CEA,State electricity Boards, Allied Organisations, Academia, NGOs, international financial institutions like World Bank etc. and PAPs from



our projects, to get their feedback in an open and transparent manner to finalise the ESPP.

Socio-economic survey for forthcoming Sasaram and Kolar HVDC substation Action Plan(RAP) in line was conducted in line was conducted in line with ESPP and public consultation was undertaken for enroute of East-North Interconnector and Talchar-II project testifying ESPP implemantation in letter and spirit.

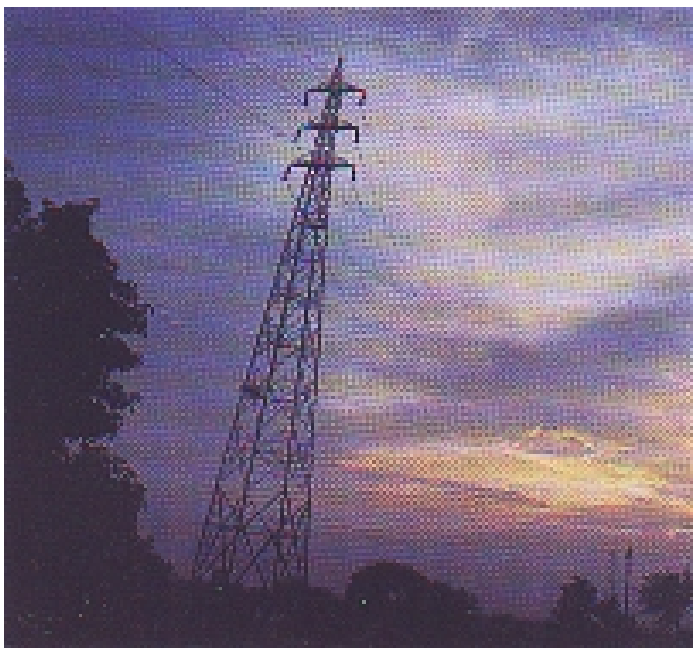
The ESPP developed by POWERGRID has been accepted by world bank and highly appreciated by different multilateral agencies like, ADB and OECF etc. who have advocated that POWERGRID should consider marketing thisnewly acquried experting on a consultancy basis.

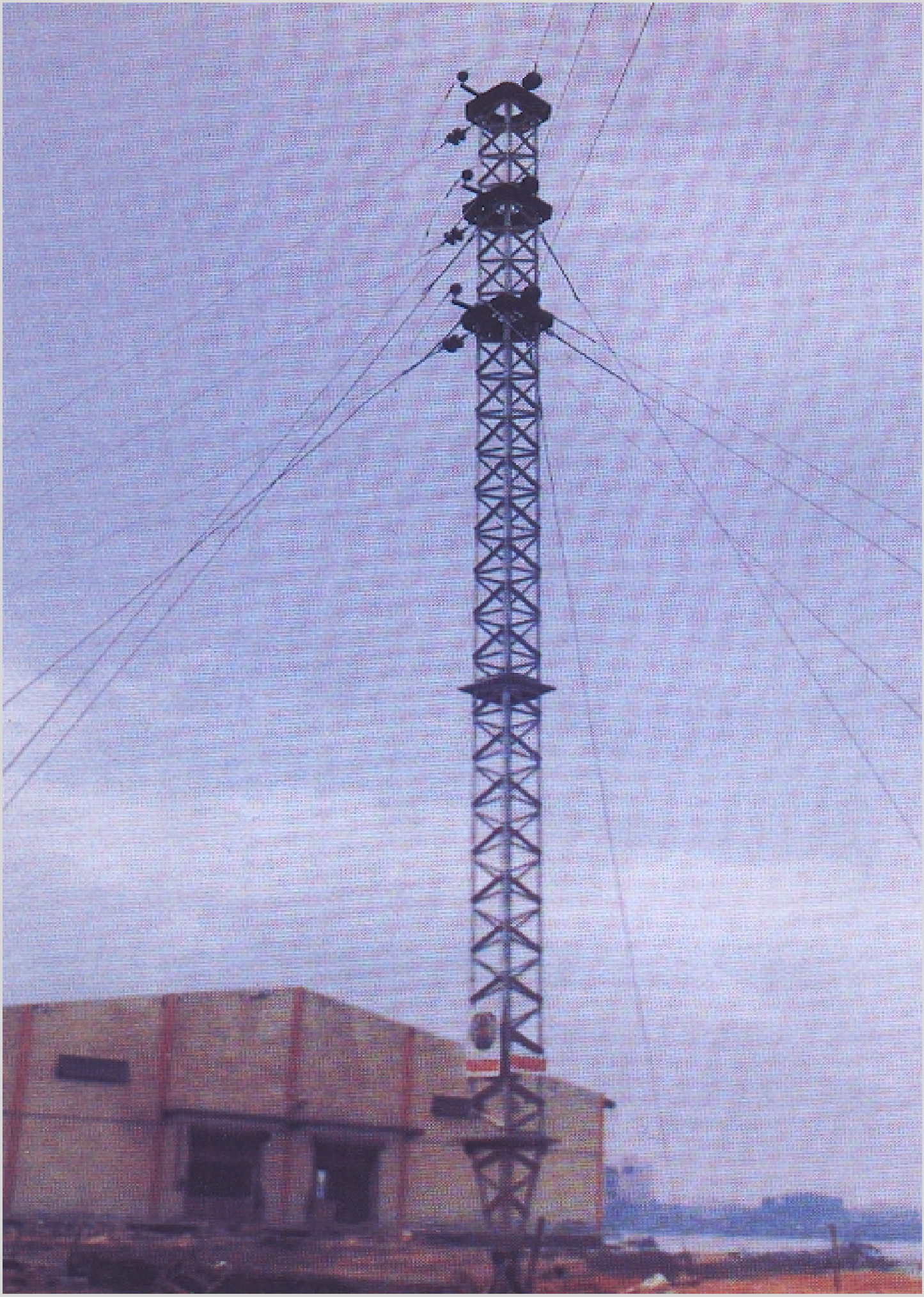
LIKE BETWEEN INSTITUTION AND INDUSTRY FOR TECHNOLOGICAL EXCELLENCE

POWERGRID has also endeavoured to establish and stregthen the long felt missing link between premier technological institutions and industry. In this direction,POWERGRID has taken effective steps which includes established POWERGRID Chair at IIT,Delhi and exchange of research/experties for mutual benefit with other Universities.

Towards dovetailing R&D activities into practice POWERGRID has undertaken many initiatives. Detailed simulator studies were conducted at GEC-Alsthom, U.K by Real Time Digital Simulator (RTDS), the latest tool to verify that there is no adverse interaction between the Chandrapur HVDC Back-to-Back project of POWERGRID and Chandrapur-Padghe HVDC bipolar project of MSEB. POWERGRID also implemented actual control hardware of Chandrapur Back-to-Back and Chandrapur-Padghe HVDC bipole. This was the first time in the world, that such extensive studies involving two HVDC projects nearby were conducted using RTDS. M/s GEC Alsthom, ABB, HQI, BHEL, MSEB and POWERGRID were involved in these studies.

POWERGRID has also taken up study of measurement of AC/ DC field under UHV transmission lines and in the sub-stations in association with CPRI. Also a study on possible biological effects of electric field has been taken up. The resulting date have confirmed the suitability by various design parameters adopted by POWERGRID. Furuther, means of reduction of the electric and magnetic fields have been suggested as a fall out from the studies conducted.





For the first time in India, Flexible AC Transmission System (FACTS) is proposed to be applied on 400 KV system. Towards this, Kanpur-Ballabhgarh corridor in Northern Region has been identified and the project is being taken up as an R & D project in association with CPRI, BHEL and CEA.

Real Time Digital Simulator (RTDS) is being developed indigenously in association with IIT, Kharagpur, which will be capable of simulating the behaviour of power system under normal and contingency conditions in real time for smooth, efficient and reliable operation as well as to train the system dispatcher/ operation and other personnel.

POWERGRID has also actively contributed at International forums in formation of IEC standards for insulation co-ordinations of HVDC convertor stations and has significantly contributed in CIGRE working groups for various topics in the area HVDC. Such participation keeps POWERGRID team also abreast with the latest trends.

CELEBRATION OF 50TH ANNIVERSARY OF INDIAN INDEPENDENCE

A number of cultural programmes and activities have been organised in POWERGRID to celebrate 50th Anniversary of Indian Inde-pendence. The annual culural event was organised at Nagpur in November 1997. A seminar on Women in Power Sector with the theme of "Challenges in next Millennimum" held in Shimla in May 1998 was participated by the women from various organisations. It participated in "Pride of India" exhibition held in January 1998 in Vietnam. In addition, cultural and sport programmes, exhibitions on handicraft, painting, photography etc. have been organised in various regional cities. It is a matter of pride that POWERGRID grabbed first position in Sports Tournament and Cultural Meet held under the aegis of Ministry of Power. POWERGRID also organised "National Conference on Corporate Governance" on July 23, 1998 which was participated by eminent personalities in Public and issues confronted by the decision makers for marching ahead in the liberalised environment.

The integrated culture of POWERGRID is a unique feature not only in the country but also in the world wherein people living in small units in remote areas meet together and participate in cultural unification.

TRANSMISSION BEYOND NATIONAL BOUNDARY - TOWARDS SAARC GRID

India, which is in strategic position in the South Asian Region can play a vital role in developing sound power sector in the overall region. In line with the policy of the Goverment of India so strenghen friendly relations with neighouring countries, projects under electricity exchange programme has been taken up with neigbouring countries. Countries like Nepal and Bhutan are already being assisted for the past many years. To further strengthen the friendly relations, POWERGRID plans to connect the power grid of Bangladesh, Myanmmar, etc. for establishing the SAARC grid for harnessing the vast potential of diversified resources and load patterns for mutual benefit.

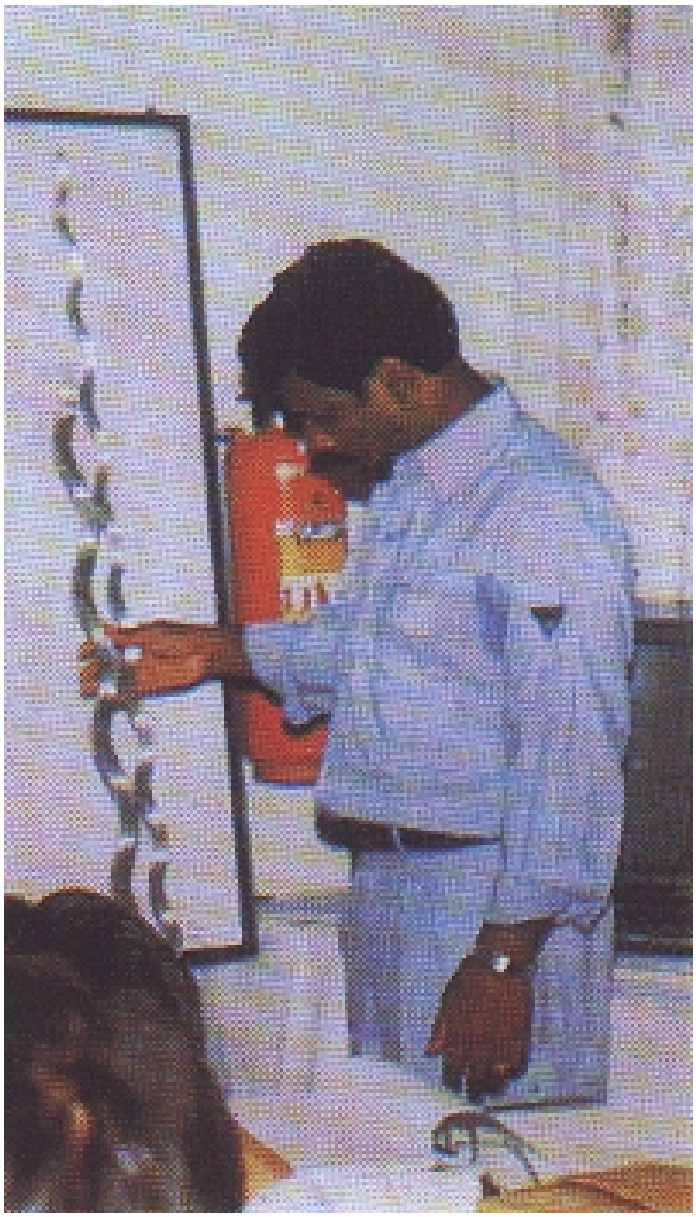
Dialogue has already been intiated with Bangladesh to interconnect its grid with India, as geographical location, diverse sources of energy and the technical parameters are favourable to both the countries. POWERGRID is considering two inter-connections by providing a 220 kv AC inter-links betweeen Eastern Region of India and Western Bangladesh and another between Eastern Bangladesh and North-Eastern Region of India. The system would enable exchange of about 150 MW of power. Efforts are being made to evolve a sound institutional and commercial arrangement under the aegis of ADB.

POWERGRID has been purchasing power from Chukha HEP in Bhutan for the past few years to sell the same in various regions in India through massive transmission network constructed by POWERGRID.

The Mahakali Treaty [Article (2b)] between Goverment of India and Nepal, provides that Nepal shall have the right to receive 70 million units of energy on a continuous basis annually, free of cost, from the date of entry into force of the Treaty. For this purpose, India is required to construct a 132kv transmission line upto Mahendra Nagar, Nepal on the Indo-Nepal Border from the Tanakpur Power Station. A 132 kv transmission line from Tanakpur upto this point will be constructed by POWERGRID.

DIVERSIFICATION INTO TELECOMMUNICATION BUSINESS

POWERGRID plans to diversify its operations into telecommunication business, as its existing transmission network provides as excellent opportunity to establish national information infrastructure for Long Distance Telecommunication Services. The existing network facilitates a ready-made right-of -way for installation of Overhead Optical Fibre Ground Wires (OPGW) for carrying high speed audio-video and data signals and would pro- vide extremely robust support in remarkably cost effective manner.



As per the recommendations and directive of Cabinet Committee on infrastructure in September 1997, POWERGRID has already prepared a preliminary plan for embarking upon telecommunication business in a phased manner. To evolve a viable proposition, assistance from international consultants has been sought under World Bank Financing. Needful steps for appointment of such consultants have already been taken up and the consultant is expected to be appoointed by January, 1999. A suitable project report will then be prepared for further processing for Government apporoval and implementation.

It is pertinent to mention that optical fibre connection is at present avaible on POWERGRID's Itarsi-Jabalpur Transmission Line in Madhya Pradesh. M/s Bharati Telenet Limited (BTL) being the sole licensee in this area have approached POWERGRID to utilise this facility for basis telecom services, POWERGRID intends to start a dialogue in this regard in consultation with eminent experts in this field.

DEVELOPMENT OF MEGA IPPs AND POWER TRADING

Efforts are also being made for trade of power through an independent agency which will act as a single window for negotiating sale and purchase of power on sound economic basis. POWERGRID owing to its unique position of linking the bulk generators and their beneficiaries in Indian power system becomes a natural vehicle for development of trade of power. Being a prime national utility and playing a facilitator role in power sector development. it has commited itself to have a major stake in establishing the mechanism for

power trading through institutionalising Power Trading Corporation and will lead the way for providing the much needed confidence to investors in this field. It shall also be playing an instumental role in development of Mega IPPs and in Power Trading by establishing requisite transmission network thus eliminating the institutional barriers for power evacuation and transferring the surplus power to deficit regions in most economic, efficient and reliable manner.

CONCLUSION

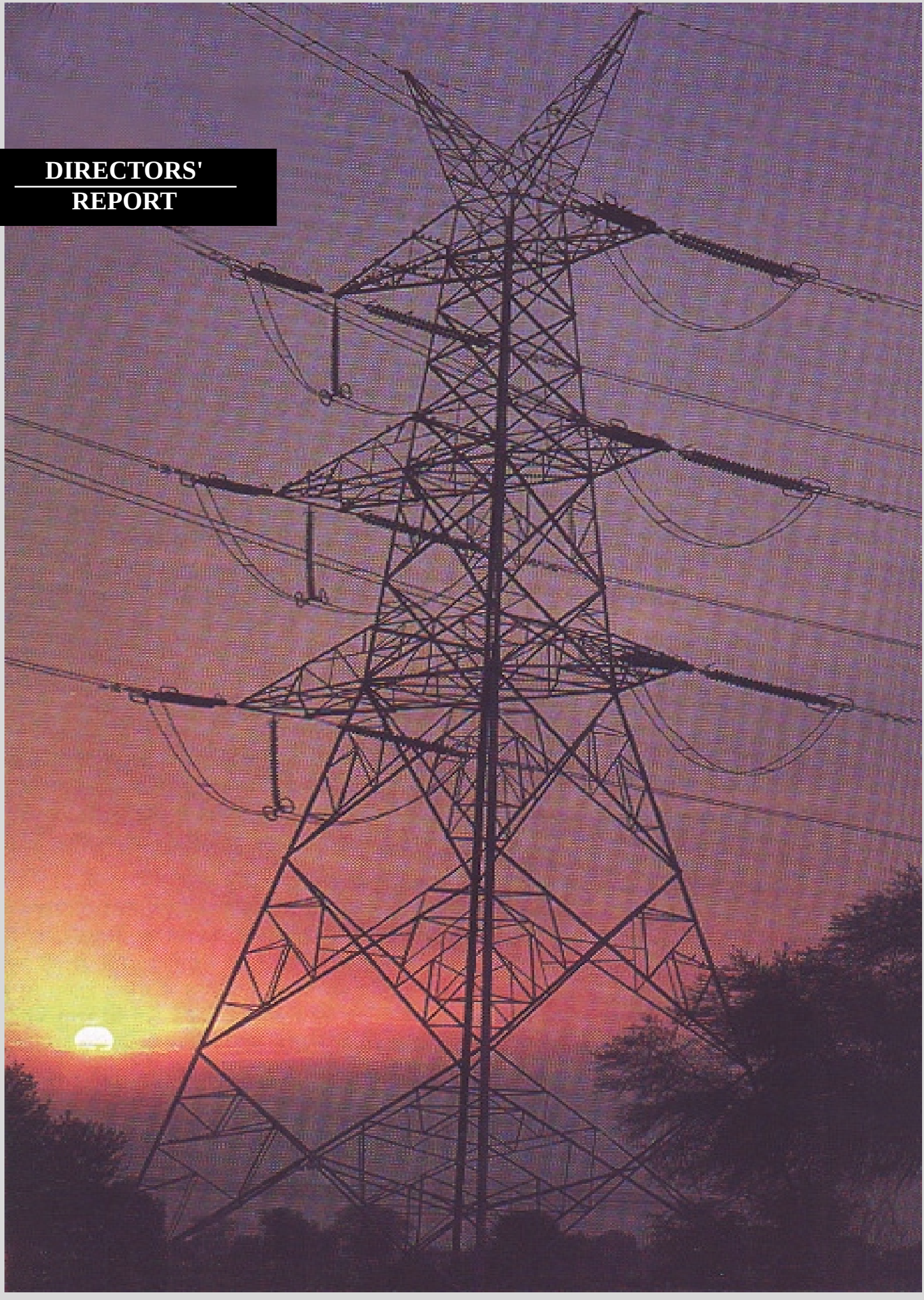
POWERGRID, conceived as a change agent and facilitator in the power sector, is a young organisation and promises to play a catalytic role in the national and international power scenario.

POWERGRID will not be limiting its role to that of being only a bulk power mover but will be embarking into synergic areas for diversification to sustain its growth. It commits itself for playing a pivotal role in economic growth of the country by continuing to act as a dominant force in change management and as a facilitator to motivate and catalyze development in all facets of power sector.

(R.P.Singh)
Chairman & Managing Director

Date : 28th August, 1998
Place : New Delhi.

DIRECTORS' REPORT



DIRECTORS' REPORT
AT THE 9TH ANNUAL GENERAL MEETING HELD ON 28TH AUGUST, 1998

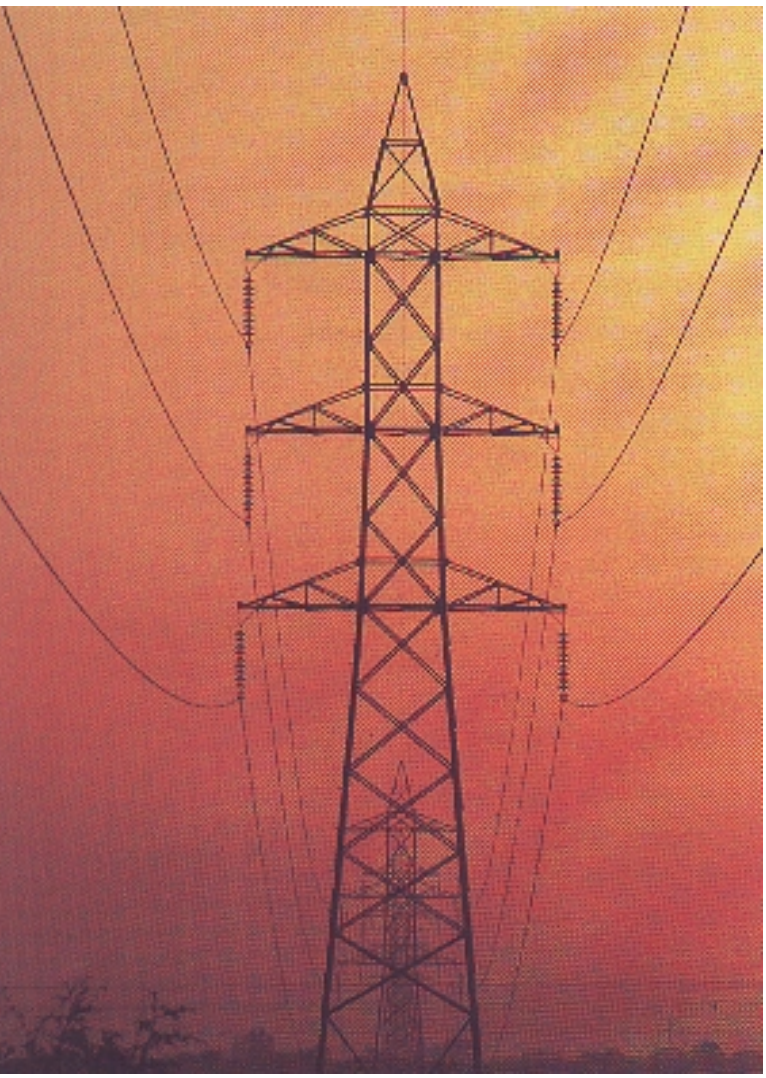
To

The Members,

Gentlemen

It gives me pleasure to present on behalf of the Board of Directors, the 9th Anuual Report on the performance of the Power Grid Corporation of India Limited (POWERGRID), together with the Audited Statements of Accounts for the financial year 1997-98.

At the end of the 7th year of its business operation, POWERGRID is proud of remarkable achievements in engineering project management, operational and financial excellence supplemented with Organisational Development, Cultural Transformation to its hardcore business operations. The report primarily dwells upon versatility in POWERGRID's performance in the evolving power sector scenario.



PERFORMANCE DURING THE YEAR 1997-98

MOU PERFORMANCE

Based on the provisional results of performance for the year 1997-98, POWERGRID is again poised to achieve "Excellent Performance" reting as per its MOU with Ministry of Power.

OPERATIONAL

As on March 31, 1998, POWERGRID operates a total of 31,250 CKMs transmission lines consisting of 23,415 CKMs of 400 kv, 5,080 CKMs of 220 kv, 1,125 CKMs of 132 kv and 1,630 CKMs of HVDC system distributed over 55 sub-stations with 27,875 MVA of transformation capacity. The operational performance of POWERGRID's transmission system has been impressive in all the five power regions. Overall average availability of transmission lines during the year was 98.90% which is comparable with best international standards.

During the year, POWERGRID has commissioned 3,397 CKMs of 400,220 and 132 kv transmission lines along with 630 MVA of transformation capacity. With the successful commercial operation of 1,000 MW HVDC Inter-regional link at Chandrapur on March 1, 1998, POWERGRID has leaped one step ahead towards the formation of the National Power Grid. Other major projects commissioned are 400 kv Vindhyachal Additional Transmission System, 400 kv Gandhar-Padghe, 400 kv Chamera-Kishenpur, 400 kv Bawana-Hissar-Jaipur and 400 kv Ramagundam-Hyderabad transmission lines.

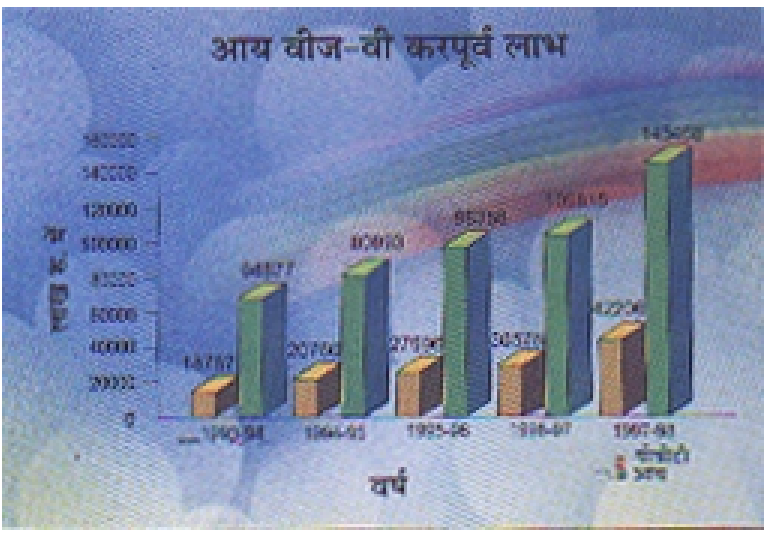
CONSTRUCTION

Timely implementation of its projects reflects construction performance and is one of the key performance area required to sustain the growth of the corporation. Therefore, POWERGRID has evolved a system of rigorous monitoring for projects under implementation. By way of proficient management of the construction activities, POWERGRID has strung 2,080 CKMs of transmission lines surpassing the MOU target of 1,987 CKMs.

Further 8,960 CKMs of transmission lines with voltage levels varying from 132 kv to 800 kv and 17 substations including bays, are under construction which are expected to be completed in the coming years.

FINANCIAL

Financial performance is the mainstay of the Corporation which eventually concludes the accomplishment of POWERGRID's business.



During the year, Corporation has earned a net profit of Rs.337.16 crores vis-a-vis a total Turn Over of Rs. 1,434.68 crores including miscellaneous income. POWERGRID has made a provision of Rs 84.9 crores towards income tax, out of which Rs 39.51 crores is for the current financial year and Rs 45.39 crores is for financial year 1996-97 payable in the current year. At the end of this financial year the capital employed by the Corporation stands at Rs. 6,885.17 crores.

Paid up capital of the company as on 31st March, 1998 stands at Rs. 3,036.54 crores (including Rs 157.89 crore of Share Capital Deposit) as a against Rs. 3,020.04 crores as on 31st March, 1997 (including Rs. 162.89 crores of Share Capital Deposit).

Dividend

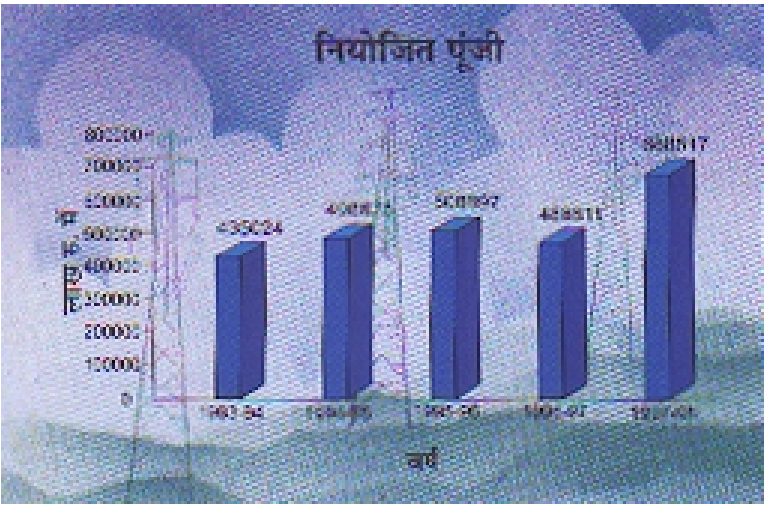
The Directors recommended a lump sum dividend of Rs. 20 crores for the year ended 31st March, 1998. Accordingly a provision of Rs. 20 crores towards proposed dividend for the Financial Year 1997-98 has been made in the books of account. The dividend shall be paid to the President of India, after its approval by the shareholders in the Annual General Meeting. Further, as per the Income Tax Act, 1961, Provision of Rs. 2 crores being tax on proposed dividend has also been made.

Transfer of Profit to Reserves

An amount of Rs. 175 crores has been transferred to General Reserve and Rs. 125 crores to Bonds Redemption Reserve.

BUDGET UTILIZATION

POWERRID has been consistenly meeting the budget allocation targets implying that POWERGRID is successfully adhering to the committed implementation



schedules. During the financial year 1997-98, POWERGRID has utilized Rs. 1,600 crores against a budget allocation of Rs. 1,600 crores.

COMMERCIAL

During the year POWERGRID has recorded a Gross Revenue of Rs. 1,435 crore (including miscellaneous incomes).

POWERGRID continued to realise 100% and in some months even in excess, on the monthly notified billing all through the year. This has been feasible due to our relentless endeavor to minimise the sundry debtors. The overall increase in amount received through Letter of Credit is 87% percent as the amount stands at Rs. 72.94 crores on March 31, 1998. As per schedule, POWERGRID has realised an Amount of Rs. 30.25 crores during this year, from already sanctioned second Central Plan Assistance (CPA-II) of Rs. 346 crores. The remaining would be liquidated progressively

Notification of Transmission Tariff

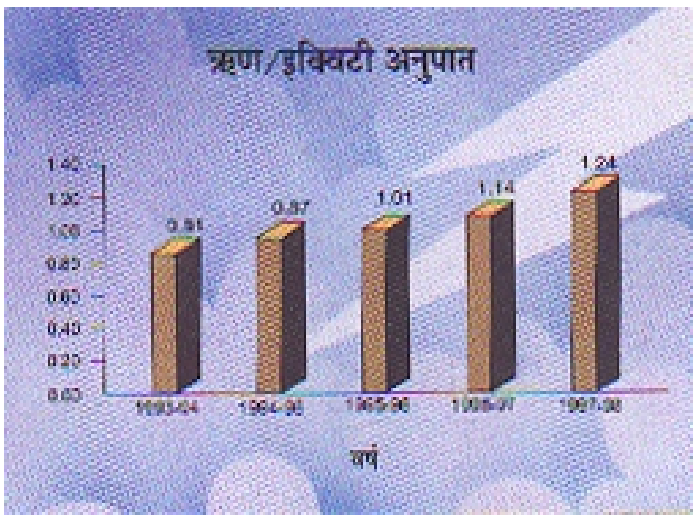
The much awaited issue of new transmission tariff notification was ultimately addressed during this year. Return on Equity has been increased from 12% to 16% which is now in line with return permitted by GOI to Generation Companies. This will help POWERGRID to generate more internal resource to invest in its projects.

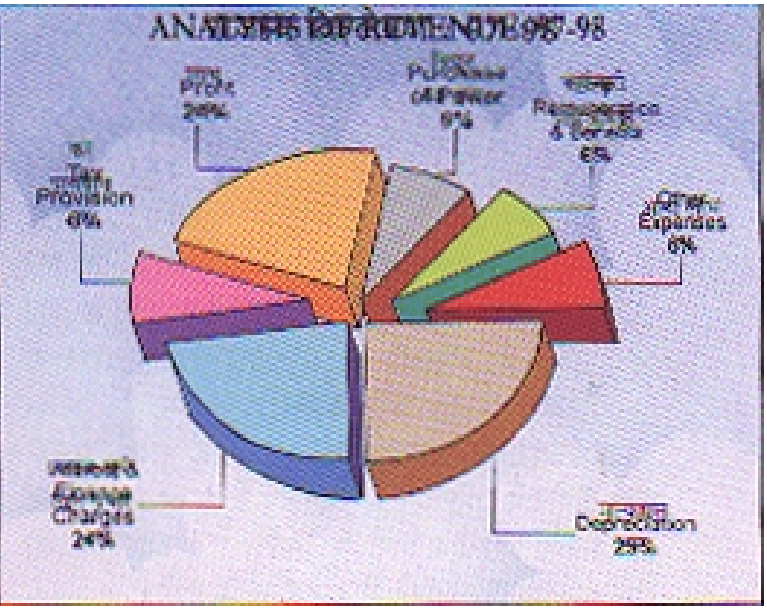
Availability Based Tariff Structure

In order to rataionalise the power tariff structure on national basis, POWERGRID has played a catalytic role to evolve and implement the Availability Based Tariff. Government of India November 1996. decided to implement Availability Based Tariff for the generating stations as well as future IPPs along with decentralised dispatch by SEBs with RLDCs

coordinating regional and inter-regional operations i.e. operating loose regional power pools as the operating mode for the regional grids. Significant progress has been achieved in implementation of this new tariff structure. A mock exercise has been successfully completed and Special Energy Meters have been installed in Southern Region and the actual implementation will commence soon

In Eastern and North-Eastern regions metering requirement for undertaking mock exercise has been completed. The needful actions for procurement of metering facilities for Western and Northern regions have been initiated. In phased manner the





implementation of the Availabability Based Tariff in all the regions will be completed by next year.

BUSINESS DEVELOPMENT

Based upon the in-house expertise developed in the area of engineering, contractiog, project management, financial & personnel management in the transmission sector, POWERGRID has bagged various vital assignments amounting to Rs. 35 crores out of which Rs. 13.86 crores have been realised in 1997-98. This includes Rs. 1.6 crores in foreign Exchange.

POWERGRID in association with EPDCI, Japan & TEPSCO, Japan has secured an OECF funded assignment from WBSEB for Review Engineering Consultancy Services for Strengthening of Transmission System of West Bengal against stiff international competition from foreign Consultants viz. EDF France, Lahmeyer Intl., Germany etc. In this consultancy, POWERGRID is the Lead Partner sharing the major consultancy assignment.

During the year POWERGRID and Lahmeyer International, Germany, has jointly submitted the bids to GRIDCO, Orissa for a consultancy assignment of upgradation and re-conductoring of the existing transmission lines for higher capacity of power flows and stands a fair chance of being awarded.

POWERGRID has been awarded the work of exclusive O&M of 400 KV, 660 CKMs of transmission lines by Karnataka Electricity Boards worth Rs. 1.25 crores per annum which will continue for period of 5 years at an incremental cost of 10% annually. Basides, POWERGRID has also been entrusted with the consultancy services for execution of transmission lines and substations by Pondicherry Electricity Department worth Rs. 4.7 crores. POWERGRID is also providing consultancy services to Energy Management Centre for Narmada Control Authority and Load Despatch and SCADA System to Bombay Suburban Electricity Supply Ltd. POWERGRID has also taken various types of consultancy asignments for HPSEB, DVB and KEB.

Business opportunities are also being explored in neighbouring contries such as Nepal, Bangladesh and other Middle-east countries.

POWERGRID PROJECTS

The projects undertaken by POWERGRID are broadly classified i) Generation Linked projects, ii) Grid Strengthening projects, iii) Inter-regional links and iv) Unified Load Despatch & Communication Schemes. Further, in view of the entry of the various large Independent Power Producers in the Power Sector, POWERGRID is also contemplating possible investments towards implementation of transmission projects related to IPP projects. In addition, POWERGRID is also entrusted upon assisting various SEBs in their transmission and distribution network.

Generation Linked Projects

To meet the power evacuation requirement, major projects under execution by POWERGRID are

Kathalguri transmission system, Itanagar S/s for Ranganadi project, RAPPB transmission system, Faridabaad transmission system, Nathpa-Jhakri transmission system, and Vindhyachal-II transmission system, Kayamkulam transmission system.

Grid Strengthening Projects

System studies conducted on network revealed certain deficiencies in the transmission system which were hampering the smooth transmission of power. Many augmentation schemes to improve the transmission system have been untertaken. Some of such schemes are augmentation in the NER grid to benefit Southern Assam, Mizoram and Tripura, 800 KV transmission line between Kishenpur and Moga, 400 KV S/s under construction at Jallandhar etc.

RESEARCH AND DEVELOPMENT

POWERGRID has actively contributed at International forums in formation of IEC standards for insulation coordination of HVDC convertor stations. POWERGRID has also contributed in CIGRE Working Groups for various topics in the area of HVDC. Such participation keeps POWERGRID team abreast with the latest trends. These forums also help to reflect POWERGRID's know-how potential.

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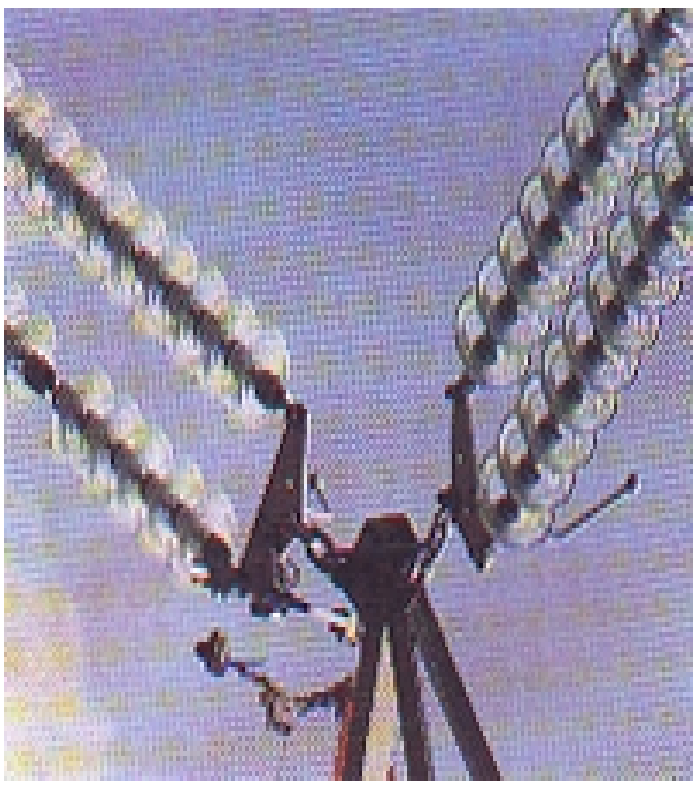

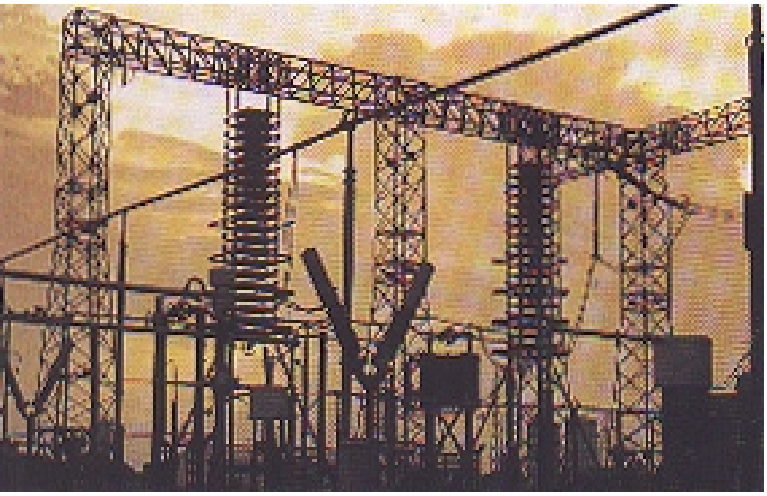

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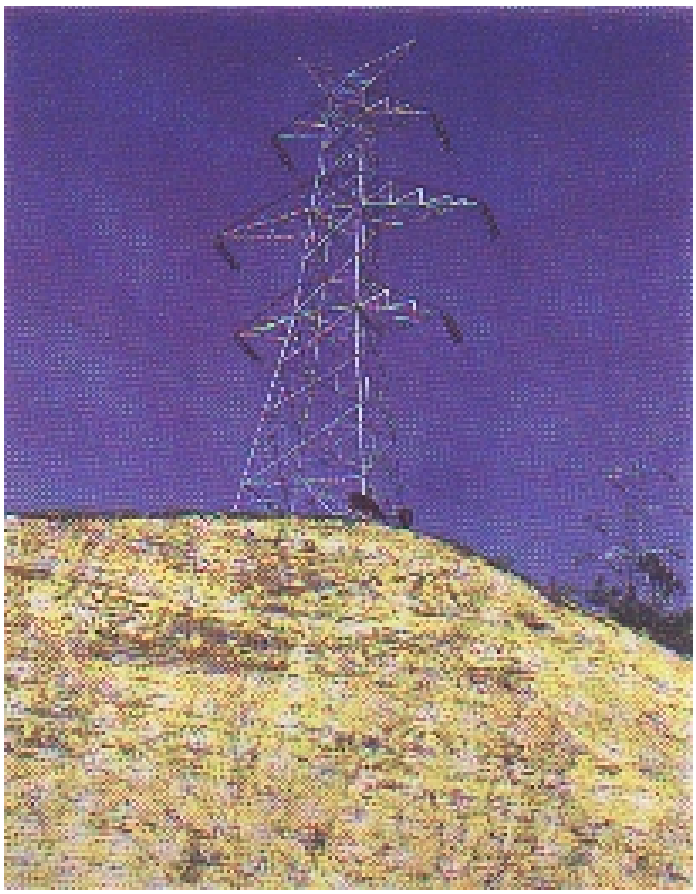
STANDARDISATION OF DESIGN

successful completion of prototype tower tests had been a great challenge for POWERGRID due to repeated failures of towers designed by contractors, multiplicity of tower design and limited number of test bids available in the country. This has posed as a serious bottleneck in the initial stages of project execution.

In order to overcome this situation, POWERGRID has decided to use its in-house expertise and experience acquired over the years to standardize towers and foundation designs for transmission lines rated 400 kV and above voltage levels. As a part of the standardization program, POWERGRID in the first phase, has already intiated activities for design, standardization and testing of 15 nos. towers of 400 kV and 500 kV HVDC lines for various wind zones. This shall be followed by further designs suitable for all the wind zones in the subsequent phases. By resorting to such design and standardization, POWERGRID would not only be reducing the implementation time for the projects but also inventories for transmission line maintenance.

INTER-REGIONAL EXCHANGE OF POWER

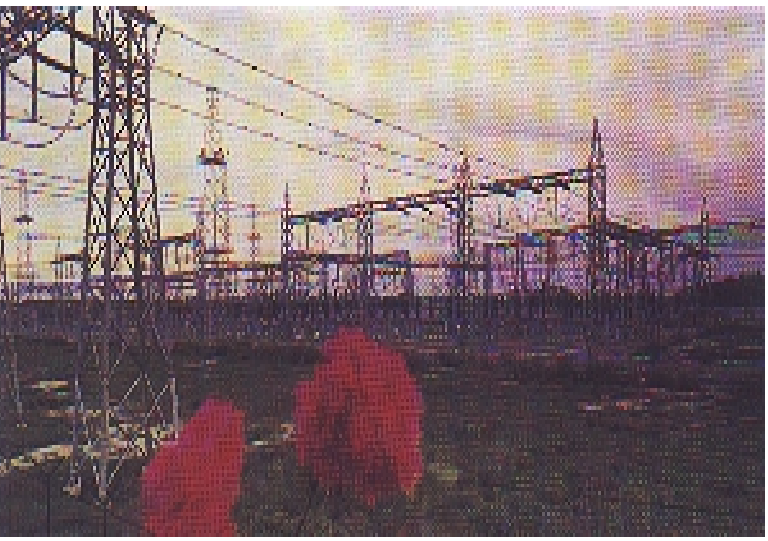
POWERGRID has given utmost priority for exchange of power between various regions, so as to utilise the available energy in optimum manner. This has helped on one hand to meet the unserved demand in power starved states while on the other hand, plant load factor of generationg plants in the exporting regions has improved substantially.



Pre sently, POWERGRID has been managing to transfer the power over long destance, on an average of about 1,000 MW (maximum upto 1,880 MW), amounting to over 22 Million units per day.

Surplus Power in Eastern Region

Of late in Eastern Region, a phenomenon of substantial energy surplus has been observed. This is mainly because the load has not grown as originally envisaged and thus substantial amount of power/energy remains unutilised which could be exported to neighbouring regions for meeting their deficits.



At present about 150-200 MW is being transferred from Eastern Region to Southern Region through existing 220 kV Balimela (Orissa) - Upper Sileru (Andhra Pradesh) line. Jeypore-Gazuwaka 400 KV D/C AC line, a part of Gazuwaka HVDC Back-to-Back project, has been commissioned ahead of schedule (18th June 98). This line can enable transfer of additional 250 MW power to Southern Region on radial mode. Upon commissioning of Gazuwaka HVDC Back-to-Back Station, which is expected by February 1999, 500 MW power can be exchanged.

There exist two state owned links between Eastern and Northern region i.e. Dehri-Mugalsarai 220 kV D/C and Karamnasa-Mugalsarai 132 kV D/C, which has been used to transfer power from Eastern to Northern Region. Necessary strengthening of Eastern Regional grid near Bodhgaya has also been carried out by POWERGRID to effect power transfer on the above line via Bihar transmission system and upto 100 MW has been transferred to Northern region, from where the same has been further transferred to Tamil Nadu via Western Region.

An exchange of power to the tune of 250-350 MW is taking place from Eastern to Western Region by utilizing Budhipadar-Korba 220 KV D/C line on radial mode.

Flow of power to the tune of 100 MW from Eastern to North-Eastern Region has started from February 1997. At present, both the regions are interconnected with 220 KV and 132 KV lines and are being operated in synchronous mode.

DISASTER MANAGEMENT

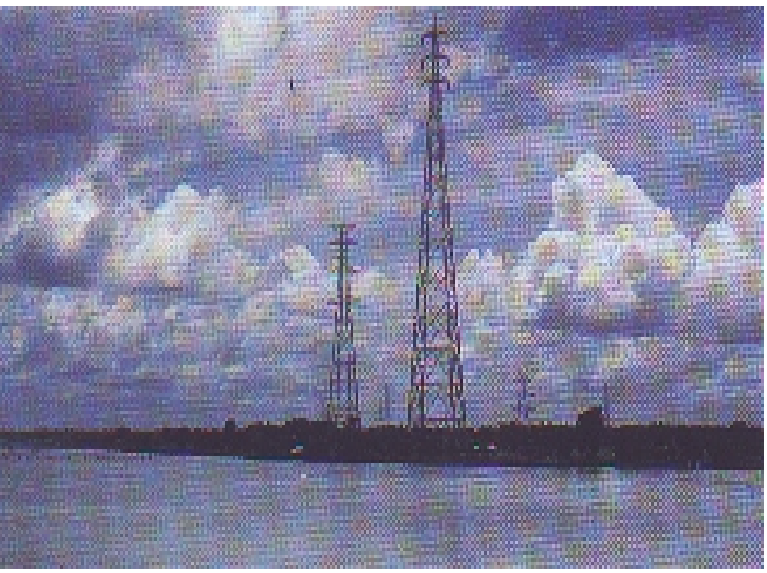
The transmission systems world over are vulnerable to natural calamities like strom, tornado,landslide, flash-flood and vandalism, theft etc. In recognition to the impact of failure of transmission lines caused by such unforeseen circumstances sufferings of the public at large. POWERGRID has equipped itself to restore the transmission lines in quickest possible time.

POWERGRID has developed dedicated and adequately trained teams which have been posted as various strategic locations to manage such disastorous situations on immediate basis.The recent devastation caused by cyclone in Gujarat to power supply network was attended by POWERGRID on war footing and normalcy was restored within a few days,which otherwise would have taken months time. The collapsed towers are easily bypassed using ERS structures resulting in restroration of the damaged system within shortest possible time. The damaged towers then can be attended to through the conventional method, without affecting the regular power flow. ERS can also be effectively utilised to prevent impending collapse of partly damaged towers. POWERGRID has successfully deployed ERS on number of occasions to restore damaged transmission system in various regions e.g. Bairasuil-Pong and Tanakpur-Bareilly system for Northern Region, Maithon-Jamshedpur in Eastern Region, Kawas-Nalsari in Western Region and Gohpur-Itanagar System in NER etc. In all these cases, the restoration work was completed in record possible time in the range of about 5-7 days against a conventional time requirement of about 4-6 weeks thereby resulting in substantial savings.

In case of Kawas-Nawsari line failure in Western Region, the conventional time required for restoration of endangered towers due to erosion by Tapi river water, could have been in the order of 6 months, as it involved special foundations, which were restored through deployment of ERS in one week's time. ERS was successfully utilised to bypass the endangered towers having river span of about 900 meters with tower structure of 50 meters and is considered to be a unique achievement.

The vital experience gained by POWERGRID and the facilities available has not only been instrumental in quick restoration of its damaged system but also has been made available to cater to the need of other utilities and SEBs in the country. One of the recent examples is in relation to the active support provided by POWERGRID in managing the disastrous situations in the state of Gujarat caused by the cyclone in June, 1998. Immediately after receipt of request of help, POWERGRID moved men and machines towards Gujarat even without knowing the final destination. Both the circuits of the collapsed 220 KV D/C Anjar-Panadru line, were restored through deployment of ERS by POWERGRID.

The work on first circuit was started on June 13, 1998 and was restored by June 18, 1998 and the second circuit was restored on June 23, 1998 after the commencement

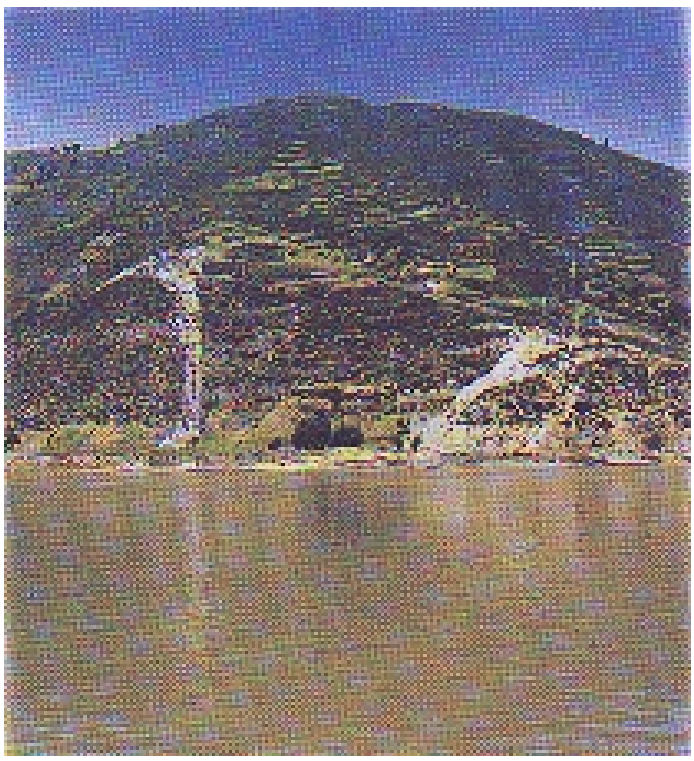


of work on line from June 19, 1998. Further, one circuit of 220 KV Anjar-Mehsana line, where 16 towers collapsed in 5 different locations were restored by POWERGRID on July 6, 1998. The restoration of this line was also coordinated by GEC Alsthom. The assistance from POWERGRID also covered restoration of distribution network of the State including re-commissioning of their LT sub-stations which was completed by July 9, 1998 and thereby vital power supply to Kandla Port, GAIL,IOL etc. was restored. The restoration of Gujarat system resulted in immediate evacuation of the land capacity of 225 MW of power to Gujarat thereby saving of energy cost to the tune of Rs. 25 to 30 crores peer month to the nation.

ASSISTING SEBs

POWERGRID, as a part of its commitment to improve the transmission sector nationwide, has extended its expertise and assistance to the interested State Electricity Boards in improving their transmission and distribution networks. Inadequate shunt compensation in thee distribution network of the state utilities has been a perpetual problem faced in the country. This leads to higher T&D losses, degradation of voltage profiles, under utilisation of EHV transmission network nad thus has been a primary reason for unsatisfactory regional grid operations. SEBs, on account of financial constraints, have not been able to accord a high priority and are also not in a position to raise funds from multilateral/international lenders. Exploiting its excellent performance with national and international financers, POWERGRID has tied up financial assistance for procurement and erection of Shunt Capacitors in the state networks so as to help them in overcoming the exitsing deficiencies. This offer has been extended to all the SEBs in the country and procurement actions have been intiated for implementation of such schemes in different states in a phased manner.

Rising to the expectations of Government of India, POWERGRID has undertaken maintenance of Delhi Vidyut Board Sub-stations on Management basis from May 1998, The substations include Okhla 220 KV, Mehrauli 220 KV and Masjid Moth 33 KV. Further, Capacitors to the tune of 150 MVA have been installed in 11 substations which will substantially improve the voltage and regular supply of power being fed by these substations.



Actions are being intiated to meet the capacitor requirements of Punjab, Haryana and Rajasthan State Electicity Board by way of procuring around 1,000 MVAR capacity on their behalf. While Shunt Capacitors shall continue to be under the domain of SEBs, POWERGRID's endeavour is to overcome the prevailing backlog on "no profit-no loss basis"

TOWARDS DEVELOPMENT OF NATIONAL GRID

To realise the national vision of establishing an integrated National Grid, POWERGRID has taken up series of steps to establish inter regional links connecting various regions. In the first step, all the regional grids would be interconnected through asynchronous links, which are comparatively robust and through which controlled exchange of power is feasible under varied system operating conditions of the connecting regions. The grid would be further strengthened with the large inter-regional links planned with mega size multi-state projects. In addition to the above, small schemes, which can be completed in short time with low investment have also been taken up.

PROJECTS UNDER OPERATION

HVDC BACK-TO-BACK STATION AT VINDHYACHAL

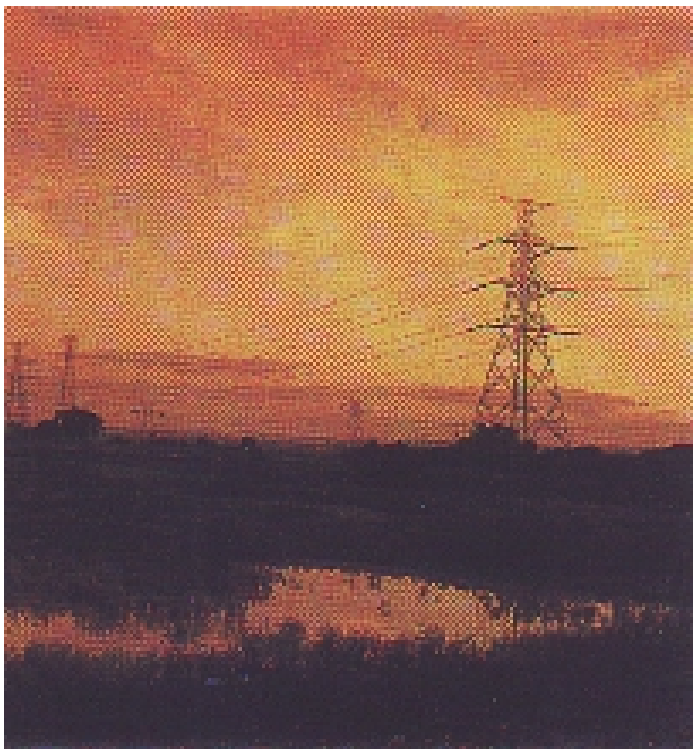
500 MW HVDC Back-to-Back Station at Vindhyachal connecting Northern and Western Region, is under operation. Generally, 400-500 MW of power is being exchanged through this link in off-peak hours.

HVDC BACK-TO-BACK STATION AT CHANDRAPUR

2x500 MW HVDC Back to Back Station at Chandrapur connecting Western and Southern Region has also been commissioned and has enabled transfer of about 600-700 MW of power to Southern Region from Western, Eastern and Northern Region.

400 KV D/C MALDA - BONGAIGAON LINE

This line has been constructed under Kathalguri Transmission System and connects Eastern and North-



Eastern Region. This line can enable exchange of power upto 800 MW between the two regions.

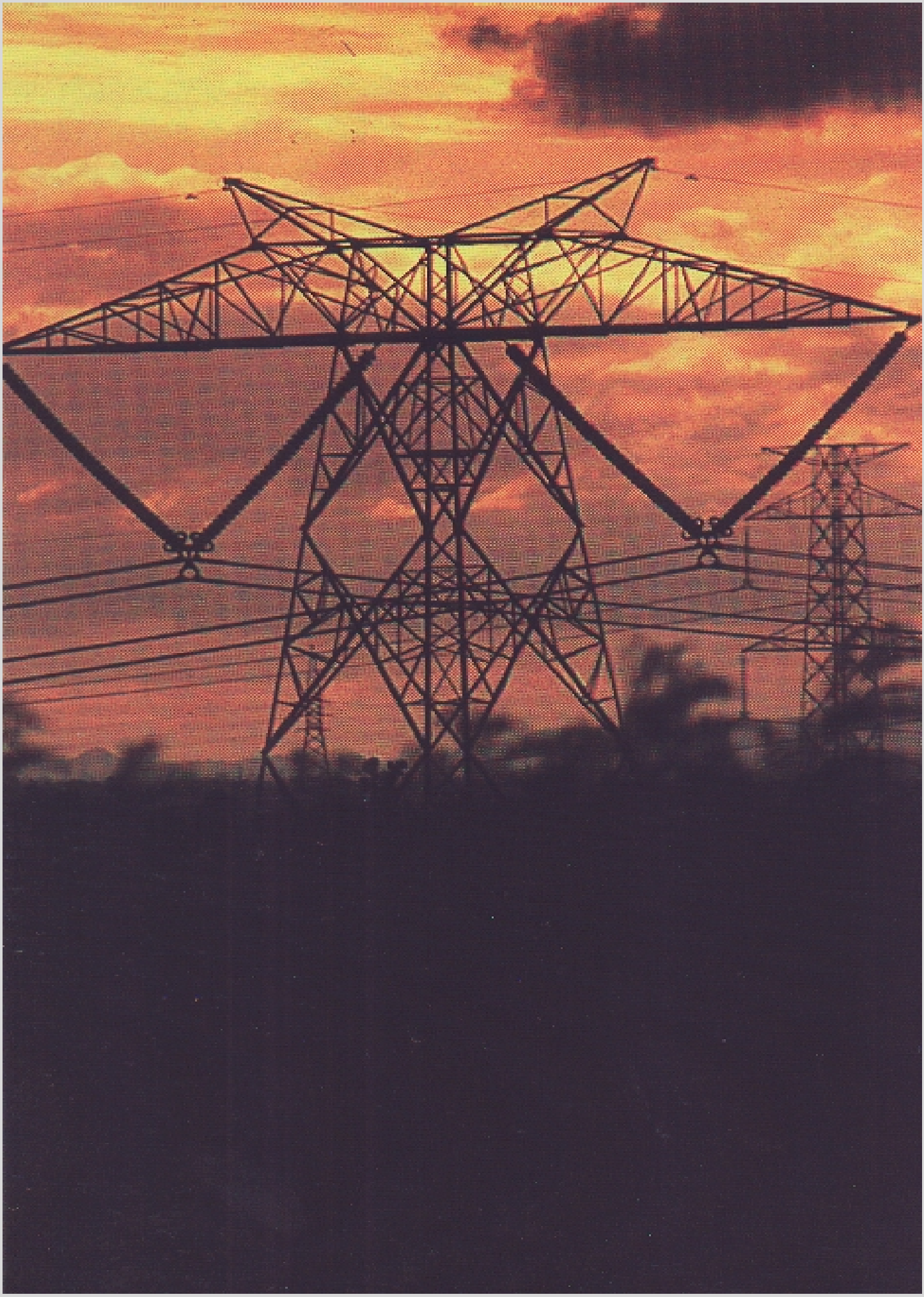
PROPOSED PROJECTS
Short Term

BUDHIPADAR - KORBA 220 KV S/C LINE

This line has already been awarded and is scheduled for commissioning by February, 1999. This would enable transfer of about 150 MW additional power from Eastern region to Western region which can be further transferred to southern region.

DEHRI - KARAMNASA 132 KV S/C LINE

This line would enable transfer of about 100 MW from Eastern Region to Northern region from where power can be transferred to Western region & Southern region. Award for this line also been placed and the line is expected to be commissioned by the end of this year.



GAZUWAKA HVDC BACK-TO-BACK STATION

This 500 MW HVDC Back-to-Back Station between Eastern and Southern Regions is scheduled to be commissioned by February, 1999 and would enable transfer of 500 MW power to Southern Region.

Medium Term

During the next four to five years, the inter regional links taken up shall complete the first phase of formation of National Grid. Further, several mega size multistate projects are also being planned for execution in next five to seven years time. Transmission system for these projects will strengthen the National Grid and will be integrated well within the regional grids. The major projects includes :

SASARAM HVDC BACK-TO-BACK

500 MW HVDC Back-to-Back link between Eastern and Northern Region has been in the advanced stage of Government approval and is expected to be commissioned by 2001-02.

EAST-WEST INTERCONNECTION THROUGH RAIPURA-ROURKELA 400 KV AC LINES

Raipur- Rourkela 400 KV D/C line has been proposed for strong interconnection between Eastern and Western Region expected to be commissioned by 2002-03. It would enable transfer of additional power upto 800 MW to Western region. From Western region, power can be transferred to Southern region through Chandrapur HVDC Back to Back and to Northern region through Vindhychal HVDC Back to Back Station.

400 KV LINES FROM PURNEA TO LUCKNOW ALONG HIMALAYAN FOOTHILLS

North-Eastern region (NER) is likely to have surplus power after commissioning of Ranganadi and Doyang HEPs by the end of 9th Plan. For evacuating this power, it is necessary that 400 KV line is constructed from Purnea (Bihar) where surplus power of NER can be pooled to Lucknow (U.P) via Muzaffarpur and Gorakhpur. The commissioning of these system would coincide the hydro electric project.

TRANSMISSION SYSTEM FOR MEGA SIZE MULTISTATE PROJECT IN EASTERN REGION

In Eastern region several mega size projects are planned while the beneficiaries will be located in Northern, Southern and Western Regions. The transmission systems planned with these projects shall strengthen the National Grid. The major projects are :

* Talcher - Kolar HVDC Bipole

The 2,000 MW Talcher - Kolar HVDC bipole has been planned to evacuate power from Talcher II Project (2000 MW) in Orissa to Southern Region constituents.

* Hirma - Jaipur HVDC Bipole

The 3,000 MW HVDC bipole from Hirma in Orissa to Jaipur in Rajasthan has been planned to evacuate the power from proposed generating projects at Hirma (6x660 MW) to Northern Region.

- 400 KV AC network from Hirma in Orissa to Raipur in Madhya Pradesh for evacuating power from Hirma project (6x660 MW) to Western region.

- 765 KV Inter connection between Eastern and Northern region.

- 765 KV lines are planned between Eastern and Northern Region as a composite transmission system for evacuation of power from Kahalgaon II (1,500 MW), Maithon RBC (1,000 MW), Farakka III (500 MW) generating station in Eastern Region to Northern Region. These High capacity lines shall ultimately be a part of the synchronous National Grid [planned for future.

Transmission System for Coastal Projects

Several coastal projects are planned in Southern Region and in Gujarat where the fuel can be conveniently transported. The projects are :

- Pipavav Project (2000 MW) in Gujarat

The power from this project is proposed to be allocated to Western Region constituents and Rajasthan. 400 KV lines in Western Region and between Western & Northern Region are planned for evacuation of power from the project.

- Project in Southern Region

Cuddalore (1,000 MW) in Tamil Nadu, Krishnapatnam (1,500 MW) in Andhra Pradesh, Kayamkulam II (2,000 MW) in Kerala, South Madras (1,000 MW) in Tamil Nadu etc. are being planned for the Southern Region constituents. Transmission system for these projects shall comprise number of 400 KV lines from the generation projects to various load centres in Southern Region

Long Term Transmission Planning

A long term perspective plan has ben evolved by POWERGRID, considering the huge hydro potential in North-Eastern Region and concentration of coal reserves in the states of Orissa, Bihar and Madhya Pradesh.

The scheme broadly envisages :

- High capacity 400 KV AC links in Chicken Neck Area in NER

- A ring of 2 nos. of 800 KV lines interconnecting Eastern, Western and Northern regions.

- 2nd HVDC bipole of 2,000 MW between Eastern Region and Southern Region.

- 2nd 500 MW HVDC Back-to-Back Station at Gazuwaka between Eastern Region and Southern Region.

The above schemes planned will act as high capacity power transmission highway across the country so as ti provide flexibility in locating various power that may in future be imported from neighbouring countries like Bhutan, Bangladesh, etc.

The above plans would ultimately lead to a synchronised operation of North-Eastern Region, Eastern Region, Western Region and Northern Region while Southern Region is preferred to be operated at asynchronous mode to avoid a very large synchronous grid.

UNIFIED LOAD DESPATCH & COMMUNICATION FACILITIES

Unified Load Despatch and Communication facilities is one of the basis prerequisites for economic despatch of power between Regions/States leading to effective and efficient on-line management of Regional and National Power Grids.

POWERGRID has undertaken implementation of state-of-the-art Unified Load Despatch and Communication facilities throughout the country. This will facilitate consistency in design, implementation, maintenance, compatible equipment & systems and fully dedicated integrated communication network throughout the nation.

Unified Load Despatch and Communication Projects are essential for enhanced performance of Regional/ National grids as that have high techno-economic viability. It has been established that a typical project of Rs. 600 crores in Indian system would recover its economical cost within a period of about 3.5 years. Realising the merits and need of these projects, POWERGRID will be investing around Rs. 2,000 crores for augmentation of LD&C facilities in all the five power regions.

At present the implementation of LD&C facilities is in progress in Southern & Northern Regions. The technology being new, POWERGRID is seeking the services of pioneer international consultants in timely execution of such projects. Contracts for all the EMS/ SCADA and communication packages under North Eastern, Eastern and Western Regions, are to be commissioned progressively.

While the Unified LD&C schemes would take some time to be implemented, as an interim step, mini Supervisory Control & Data Acquisition (SCADA) system was developed in-house and commissioned to monitor online system parameters in the Southern Region. The data exchange system between distant locations in grid and the control centre was designed and installed with the aid of Remote Control Units (RTUs) that collest, process, and transmit vital digitised data round the clock without which monitoring or controlling the system operation would be impossible.

POWERGRID engineers have introduced a new concept of energy metering with a very high degree of accuracy capable of measuring electrical energy consumption (both real and reactive) at very short intervals. This new metering system known as Special energy Meters is micro electronic, solid state, tamper proof and have already been installed in Southern, Eastern and North Eastern Region shall play a crucial role in enforcing regional grid discipline.

POWERGRID CHAIR

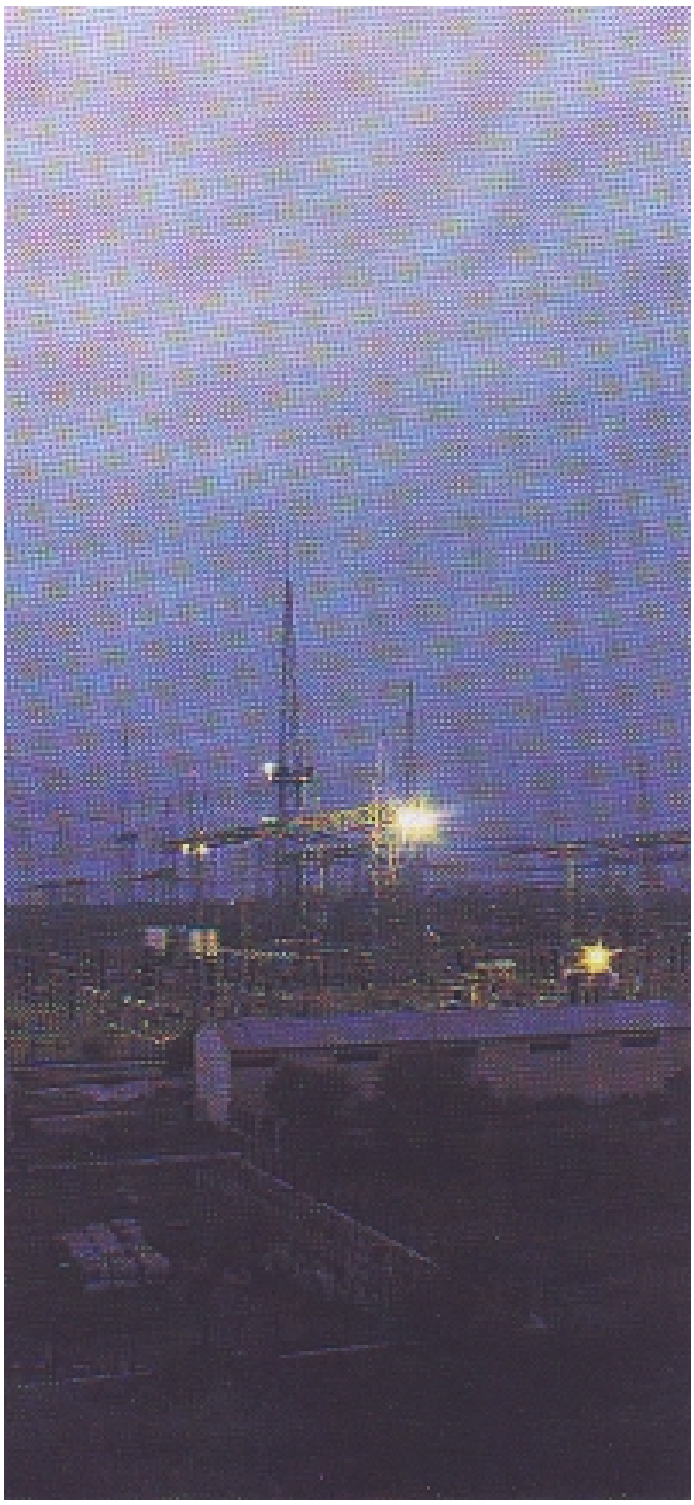
POWERGRID is establishing a chair in IIT Delhi of professor for POWERGRID system Engineering. This shall go a long way in the direction of industry and academics collaboration. This will act as a link between IIT Delhi and POWERGRID in the field of evolving new technology in the field of power system Engineering. It is expected that, this step will help POWERGRID in reaping the benefits of laboratory research through practical implementation.

For this purpose POWERGRID has allocated an endowment of Rs. 30 lakhs.
Further modalities concerned with the regulation, administration, remuneration etc. shall be decided by POWERGRID in consultation with IIT, Delhi.

CONTRACTS MANAGEMENT

POWERGRID with active support from the World Bank and Asian Development Bank, has evolved its procurement strategy based on the latest market trend in the industry. Financial parameters have been introduced as a part of the qualifying requirements to discourage the small bidders and attracting larger companies. However, while switching over to international trend in procurement, interest of indigenous industry are well protected. Both the World Bank and Asian Development Bank have on number of occasions lauded POWERGRID's performance in procurement areas so much so that POWERGRID was recommended to be a consultant to some of the SEBs for such activities. As a manner of fact, one of the recent loans provided by Asian Development Bank to POWERGRID has been termed as a "model case"

During financial year 1997-98, 48 packages have been awarded amounting to Rs. 1,048.10 crores, out of which 6 major packages for Northern Region and Southern Region System Co-ordination and Control Project were awarded aggregating to Rs. 609.06 crores. These packages were awarded in record time inspite of 2 stage bidding.



PROJECT EXECUTION

POWERGRID has developed an Integrated Project and Construction Management System to ensure availability and optimal utilisation of input resources resulting in elimination of time and cost over-run. A 3 tier detailed network developed with Site Contractors, Regional Offices and at Corporate level is monitored at scheduled intervals to integrate all project activities and exercise control measures at every stage of implementation, resulting in completion of project on schedule.

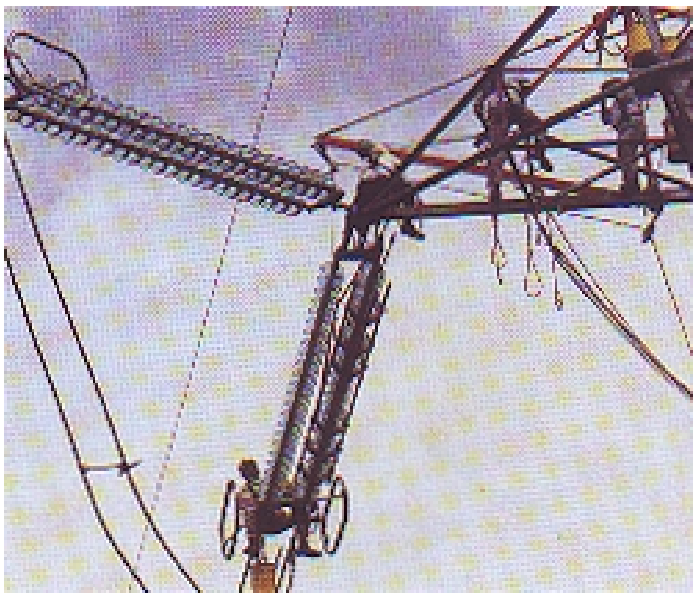
Streamlined computer data based systems to accommodate all neessary input from related resources including vendors etc. have been developed and regular monitoring at all levels along with exception reporting to the top management level is carried out throughout the project implementation cycle resulting in eliminating chances of slippages.

HUMAN RESOURCE MANAGEMENT

POWERGRID believes that its core strength lies in its pepole & cares for their overall growth & development. POWERGRID's human resource consisting of over 7,000 professionals is spread all over the nation with-standing the various geographic, climatic conditions to ensure transmission system availability. Human re-source of POWERGRID, operating in all types of re-gions from hilly terrain to plain and desert to forests and rivers, withstanding sub-zero temperatures, daring the natural and man-made dangers, is truly its most sig-nificant asset. This realization is reflected in the HR philisophy of the organization.

Human resource policies of the organization are aimed at attracting, retaining and maintaining the best of the talent available in the country besides maintaining the morale and motivation of the existing human resource. Various schemes and incentives have been implemented to facilitate their career growth with a view to 'Putting People First'.

Human Resource Development model of POWERGRID has been lauded as one of the best models by Overseas Development Administration, UK and is being used by it in the countries of its operation, besides requesting POWERGRID's association as a HRD consultant. POWERGRID obtained the National HRD Award in 1998 in recognition of its HRD efforts and the impact POWERGRID has created within the nation and beyond. Already more than 1,000 people in workmen category have been trained and redeployed to harness their potential and utilize their competency. The value audit of HRD has revealed that the organiziation has already benefited by over Rs. 20 crores in last five years on account of such developmental activities.

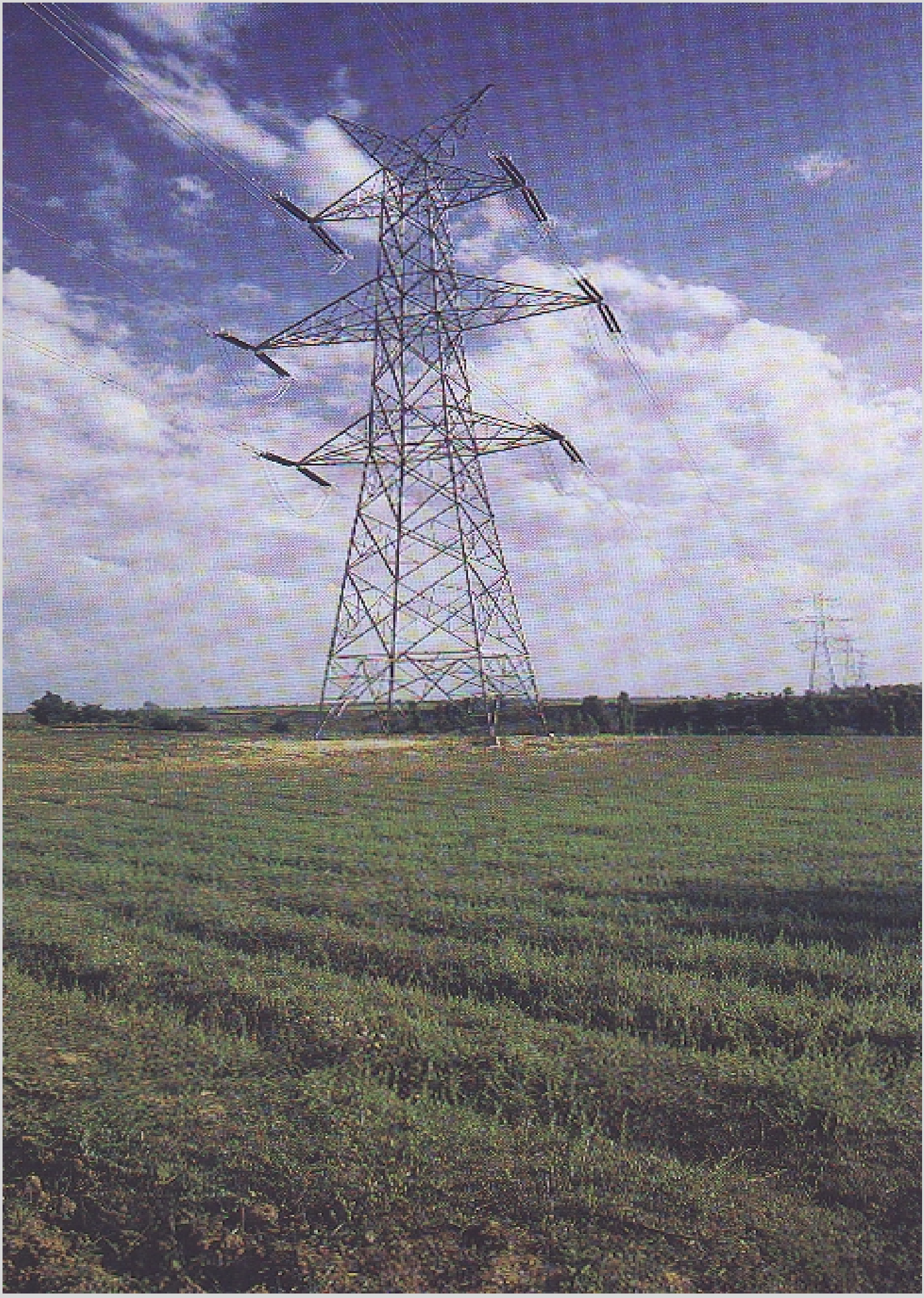


POWERGRID employees have been winning the pres-tigious "Prime Minister's Shram Shri Awards" every year for their exceptional zeal and enthusiasm towards work.

Celebration of 50th Anniversary of Indian Independence

A number of cultural programmes and activities have been organised in POWERGRID to celebrate 50th Anniversary of Indian Independence, which includes :

Annual Cultural event at Nagpur in November 1997.



- A workshop on conditioning monitoroing of EHV Transformers and Shunt Reactors.

- Ranked first in Sports Tournament and Cultural Meet held under the aegis of Ministry of Power, New Delhi.

- A seminar on "Women in Power Sector-Challenges in next Millennium" was held in Shimla in May 1998 participated by the female employees from various organistions.

- Participated in "Pride of India" exhibition held in Jauary 1998 in Vietnam.

- In addition, cultural and sport programmes, exhibitions on handicraft, painting, photography etc. have been organised in various regional cities viz. Nagpur, Jammu, Patna, Chandigarh, Faridabad,etc. to commemorate 50th Anniversary of Indian Independence.

- Organised National Conference on "Corporate Governance" under the aegis of Ministry of Power on July 23, 1998.

POWERGRID has been inculcating cultural integration throughout the organisation by involving family members of the employees to participate in cultural programmes at frequent intervals to bring people closer to each other. POWERGRID is also imparting computer training programme to family members of the employees so as to enrich their skills and mental ability. The integrated culture of POWERGRID is a unique feature not only in the country but also in the world community
wherein people living in small units in remote areas meet together and participate in cultural unification.

SOURCING OF FUNDS

POWERGRID envisages to invest around Rs. 13,000 crores during the 9th Plan and an additional investment of Rs. 5,000 crores towards construction on transmission systems associated with mega IPPs. The International Financial Institutions have actively supported POWERGRID since its very inception. They have already committed around Rs. 6,000 crores and have further earmarked additional similar amount for financing its new projects.

POWERGRID during the current year had accomplished significant success in negotiating financial resources to the tune of Rs. 6,000 crores from leading bilateral/multilateral agencies for implementing its new transmission schemes which are vital for developing the National Grid and for providing missing links to strengthen the regional grids.

The World Bank loan commitments to POWERGRID today amounts to about US $ 1.5 billion. This includes its first direct loan to POWERGRID for an amount of US $ 350 million for POWERGRID System Development Project. Furher, the World Bank has agreed "in principle" to extend the 2nd loan to POWERGRID, on a time slice concept, amounting to around US $ 1.2 billion against a basket of projects spread in a time slice of 5-7 years. POWERGRID has already negotiated the first tranche of US$ 450 million loan.

The Asian Development Bank has extended POWERGRID a first sectoral loan of US$ 275 million against a group of transmission projects in all the regions including a load despatch project in North-Eastern Region & has further agreed "in principle" as indicated above to extend another US$ 250 million loan for various new projects.

The Overseas Economic Co-operation Fund, Japan has already provided loans amounting to Yen 32.754 billion towards the implementation of transmission system associated with the Gas Power Projects of Gandhar, Kathalguri and Faridabad. The OECF has further preappraised POWERGRID for extending another US$ 400 million loan primarily for Talcher-II,HVDC Back-to-Back
Station.

POWRGRID has also negotiated with the Export-Import Bank of Japan for a loan of US$ 275 million for co-financing various projects of Northern Region transmission system.

In addition, European Investment Bank Department for Internationl Development, U.K.,West Merchant Bank, the Banque Indosuez and Credit Nationale, Paris, Industrial Bank of Japan etc. have also financed POWERGRID projects and continue to show keen interest in financing new schemes.

REDEFINING THE GREEN BOUNDARIES

The Indian power sector has gone through a phenomenal growth during last three decades. but such a growth has accompanied serious impact on environment. Virtually
everyday, concerned citizens and NGOs complain that power projects have indiscriminately degraded the natural
resources or have been insensitive to socio-cultural issues. However, it is heartening to note that POWERGRID's activities like construction of transmission line and its subsequent operation and maintenance are non-polluting in nature and its environmental impact are also negligible and restricted to Right-of-Way only. Another crucial feature is the inherent flexibility available in routing of power transmission lines and locating sub-stations, which help to great extent in avoiding envirnmentally sensitive areas such as fragile ecosystems with their inherent biodiversity,
dense human habitats and areas of cultural significance.

In spite of the relative advantages, POWERGRID keeping in mind the importance of sustainable development has decided to address potential environmental and social
implications through a well defined policy and procedures called "Environmental and Social Policy & Procedures" (ESPP). Which describes the operational measures that have been taking place to ensure that the environment and social assessment and management process is fully integrated into the typical project cycle. The three key principles of POWERGRID's ESPP are Avoidance, Minimisation and Mitigation.

The Company took the initiative by organising the first ever National Consultation in Asia on 12th June, 1997, in which ESPP was put-forth to public and inviteed from Ministry of Power, MOE&F, CEA, State Electricity Boards, Allied Organisations, Academia, NGOs to get their feedback in an open and transparent manner to finalise the ESPP.

The most striking feature of the ESPP other than environmental & social management and progressive entitlement framework is taking all stakeholder including the general public into confidence through public consultation at each step of project implementation.

We have fully galvanised our resources to implement ESPP. Socio-economic survey for forthcoming Sasaram and Kolar HVDC substations & development of Rehabilitation Action Plan (RAP) in line with ESPP by A.N. Sinha Institute, Patna and Indian Institute of Management, Bangalore respectively and public consultation enroute of East-North
Interconnector and Talcher-II project are the testimony of ESPP implementation.

The ESPP developed by POWERGRID has been accepted by World Bank and highly appreciated by different multilateral agencies like, ADB and OECF etc. The WS Atkins,
London, UK a leading International consultant in the field of Environmental studies has commented : **"The ESPP is the first documents of its kind for any Indian utility and, as far as known, for any Private Sector business as well. As such, it provides an excellent model for other Governments and private Sector Companies to adopt for their own purpose. POWERGRID should consider marketing this newly acquired expertise on a consultancy basis."**

ASSURING QUALITY

In POWERGRID, quality is a way of life. The Corporation is fully committed to provide the best possible time-bound quality services to its customers in all areas of its operations. The organization's quality vision encompasses design, engineering, execution, operation & maintenance and related management functions.

POWERGRID is the first Indian power utility to get ISO 9001 Quality Systems Certification by NQA-Quality System Registrar, UK for turnkey execution of Transmission

Line and Sub-station projects upto 400 kv inclusive of design, engineering, procurement, construction, operation and maintenance. POWERGRID also obtained the certificate of registration for its Quality Management System from Electricity Association Quality Assurance (EAQA).

SECTORAL DEVELOPMENT

Regulatory Framework

To support the pace of economic liberalisation, the reforms in the power sector in India are now in full swing and Union as well as the State Governments are putting in sincere efforts to encourage investment. As the first step, constitutional framework has been

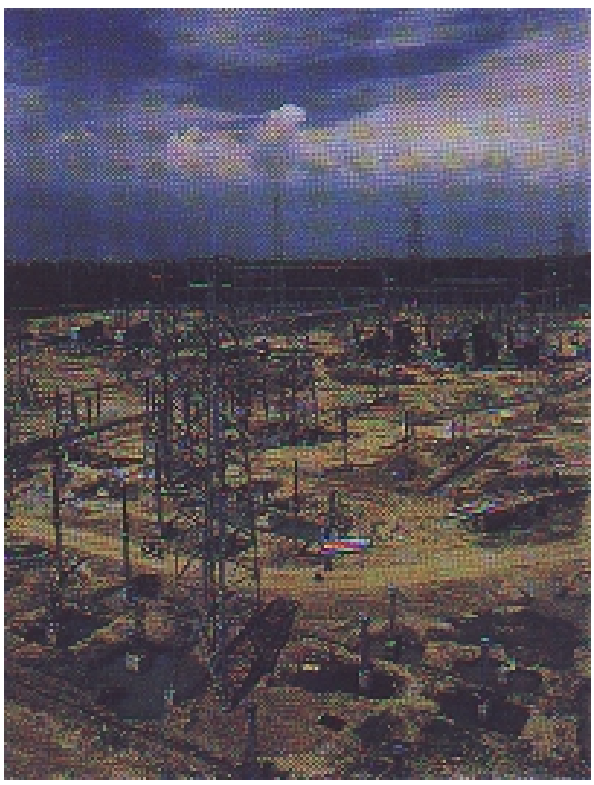
provided to establish Regulatory Mechanism by creating quasi-judicial bodies that is Central Electricity Regulatory Commission and State Electricity Regulatory Commission at the centre and State level respectively for regulation of tariff etc.

The Government-owned State Electricity Boards are also proposed to be restructured. As per Electricity Laws (amendment Bill 1998) each State shall have a Government owned Independent Transmission Utility, for development of transmmission system in the State. POWERGRID shall be responsible for development of the regional and inter-regional transmmission systems. The amended Electricity Laws also stipulate that the Load Dispatch funcion shall be with the State transmmission Utility within a State and with POWERGRID at the regional level.

Private Participation in Transmmission

POWERGRID's persistent efforts to accord the deserved priority to the transmmission sector, which has so far eluded this vital sector of Indian power system, has been duly recognised, as your company has now been statutorily acknowledged as Central National Transmmission Utility of the country by the Government.

Transmmission has been recognised as a separate business activity by the amendments made in Electricity Laws in India. The doors have now been opended for private sector participation exclusively in this field. To develop adequate transmmission system, funds to the tune of Rs. 60,000 crores needs to be invested in the next five years time. As per the provision of the amended laws,the main
transmmission utilities may invite private sector to build specific segments of the transmmission system in their respective areas on ownership basis through transmmission licensee shall be contracting only with the concerned main transmmission utility, and get paid an availability linked fixed monthly transmmission charge. The assets so built by the private utility will be fully under control of the main transmission utility.POWERGRID is likely to play pivotal role in inviting private sector investment by inviting offers and selecting the parties through competitive bidding for formation of joint venture and/ or for becoming a transmmission licensee.



Power Trading Corporation

It is being endeavoured to facilitate trade of power through an independent agency which shall have sole responsibility to negotiate sale and purchase of power. POWERGRID being the only transmission utility in the central sector, links the bulk generators and their beneficiaries in Indian power system. Therefore it is the natural
choice for development of trade of power Being a prime national utility and playing a facilitator role in power sector development, it has committed itself to have a major stake in establishing the mechanism for power trading through institutionalising Power Trading Corporation and will lead the way for providing the much needed confidence to investors in this field. It shall be playing an
instrumental role in development of Mega IPPs and in Power Trading by establishing requisite transmmission network.

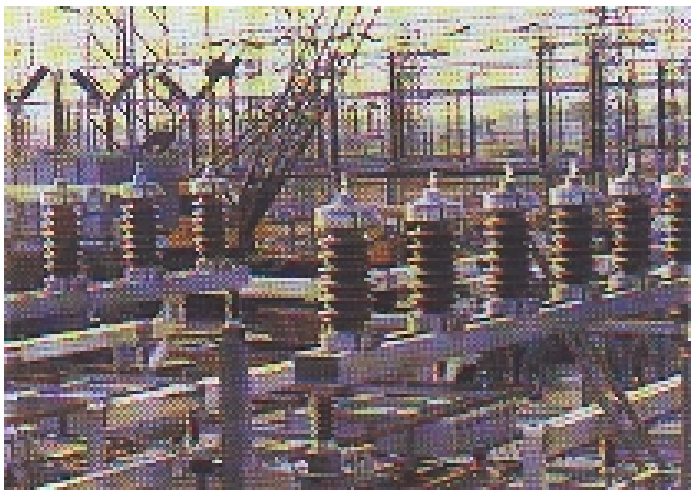
POWER TRANSFER TO NEIGHBOURING COUNTRIES

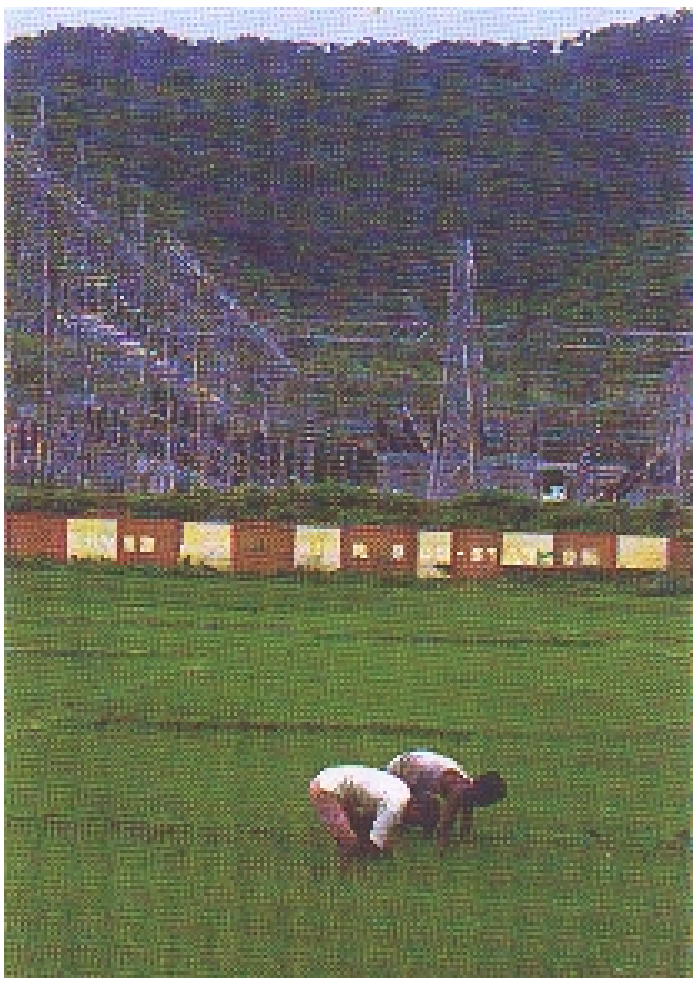
Bangladesh

In line with the policy of the Government of India to strengthen friendly relations with neighbouring countries, projects under electricity exchange programme has been taken up with Bangladesh. Besides geographical location of the two countries the technical parameters are also very favourable to interconnect the two countries and extend mutual benefit through economic exchange of power.

Both India and Bangladesh are endowed with resource potential, while India has coal and hydro resources, Bangladesh has huge gas reserves which besides other uses can be utilised for power generation. Interconnection between two countries would help in a big way for overall development of the region. Thus, it is inevitable to have trans-national links which can adequately handle bulk exchange of power even under contingencies.

POWERGRID is considering 2 interconnections between the two countries by providing a 220 KV AC inter-links between Eastern Region of India and Western Bangladesh and another between Eastern Bangladesh and North-Eastern Region of India which require comparatively low investments. The system would enable exchange of about 150 MW of power.





The success by and large, depends upon a sound institutional and commercial arrangement which is being taken up under the aegic of ADB. The

arrangement would facilitate preparation of the commercial aspects that need to be covered in the power purchase/ sale agreement between the two countries and assist in arriving at a settlement on the basis of international commercial practices.

Bhutan

POWERGRID had been purchasing power from Chukha HEP in Bhutan for the past few years to sell the same in various Regions in India through massive transmmission network constructed by POWERGRID. During the year 1997-98, sale of power to the tune of over Rs. 165 crores has been made.

Nepal

The Mahakali Treaty [Article (2b)] between Governments of India and Govt. of Nepal provides that Nepal shall have the right to receive 70 million units of energy on a continuous basis annually, free of cost, from the date of entry into force of the treaty. For this purpose, India is required to construct a 132 KV transmmission line upto Mahendra Nagar, Nepal on the Indo-Nepal Border from the Tanakpur Power Station. A 132 kv transmmission line Tanakpur upto this point will be constructed by POWERGRID The capital cost is being borne by Government of India. The project is likely to be executed in one and half years time.

VENTURING INTO TELECOM BUSINESS

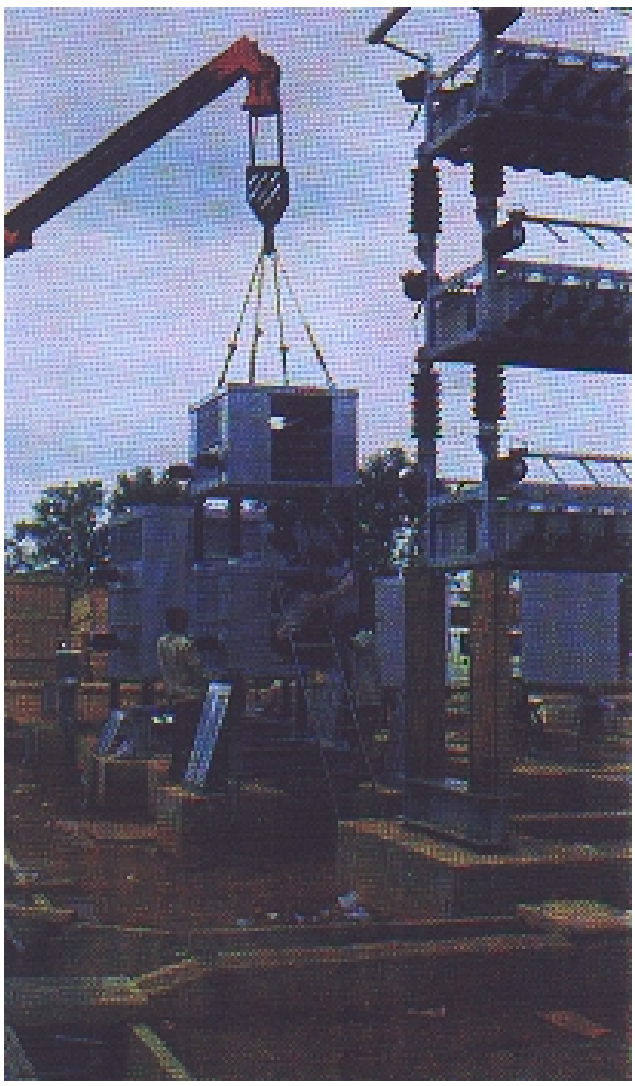
POWERGRID's exiting transmmission network through out the country provide an excellent opportunity to establish a backbone for national information infrastructure providing Long Distance Telecommunication Services. Such existing network provide a ready-made right-of-way for installation of Overhead Optical Fibre Ground Wires (OPGW) for carrying high speed audio-video and data signals. Telecommunication network could thus be established over an already existing lattice system and would provide extremely robust support in remarkably cost effective manner. POWERGRID plans to diver- sify its operations into telecommunication business in line with the leading worldwide power utilities like NGC of UK, IVO of Finland, etc. As per the recommendations and directive of Cabinet Committee on infrastructure in September 1997, POWERGRID has already prepared a preliminary plan for embarking upon telecommunication business in a phased manner.

Towards exploiting the benefit from such ventures, number of business models are available and POWERGRID need to embark upon in this business based on a most appropriate model. It is also evident that as far as possible, POWERGRID, on its own, need to develop such facilities to maximise benefit. Assistance from international consultants having adequate practical experience in this field has been sought under World Bank Financing. Appointment of such consultant has already been taken up. The consultants is expected to be appointed by January, 1999. A suitable project report will then be preparred for further processing for Government approval and implementation.

Optical fibre connection is at present available on POWERGRID's Itarasi - Jabalpur Transmission Line in Madhya Pradesh. M/s Bharati Telenet Limited (BTL) being the sole licensee in this area has approached POWERGRID to utilise this facility for basic telecom services.M/s BTL being the only authorised licensee in this area, the proposal for leasing active band width on this line cannot be tendered and hence need to be negotiated mutually. In order to ensure reasonable offer and transparency in processing, POWERGRID intends to constitute a committee of eminent experts.

EVOLVING ROLE OF POWERGRID

In its brief but significant appearance in the Indian Power Sector, POWERGRID has opended up new vistas ushering in "Change" in every facets of Electric Power Utility Services in the country. POWERGRID is evolving as a "facilitator-cum-change Agent" to oversee the mainfestation of change in redefining and restructuring the Indian Powe Sector. The future perspective of POWERGRID thus entails multiple role of POWERGRID, with various business areas, such as, Povider of Transmmission Services, System Operator, Energy Accounting and System Administrator and Facilitator in Energy Trading. Further, POWERGRID also plans to diversify in the areas of Distribution, Telecommunication,etc., through Joint Ventures besides providing its expertise as Consultancy Services in all aspects of Transmmission & Distrubution of Power.



PARTICULARS OF EMPLOYEES

The particulars of employees of the Corporation who were in receipt of remuneration in excess of the limit prescribed under Section 217 (2A) of the Companies Act, 1956 is given in Annexure-I to this Report.

CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO

As regards the requirement of the disclosure under Section 217 (1) (e) of the Companies Act,1956 read with Rule 2 of the Companies (Disclosure of Pariculars in the Report of Board of Director) Rules, 1988 ralating to conservation of energy, technology absorption and foreign exchange earnings and outgo information is given in Annexure-II to this Report.

COMPTROLLER AND AUDITOR GENERAL'S COMMENTS

Review of the accounts for the year ended 31st March, 1988 by the Comptroller and Auditor General of India u/s 619 (4) of the Companies Act, 1956 along with Directors' comments on the point raised by the CAG is given in Annexure-III to this Report.

POWERGRID'S BOARD

Many changes took place in the Board of Directors of the company during the year. Shri R.P.Singh assumed the charge of the post of Chairman & Managing Director w.e.f. August
23, 1997. He held the post of Director (Personnel) from September 11, 1995 to August 22, 1997 with additional current charge of the post of Chairman & Managing Director from November 1, 1996 to August 22, 1997. Dr. V.K.Garg was appointed as Director (Finance) w.e.f Septmber 17, 1997. Shri Bhanu Bhushan assumed the office of Director (Operation) w.e.f November 13, 1997 and Shri Binay Kumar was inducted to the Board as Director (Personnel) w.e.f July 7,
1998. Shri Anil Razdan, Joint Secretary (Systems), Ministry of Power was appointed on the POWERGRID Board in place of Shri J. Vasudevan, Joint Secretary, Ministry of Power
w.e.f August 11, 1998. Board of Directors wish to place on record the contribution and guidance received from Shri J. Vasudevan. In addition, three part time professional Directors were appointed to the Board w.e.f. July 27, 1998 viz. Shri.R.V.Shahi, CMD, BSES Ltd., Shri R. Parthasarathy, MD, ILFS and Dr. Ramesh Gupta, Professor, IIM, Ahemedabad.

Shri A.L. Jaggi, Director (Operations), laid down the office on May 31, 1997 on attaining the age of superannuation.

ACKNOWLEDGEMENTS

The Directors place on record their grateful thanks for the guidance and co-operation extended all through by Ministry of Power, Central Electricity Authority, Ministry of Home
Affairs, Deptt. of Economic Affairs, Ministry of Finance and other concerned Govt. departments. Agencies at the Central and State level without whose active support the achievements by the Corporation during the year under review would not have been possible.

The Directors take this opportunity to thank the Principal Director of Commercial Audit and Ex-Office Member Audit Board-III for the co-operation during the year. Your Directors also acknowledge the valuable suggestions and guidance received from the statutory auditors (M/s. B.M. Chatrath & Co.,M/s.Umamaheshwar Rao & Co. and M/s Rasool Singhal & Co.) during the audit of accounts of the company for the year under review.

Your Directors further wish to place on record their sincere thanks to the various national/international financial institutions/banks for the continued trust and confidence reposed by them by rendering the continuous timely assistance and partronage for successful implementation of the various project by the company.

Last but not the least, the Board of Directors place on record the valuable contribution and appreciation for the support and the co-operation extended by each member of the POWERGRID family in the affairs of the company.

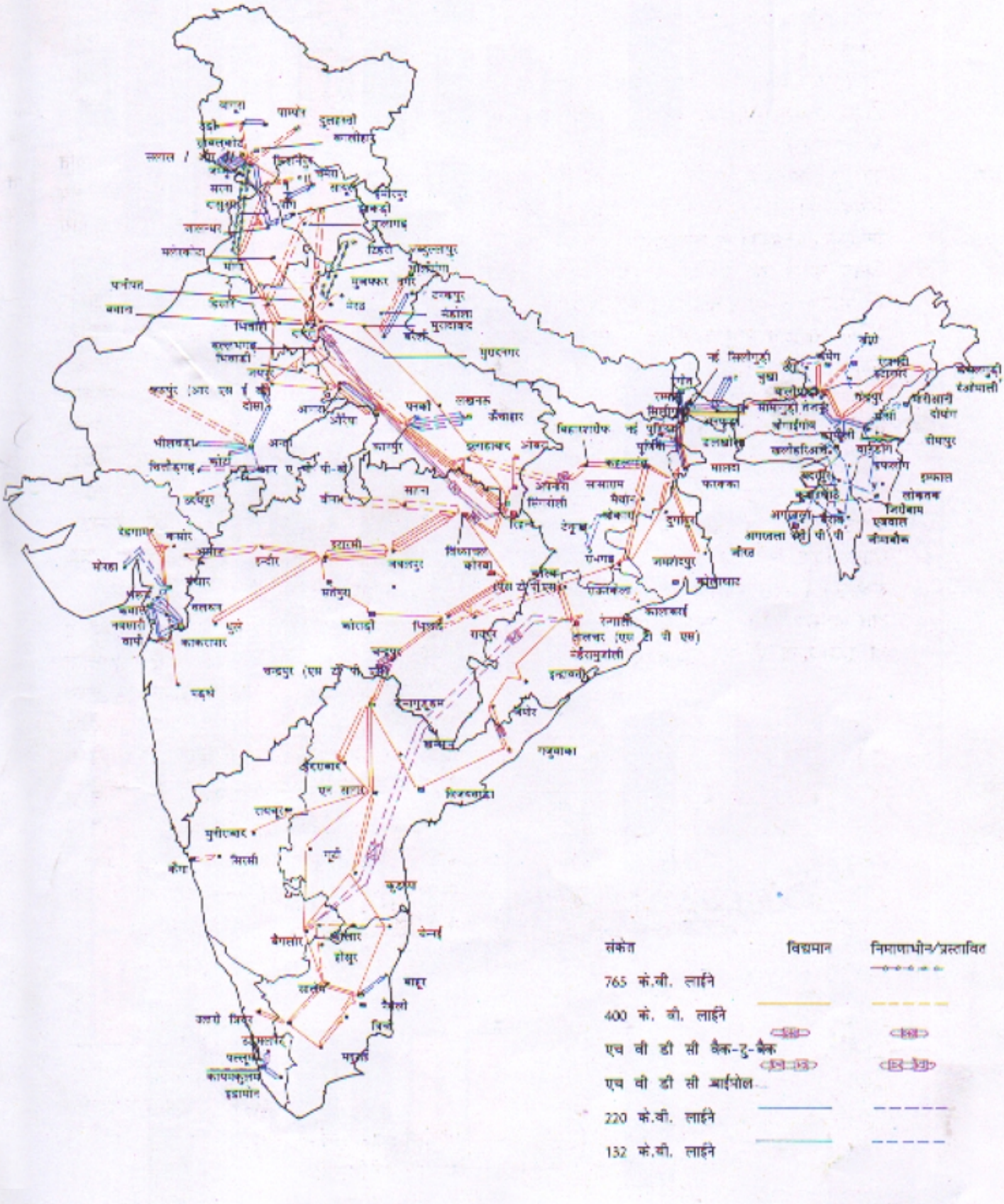
on behalf of the board

(R.P. Singh)
Chairman & Managing Director

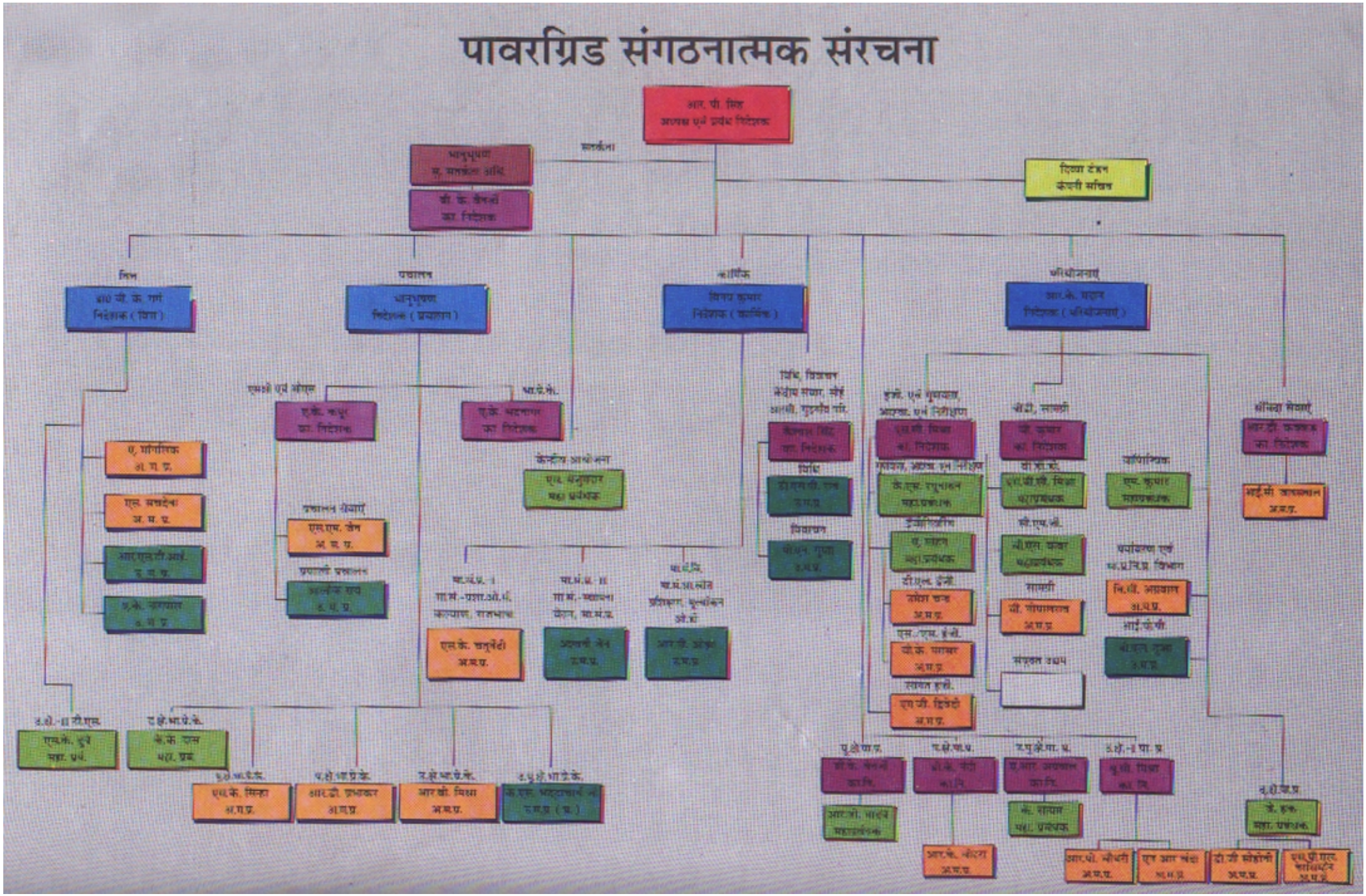
Dated : 28th August, 1998
Place : New Delhi

भारत का विद्युत मानचित्र

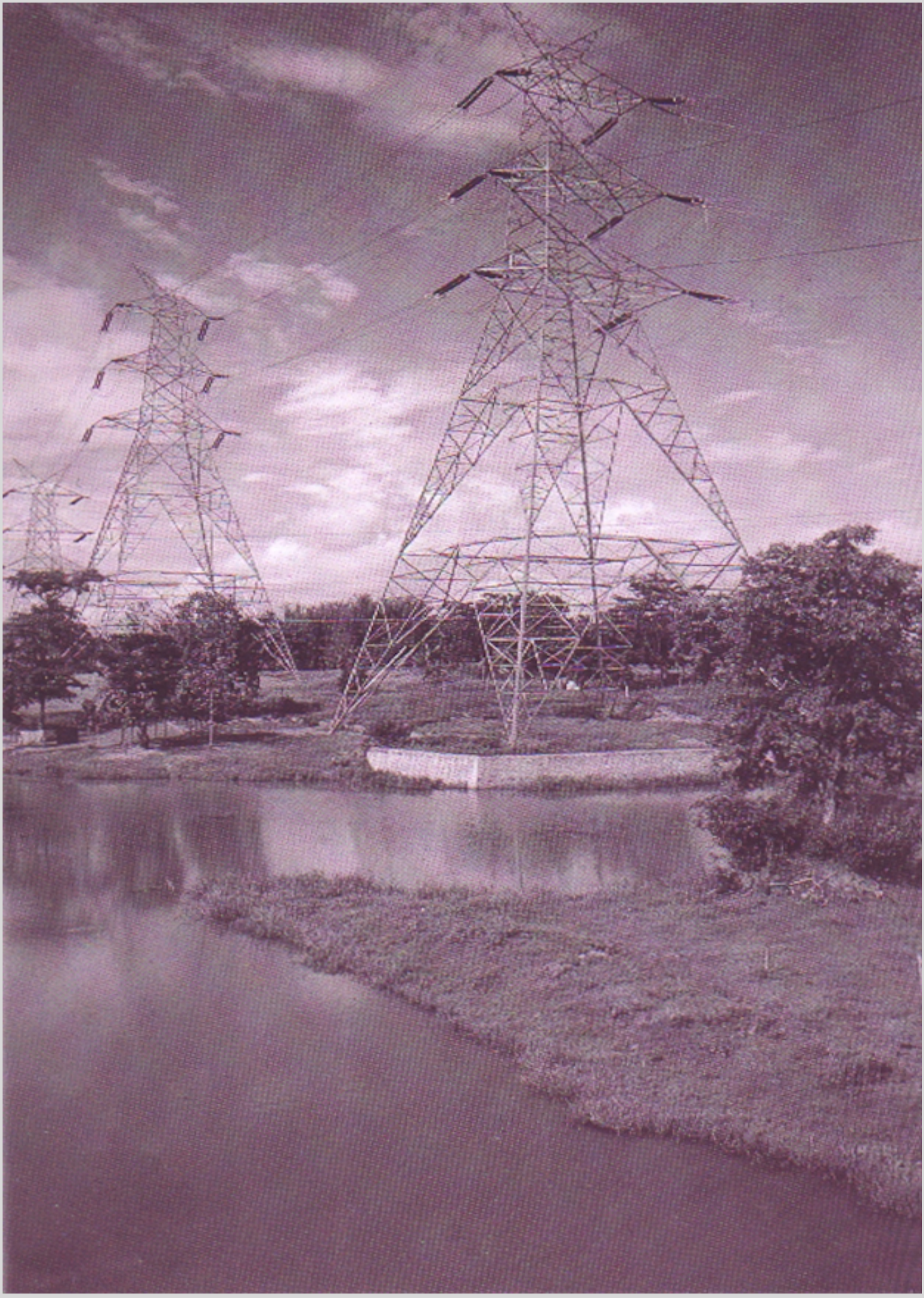
(पावरग्रिड लाइनें)



पावरग्रिड संगठनात्मक संरचना



ANNUAL ACCOUNTS



FIVE YEAR SUMMARY
FINANCIAL POSITION

(Rs. in Lacs)

	1997-98	1996-97	1996-96	1994-95	1993-94
(A) WHAT THE COMPANY OWNED.					
Gross Fixed Assets	809560	558218	549168	506654	422865
Less : Depreciation	165348	128348	95076	63002	32147
Net Fixed Assets	644212	429870	454092	443652	390718
Capital Work-in-Progress & Construction					
Stores & Advances	366536	451046	308152	197906	170160
Current Assets, Loan & Advances	116921	116060	110946	97110	91682
Total (A)	1127669	996976	873190	738668	652560
(B) WHAT THE COMPANY OWED :					
Borrowing From :					
- Govt. of India	145622	117559	88517	57703	35405
- Financial Institutions	16901	17579	18357	17146	19514
- Foreign Currency Loans	215326	169545	140935	123887	106980
- Cash Credit	---	---	---	---	4
- Other Loans / Bonds	181196	172488	142153	113151	105404
Current Liabilities & Provisions	72616	57119	56141	42087	47376
Total (B)	631661	534290	446103	353974	314683
(C) NET WORTH OF THE COMPANY REPRESENTED BY :					
(i) Equity Capital (Including Deposit)	303654	302004	299224	297224	288912
(ii) Free Reserves and Surplus	149141	116996	88621	62026	41767
(iii) Less : Misc. Exp. to the extent not Written Off	435	608	638	713	828
Total (C)	452360	418392	387207	358537	329851
(D) COMMITTED RESERVES :					
(i) Capital Reserves	11206	11827	11206	11206	8026
(ii) Grants in Aid	32442	32467	28674	14951	---
Total (D)	43648	44294	39880	26157	8026
Total (B+C+D)	1127669	996976	873190	738668	652560
CAPITAL EMPLOYED (Net Fixed Assets + Net Current Assets)	688517	488811	508897	498675	435024
(E) RATIO					
Net Profit to Capital Employed (%)	4.90	6.25	5.42	4.16	4.32
Net Profit to Net Worth (%)	7.45	7.31	7.13	5.79	5.70
Net Worth per Rupee of Paid-up Capital (In Rs.)	1.49	1.39	1.29	1.21	1.14
Debt/Equity Ratio	1.24:1	1.14:1	1.01:1	0.87:1	0.87:1
Liquidity Ratio	1.61:1	2.03:1	1.98:1	2.31:1	1.94:1

FIVE YEAR SUMMARY

OPERATING RESULTS

(Rs. in Lacs)

	1997-98	1996-97	1995-96	1994-95	1993-94
(A) EARNED FROM :					
Transmission Charges	124653	94322	86119	71686	55854
Sale of Power	16535	10127	10736	7947	8614
Consultancy & other income	2280	2266	1503	1360	409
Total Earning	143468	105815	99358	80993	64877
(B) PAID AN PROVIDED FOR :					
Purchase of Power	13114	7158	7566	5037	5474
Employees Remuneration & Benefits	8534	6338	5616	4219	2999
Transmission Expenses	4013	2944	2339	1863	1351
Administration Expenses	5885	4234	3774	2980	2380
Other Expenses (Including Prior Period Adj.)	-2116	244	-455	514	2000
Deffered Revenue Expenditure	179	181	159	136	150
Provisions	453	1169	61	84	173
Total Expenditure (Excl. Depr. & Interest)	30062	22268	19060	14833	14527
Profit before Depreciation & Interest	113406	83547	79298	66160	50350
Depreciation	36626	33004	32040	28908	16663
Interest & Finance Charges	34574	19967	19662	16492	14900
Net Profit after Depreciation & Interest but before Tax	42206	30576	27596	20760	18787
Provision for Tax	8490(*)	1	1	--	--
Net Profit after Tax	33716	30575	27596	20760	18787
Divident	2000	2000	1000	500	500

(*) Income Tax of Rs. 3951 lacs for the year 1996-97 has also been provided during 1997-98.

REVENUE EXPENDITURE ON SOCIAL OVERHEADS
FOR THE YEAR ENDED 31ST MARCH, 1998

(Rs. in Lacs)

Sl.	Particulars	Township	Education & School Facilities	Medical Facilities	Subsidised Transport	Social & Cultural	Subsidised Canteen Activities	Total	Previous year
1.	Payment to Employees	---	35	545	11	80	129	800	613
2.	Material Consumed	15	---	---	---	---	---	15	12
3.	Rates & Taxes	2	---	---	---	---	---	2	8
4.	Welfare Expenses	1	41	107	8	224	12	393	432
5.	Other Including Repair & Maintenance	226	---	---	---	---	---	226	172
6.	Depreciation	411	---	---	---	---	---	411	322
7.	Sub-total (1 to 6)	655	76	652	19	304	141	1847	1559
8.	Less : Recoveries	29	---	---	---	---	---	29	32
9.	Net Expenditure (7-8)	626	76	652	19	304	141	1818	1527
10.	Previous year	469	60	504	43	321	130	1527	---

ACCOUNTING POLOCIES

1.0 Capital Reserve

1.1 Grants-in-aid received from Central gevernment or other authorities towards capital expenditure for projects and betterment of transmission systems are shown as grants-in-aids under reserves and surplus till the utilisation of grant. However , grants received for specific depreciable assets are shown under reserves and surplus while the same are under construction. On capitalisation such grants-in-aid are treated as deferred income and recognised in the profit and loss account over the period and in proportion in which the depreciation on these assets is provided.

2.0 Fixed Assets

2.1 In the case of commisioned assets, Deposit work/cost plus contracts where final settelment of bills with contractors is yet to be effected, capitalisation is made on provisional basis subject to necessary adjustments in the year of final settlement.

2.2 Assets and systems common to more than one transmission System are capitalised on the basis of engineering estimates/ assessment.

2.3 Net pre-commissioning expenditure is adjusted directly in the cost of related assets and systems.

2.4 The cost of land includes provisional deposits, payments/ liabilities towards compensation, rehabilitation and other expenses, but does not include the deposits/ advances/ expenditure incurred wherever possession of land is still to be taken.

2.5 Capital expenditure on assets not owned by the company is reflected as a distinct item in capital work in progess till the period of completion and thereafter in fixed assets.

3.0 Mandatory spares

3.1 Mandatory spares in the nature of sub - station equipments/ capital spares i.e. stand by/service/ rotational equipment and unit assemblies either procured alongwith the equipments or subsequently are being captalised and depreciation is charged as per rates applicable to those equipments.

3.2 Mandatory spares of consumable nature, transmission line items are treated as inventory items,after commissioning of the line.

4.0 Treatment of Expenditure during Construction

4.1 Incidental expenditure during construction (net) including Corporate Office expenses allocated to the projects prorata to the annual capital expenditure for the year is apportioned to capital work-in-progress on the basis of accretions there to. Interest during construction is apportioned on the closing blance of capital work-in-progress.

4.2 Deposit work/cost plus contracts are accounted for on the basis of statement of account received from the contractors.

4.3 Claims for price variation/ exchange rate variation in case of contracts are accounted for on acceptance.

4.4 Expenses for the year, common to operation and construction activities are allocated to Profit and Loss Account and incidental expenditure during construction in proportion of ; i) Transmission charges/ Net sales (sale of Power minus purchase of Power) to annual capital outlay in the case of Corporate Office and ii) Transmission charges/ Net sales (sale of Power minus purchase of Power) to accretions to capital work-in-progress in the case of projects.

5.0 Conversion or Translation Foreign Currency Items

5.1 Foreign Currency loans/deposits/ liabilities are translated/converted with referance to the rates of exchange ruling at the year end. Difference is transferred to capital work-in-progress/fixed assets in case of capital assets and is charged off to revenue, in case of current assets.

6.0 Valuation of Inventories

6.1 Inventories, other than scrap, are valued at cost on weighted average basis.

6.2 Steel scrap and conductor scrap are valued at estimated realizable value or book value whichever is less and other scrap is accounted for as and when sold.

7.0 Recognition of Income

7.1 Transmission charges are accounted for based on tariff rate notified by Govt. of India under the Electricity Supply Act, 1948. In case of transmission projects where tariff has not been notified, transmission charges are being billed as per Bulk power Transmission agreements or as decided by the concerned regional electricity boards or on norms and parameters followed by Government of India for fixation of tariff.

7.2 Sale of power purchased from M/S Chukha Hydel Power Corporation Ltd. Bhutan is billed and accounted for on the basis of a composite rate consisting of power tariff as notified by GOI from time to time and the transmission tariff as per para 7.1.

7.3 Surcharge recoverable from debtors is accounted for on receipt basis.

7.4 Income tax recoverable from debtors is accounted for on receipt basis.

7.5 Liquidated damages/warranty claims and Interest on advances to suppliers, are accounted for on acceptance/ settlement.

7.6 Income from Consultancy/ Contract Service is being accounted for on the basis of actual progress/technical assessment of work executed except in cases where contracts provide otherwise.

8.0 Expenditure

8.1a. Depreciation is provided on straight line method as per rates laid down under the Electricity (Supply) Act, 1948. In respect of assets, where rates have not been laid down under the aforesaid Act, Depreciation is provided on straight line method as per rates prescribed under the Income Tax Act, 1961.

b. Depreciation on fixed assets is being provided from the year following that in which the assets become available for use, in acordance with the Electricity (Supply) Act, 1948, in preference to the Accounting Standard 6 issued by the Institute of Chartered Accountants of India.

c. Depreciation is provided retrospectively to give effect of foreign exchange fluctuations relating to the fixed assets, in accordance with the Electricity (Supply) Annual Accounts Rules, 1985, in preference to the Accounting Standard 6 issued by the Institute of Chartered Accountants of India.

d. Capital expenditure on assets not owned by the company is amortized over a period of 4 year from he year following the year in which the first line/sub-station of the project comes into commercial operation and thereafter from the year following the year in which the relevant assets have been completed and become available for use.

8.2 In the case of transmission system, assets of National Thermal Power Corporation Limited (NTPC), National Hydro-Electric Power Corporation Limited (NHPC), North-Eastern Electric Power Corporation Limited (NEEPCO) and Neyveli Lignite Corporation Limited (NLC) transferred w.e.f. 1.4.92 Jammu and Kashmir Lines w.e.f. 1.4.93 and Tehri Hydro Development Corporaion Limited (THDC) w.e.f. 1.8.93, depreciation has been charged based on gross block as indicated in transferors books with necessary adjustments so that the life of the assets as laid down under Electricity (Supply) Act, 1948 is maintained.

8.3 Plant and Machinery, loose Tools and items of scientific appliances included under different heads of assets, costing either Rs. 5000/- or less or with written down value of Rs. 5000/- or less as at the beginning of the year are charged off to revenue.

8.4 Insurance reserve is created @ 0.1% on gross value of Fixed assets as at the close of the year in respect of future losses which may arise from uninsured risks expect for value halls of HVDC and fire risk for HVDC equipments & SVC substations.

8.5 Expenses on Training and Recruitment, Research and Development are charged to revenue.

8.6 Pre-paid expenses, prior-period expenses and income items Rs. 5,000/- and below are accounted to appropriate heads of accounts.

8.7 Bonds issue expenses/front-end fees are being written off over the period of bonds/loans.

9.0 Treatment of Retirement Benefits.

9.1 Gratuity is provided on actuarial valuation basis.

9.2 The liability for leave encashment of employees is accounted for on actuarial valuation basis.

BALANCE SHEET
AS AT 31ST MARCH 1998

(Rupees in Lacs)

	Schedule No.			As At 31st March, 1998	As At 31st March, 1997
SOURCES OF FUNDS					
SHAREHOLDER'S FUNDS					
Capital	1		303,654		302,004
Reserves and Surplus	2		192,789		161,290
				496,443	463,294
LOAN FUNDS	3				
Secured loans			243,844		180,315
Unsecured loans			315,201		296,856
				559,045	477,171
				1,055,488	940,465
APPLICATION OF FUNDS					
(FIXED CAPITAL EXPENDITURE)					
FIXED ASSETS	4				
Gross Block		809,560			558,218
Less : Depreciation		165,348			128,348
Net Block			644,212		429,870
Capital Work - in - Progress	5		218,175		365,567
Construction stores and advances	6		148,361		85,479
				1,010,748	880,916
CURRENT ASSETS, LOANS & ADVANCES	7				
Inventories		13,529			10,796
Sundry debtors		73,417			51,067
Cash and Bank balances		6,939			19,835
Other current assets		14,592			26,799
Loans and Advances		8,444			7,520
			116,921		116,017
Less : CURRENT LIABILITIES & PROVISIONS	8				
Liabilities		69,901			54,872
Provision		2,715			2,204
			72,616		57,076
Net current assets				44,305	58,941
Miscellaneous expenditure (to the extent not written off or adjusted	9			435	608
				1,055,488	940,465
Contingent liabilities	10			85,883	62,836
Notes on accounts	17				

Schedule 1 to 17 and Accounting Policies from integral part of Accounts.

(DIVYA TANDON)
Secretary

(Dr. V. K. GARG)
Director (Finance)

(R. P. SINGH)
Chairman & Managing Director

As per our report of even date

For RASOOL SINGHAL & CO.
Chartered Accounts
(M. H. SINGHAL)
Partner

For UMAMAHESHWARA RAO & CO.
Chartered Accounts
(V.V.S. RAVI)
Partner

For B.M. CHATRATH & CO.
Chartered Accounts
(P.R. PAUL)
Partner

Place : New Delhi
Date : 26th June, 1998

PROFIT AND LOSS ACCOUNTS

FOR THE YEAR ENDED 31ST MARCH, 1998

(Rupees in Lacs)

	Schedule No.			For the year Ended 31st March, 1998	For the Year Ended 31st March, 1997
INCOME					
Transmission charges				124,653	93,422
(Includes Income Tax Recovery of Rs. 1250 Lacs)					
Sale of Electric Power				16,535	10,127
Consultancy / Project Management and Supervision Fees				767	578
Other Income	11			1,513	1,688
				143,468	105,815
EXPENDITURE				13,114	7,158
Purchase of Electric Power					
Transmission and Administration Expenses	12	23,766			18,612
Depreciation		36,832			33,203
Prior Period Adjustment (Net)	16	-2,295			278
			58,303		52,093
Less : Incidental expenditure during construction transferred to Capital Wok-In-Progress			5,548		5,353
	15A			52,755	46,740
Deferred Revenue Expenditure Written Off				179	181
Provision				453	1,169
Loss on Fixed Assets discarded/Sold				187	24
	13			66,688	55,272
				76,780	50,543
Profit (before interest & finance charges)			68,895		48,339
Interest and finance charges					
Less : Interest & finance charges transferred to capital Worl-In-Progress	14		34,321		28,372
	15B			34,574	19,967
Profit for the year (before tax)				42,206	30,567
Provision for taxation for the year				4,539	1
Provision for taxation for the earlier year				3,951	___
Profit after tax				33,716	30,575
Balance Profit from Last Year's account				180	921
Self Insurance appropriated earlier brought back				800	___
Proposed Divident				2,000	2,000
Tax on Proposed Dividend				200	200
Transfer to Bonds Redemption Reserve				12,500	11,216
Transfer to Insurance Reserve					400
Transfer to General Reserve				17,500	17,500
Balance of Profit carried over to Balance Sheet				2,496	180

(DIVYA TANDON)
Secretary

(Dr. V. K. GARG)
Director (Finance)

(R. P. SINGH)
Chairman & Managing Director

As per our report of even date

For RASOOL SINGHAL & CO.
Chartered Accounts
(M. H. SINGHAL)
Partner

For UMAMAHESHWARA RAO & CO.
Chartered Accounts
(V.V.S. RAVI)
Partner

For B.M. CHATRATH & CO.
Chartered Accounts
(P.R. PAUL)
Partner

Place : New Delhi
Date : 26th June, 1998

SCHEDULES

SCHEDULE 1 - CAPITAL

(Rupees in Lacs)

	As at 31st March, 1998	As at 31st March, 1997
AUTHORISED		
5,00,00,000 (Previous year 5,00,00,000) equity shares of Rs. 1000/- each	5,00,000	5,00,000
ISSUED SUBSCRIBED AND PAID-UP		
287,86,540 (Previous Year 285,71,540) equity shares of Rs. 1000/- each fully paid up	287,865	285,715
Share capital deposit	15,789	16,289
	303,654	302,004

SCHEDULE 2 - RESERVES AND SURPLUS

(Rupees in Lacs)

	Balance as at 31st March, 1997	ADDITIONS	DEDUCTIONS	Balance as at 31st March, 1998
Capital Reserve	11,827	___	621	11,206
Grants in aid	32,467	___	25	32,442
Insurance Reserve	800	629	800	629
General Reserve	92,500	17,500	___	110,000
Bonds Redemption Reserve	23,516	12,500	___	36,016
	161,110	30,629	1,446	190,293
Surplus as per Profit & Loss Accounts	180			2,496
	161,290			192,789

SCHEDULE 3 - LOAN FUNDS

(Rupees in Lacs)

		As at 31st March, 1998	As at 31st March, 1997
SECURED LOANS			
BONDS I SERIES			
a.	16.75% / 17% Taxable 7 years Redeemable non-convertible bonds of Rs. 1000/- each Redeemable at par on 10th/13th March, 1999	3,680	3,680
b.	9% Tax-Free 10 years Redeemable Non-convertible Bonds of Rs. 1000/- each Redeemable at par on 10th March, 2002	3,900	3,900
	Secured by equitable mortgage of immovable properties and hypothecation of movable properties of Kobra & Singrauli Transmission System	7,580	7,580
BOND II SERIES			
a.	15% Taxable 5 years Redeemable non-convertible Bonds of Rs. 1000/- each Redeemable at par on 11th February, 1999	23,600	23,600
b.	10.5% Tax-free 5 years Redeemable non-convertible Bonds of Rs. 1000/- each Redeemable at par on 11th February, 1999	1,400	1,400
	Secured by equitable mortgage of immovable properties and hypothecation of movable properties of Ramagundam Stage-I and II Transmission System & Nagarjuna Sagar-Gooty Transmission Line	25,000	25,000

SCHEDULE 3 - LOAN FUNDS (Contd.)

(Rupees in Lacs)

			As at 31st March, 1998	As at 31st March, 1997
BONDS III SERIES				
a.	13.5% Taxable 7 years Redeemable non-convertible bonds of Rs. 1000/- each Redeemable at mpar on 28th February, 2002	1,600		1,600
b.	9.75% tax free 7 years Redeemable Non-convertible Bonds of Rs. 1000/- each Redeemable at par on 28th October, 2001	10,000		10,000
c.	16.25% taxable 5 years Redeemable non- convertible Bonds of Rs. 1000/- each Redeemable at par on 1st September, 2002 Secured by equitable mortgage of immovable properties and hypothecation of movable properties of Auraiya and Moga-Bhiwani Transmission System. In case of above 16.25% Bonds, further additionally secured by equitable mortgage of immovable properties and hypothecation of movable properties of CTP-I Transmission system (Except Vijayawada Sub-station)	13,400		13,400
			25,000	25,000
BONDS IV SERIES				
a.	17% Taxable 5 years Redeemable non-convertible bonds of Rs. 1000/- each Redeemable at par on 8th January, 2001	10,686		10,686
b.	17.5% taxable 5 years Redeemable Non-convertible Bonds of Rs. 1000/- each Redeemable at par on 29th March, 2001	3,626		3,626
c.	17.75% taxable 5 years Redeemable non-convertible Bonds of Rs. 1000/- each Redeemable at par on 16th July, 2001	20,688		20,688
	Secured by equitable mortgage of immovable properties and hypothecation of movable properties of Doyang and Farakka Transmission Systems, and Anta Transmission Line		35,000	35,000
BONDS V SERIES				
	15.75% 5 years Taxable Redeemable non-convertible bonds of Rs. 1000/- each Redeemable at par on 24th Feb, 2002 Secured by Hypothecation of Movable properties and Equitable Mortgage of immovable properties of Chamera-Moga Transmission System.		20,000	---
Loan From Life Insurance Corporation of India				
a.	Secured by equitable mortgage of immovable propertiese of Kathalguri Transmission System	1,111		1,288
b.	Secured by equitable mortgage of immovable properties and hypothecation of movable properties of CTP-I Vijayawada Sub-station	790		1,190
			1,190	2478

SCHEDULE 3 - LOAN FUNDS (Contd.)

(Rupees in Lacs)

		As at 31st March, 1998	As at 31st March, 1997
Loan From Unit Trust of India			
Secured by equitable mortgage of immovable properties and Hypothecation of movable properties of Kahalgaon Transmission System	15,000		15,000
Loan from Indian Overseas Bank			
Secured by Hypothecation of Immovable assets of Chandrapur HVDC Transmission System and 400 KV Chamera-Kishanpur Transmission System	3,125		4,375
Loan from State Bank of India			
Secured by first paripassu charge on all Fixed Assets of the Company	20,222		---
Loan from International Bank for Reconstruction and Development			
Secured by equitable mortgage of immovable properties and hypothecation of movable properties of Vindhyachal and Rihand Transmission system and further guaranteed by Government of India	72,522		52,586
West Merchant Bank, UK			
(Guaranteed by consortium of Bankers, which is secured by hypothecation of Plant & Machinery of Jeypore-Gajuwaka HVDC transmission system, and further to be secured by equitable Mortgage of immovable properties of Indravati Sub-station.	15,167		7,834
PENDING FINALISATION OF TRIPARTITLE AGREEMENT BACK-TO-BACK AGREEMENT, AMOUNT PAYABLE TO GOVERNMENT OF INDIA ON ACCOUNT OF **NHPC PURCHASE CONSIDERATION**			
9% B series 10 years Bonds of Rs. 1000/- each redeemable at par on 11th December, 1997 Secured by equitable mortgage of immovable properties of Chukha Transmission line	---		1,913
NLC PURCHASE CONSIDERATION			
9% E series 10 Years Bonds of Rs. 1000/- each redeemable at par in December, 1999/ March, 2000 Secured by equitable mortgage of immovable properties of Neyveli-Saleem-Madras Line.	3,549		3,549
Total Secured Loans		243,844	180,315

SCHEDULE 3 - LOAN FUNDS (Contd.)

(Rupees in Lacs)

			As at 31st March, 1998	As at 31st March, 1997
UNSECURED LOANS				
BONDS V SERIES				
15.75% 5 years Redeemable non-convertible Bonds of Rs. 1000/- each redeemable at par on 24th February, 2002 Secured by Hypothecation of movable properties and Equitable Mortgage of immovable properties of Chamera-Moga Transmission System.		—		20,000
Bonds VI Series				
13% Taxable non-cumulative secured Redeemable Bonds of Rs. 1000/- each Redeemable at par in ten annual equal instalments from 6.12.2002				
To be secured by Equitable Mortgage of immovable properties of the Company		10,000		—
Loan from Government of India		**145,622**		**117,559**
Syndicated loans from ING Bank, Japan		**6,046**		—
Loans Guaranteed by Govt of India				
West Merchant Bank, UK & State Bank of India, London	20,810			17,463
Natexis Banque (Credit National), France	9,857			9,348
Credit Agricole Indosuez (Banque Indosuez), France	9,367			8,921
Skandinorviska Enskilda Banken I, Sweeden	908			2,476
Skandinorviska Enskilda Banken II, Sweeden	9,328			14,660
Asian Development Bank	31,664			7,247
Industrial Bank of Japan and Nippon Life Insurance	3,878			3,746
Syndicated Loan from Industrial Bank of Japan & other Japanese Banks/Financial Institutions	12,347			20,144
		98,159		84,032
PENDING FINALISATION OF TRIPARTITE AGREEMENT/ BACK TO BACK AGREEMENT AMOUNT PAYABLE TO GOVERNMENT OF INDIA ON ACCOUNT OF				
A. NTPC PURCHASE CONSIDERATION				
1. Loans from				
a. Exim Bank, Japan				21,600
b. Syndicated loan from Industrial Bank of Japan	9,581			—
c. Syndicated loan from Sumitomo Bank	10,648			—
d. Unit Trust of India	—			101
2. Bonds Issued By NTPC	15,270			25,696
		35,499		47,397
B. NHPC PURCHASE CONSIDERATION				
a. Export Development Corporation, Canada	3,203			3,493
b. Bonds issued by NHPC	10,380			13,583
		13,583		17,076
C. NLC PURCHASE CONSIDERATION				
Bonds issued by NLC		2,201		6,701
UNSECURED LOANS FROM OTHERS				
a. Neyveli Lignite Corporation		4,091		4,091
			315,201	296,856
TOTAL UNSECURED LOANS			559,045	477,171
GRAND TOTAL (SECURED + UNSECURED)				

SCHEDULE 4A - FIXED ASSETS - TRANSMISSION LINES

(Rupees in Lacs)

Description	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	As at 31.3.97	Additions During The year	Adjustment During The year	As at 31.3.98	Depreciation upto 31.3.97	Additions During The year	Adjustment During The year	Depreciation upto 31.3.98	As at 31.3.98	As at 31.3.97
LAND (Including Development)										
a) Freehold	439	------	309	130	------	------	------	------	130	439
b) Leasehold	366	11	358	19	5	------	5	------	19	361
Roads, bridges, culverts &										
helipads	4	------	3	1	------	------	------	------	1	4
BUILDINGS										
Others	6	------	2	4	2	------	2	------	4	4
Temporary Erection	8	------	1	9	3	2	1	6	3	5
PLANT & MACHINERY	329,724	120,285	496	450,505	64,000	18,609	267	82,876	367,629	265,724
Construction and										
Workshop equipment	28	271	232	531	10	22	49	81	450	18
Electrical Installation	62	------	62	------	35	------	35	------	------	27
Vehicles	18	------	10	8	6	1	1	6	2	12
Furniture, Fixtures and										
Other equipment	21	------	21	------	3	------	3	------	------	18
EDP & WP Machines	31	------	31	------	7	------	7	------	------	24
TOTAL (A)	330,707	120,567	67	451,207	64,071	18,634	264	82,969	368,238	266,636

SCHEDULE 4B - FIXED ASSETS - SUBSTATIONS

(Rupees in Lacs)

Description	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	As at 31.3.97	Additions During The year	Adjustment During The year	As at 31.3.98	Depreciation upto 31.3.97	Additions During The year	Adjustment During The year	Depreciation upto 31.3.98	As at 31.3.98	As at 31.3.97
LAND (Including Development)										
a) Freehold	3,596	989	234	4,819	---	---	---	---	4,819	3,596
b) Leasehold	844	44	77	965	60	16	1	77	888	784
c) Unclassified	28	---	---	28	---	---	---	---	28	28
Roads, bridge, culverts & helipads	1,732	292	10	2,034	186	54	1	241	1,793	1,546
BUILDING										
a) Main Plant	3,688	1,560	498	5,746	731	240	60	1,031	4,715	2,957
b) Other	3,206	110	2]220	1,096	563	61	261	363	733	2,643
Temporary Erection	144	9	17	136	116	12	11	117	19	28
Water Supply Drainage and Sewerage	442	318	16	776	88	23	2	113	663	354
Plant & Machinery	195,369	122,557	648	318,574	59,295	16,409	420	75,284	243,290	136,074
Construction and Workshop equipment	594	2	160	436	177	36	42	171	265	417
Electrical Installation	616	89	106	811	205	68	46	319	492	411
Vehicles	183	6	---	189	117	23	4	136	53	66
Aircraft / Aero engines, Boats	2	---	---	2	1	---	---	1	1	1
Furniture, Fixtures and Other equipment	899	58	451	506	320	60	152	228	278	579
EDP & WP Machines	267	15	89	193	99	26	26	99	94	168
Laboratory and Workshop equipment	399	108	856	1,363	191	148	421	760	603	208
Capital Expenditure on Assets not owned by the company	114	8	3	119	44	28	1	71	48	70
Total (B)	212,123	126,165	495	337,793	62,193	17,204	386	79,0112	58,782	179,930

SCHEDULE 4C - FIXED ASSETS - RESEARCH & DEVELOPMENT

Description	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	As at 31.3.97	Additions During The year	Adjustment During The year	As at 31.3.98	Depreciation upto 31.3.97	Additions During The year	Adjustment During The year	Depreciation upto 31.3.98	As at 31.3.98	As at 31.3.97
LAND (Including Development										
BUILDINGS	---	---	---	---	---	---	---	---	---	---
Others	71	2	-1	74	7	3	---	10	64	64
TOTAL (C)	**71**	**2**	**-1**	**74**	**7**	**3**	**---**	**10**	**64**	**64**

SCHEDULE 4D - FIXED ASSETS - OFFICE COMPLEX

(Rupees in Lacs)

Description	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	As at 31.3.97	Additions During The year	Adjustment During The year	As at 31.3.98	Depreciation upto 31.3.97	Additions During The year	Adjustment During The year	Depreciation upto 31.3.98	As at 31.3.98	As at 31.3.97
LAND (Including Development)										
a) Freehold	145	1,135	145	1,135	---	---	---	---	1,135	145
b) Leasehold	768	23	-24	815	5	2	-6	13	802	763
BUILDINGS										
Others	584	120	-1,935	2,639	65	88	-219	372	2,267	519
Temporary Erection	179	2	-17	198	127	25	-8	160	38	52
Water Suply										
Drainage and Sewerage	1	---	-6	7	--	1	--	1	6	1
Electrical Installation	44	--	15	29	6	2	1	7	22	38
Vehicles	62	22	-8	92	44	9	-4	57	35	18
Furniture, Fixtures and										
Other equipment	1,038	131	-400	1,569	386	189	-149	724	845	652
EDP & WP Machines	814	198	-117	1,129	233	129	-33	395	734	581
Total (D)	3,635	1,631	-2,347	7,613	866	445	-418	1,729	5,884	2,769

SCHEDULE 4E - FIXED ASSETS-TOWNSHIP ASSETS

(Rupees in Lacs)

Description	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	As at 31.3.97	Additions During The year	Adjustment During The year	As at 31.3.98	Depreciation upto 31.3.97	Additions During The year	Adjustment During The year	Depreciation upto 31.3.98	As at 31.3.98	As at 31.3.97
LAND (Including Development)										
a) Freehold	159	5	-227	391	--	--	--	--	391	159
b) Leasehold	75	5	-263	343	9	4	3	10	333	66
Roads, bridges, culverts										
& helipads	796	25	-5	826	87	25	--	112	714	709
BUILDINGS										
Others	8,577	383	-70	9,030	744	262	4	1,002	8,028	7,833
Temporary Erection	72	2	12	62	36	10	--	46	16	36
Water Supply										
Drainage and Sewerage	1,189	77	-7	1,273	140	38	--	178	1,095	1,049
Electrical Installation	535	23	-4	562	138	45	-2	185	377	397
Vehicles	10	--	-6	16	7	--	-4	11	5	3
Furniture, Fixtures and										
Other equipment	261	42	-59	362	48	28	-6	82	280	213
Hospital Equipment	1	--	--	1	--	--	--	--	1	1
School Equipment	3	--	--	3	1	--	--	1	2	2
Capital Expenditure on										
Assets not owned by										
the Company	4	--	--	4	1	1	--	2	2	3
TOTAL (E)	11,682	562	-629	12,873	1,211	413	-5	1,629	11,244	10,471

SCHEDULE 4 - FIXED ASSETS

(Rupees in Lacs)

Description	GROSS BLOCK				DEPRECIATION				NET BLOCK	
	As at 31.3.97	Additions During The year	Adjustment During The year	As at 31.3.98	Depreciation upto 31.3.97	Additions During The year	Adjustment During The year	Depreciation upto 31.3.98	As at 31.3.98	As at 31.3.97
LAND (Including Development)										
a) Freehold	4,339	2,129	-7	6,475	--	--	--	--	6,475	4,339
b) Leasehold	2,053	83	-6	2,142	79	22	1	100	2,042	1,974
c) Unclassified	28	--	--	28	--	--	--	--	28	28
Roads, bridges, culverts & helipads	2,532	317	-12	2861	273	79	-1	353	2,508	2259
BUILDINGS										
a) Main Plant	3,688	1,560	-498	5,746	731	240	-60	1,031	4,715	2,957
b) Others	12,444	615	216	12,843	1,381	414	48	1,747	11,096	11,063
Temporary Erection	403	13	11	405	282	49	2	329	76	121
Water Supply										
Drainage and Sewerage	1,632	395	-29	2,056	228	62	-2	292	1,764	1,404
PLANT & MACHINERY	525,093	242,842	-1,144	769,079	123,295	35,018	153	158,160	610,919	401,798
Construction and Workshop equipment	622	273	-72	967	187	58	-7	252	715	435
Electrical Installation	1,257	112	-33	1,402	384	115	-12	511	891	873
Vehicles	273	28	-4	305	174	33	-3	210	95	99
Aircraft/Aero engines Boats	2	--	--	2	1	--	--	1	1	1
Furniture, Fixtures and Other equipment	2,219	231	13	2,437	757	277	--	1,034	1,403	1,462
EDP & WP Machines	1,112	213	3	1,322	339	155	-	494	828	773
Laboratory and workshop equipment	399	108	-856	1,363	191	148	-421	760	603	208
Hospital Equipment	1	--	--	1	--	--	--	--	1	1
School Equipment	3	--	--	3	1	--	--	1	2	2
Capital Expenditure on Assets not owned by the Company	118	8	3	123	45	29	1	73	50	73
GRAND TOTAL	558,218	248,927	-2,415	809,560	128,348	36,699	-301	165,348	644,212	429,870
Previous Year	549,168	15,110	6,060	558,218	95,076	33,203	-69	128,348	429,870	

SCHEDULE 5A - CAPITAL WORK IN PROGRESS - TRANSMISION LINE PROJECTS

(Rupees in Lacs)

	Balance as at 31.03.97	Additions During The Year	Adjustment	Capitalised During The Year	Balance At as 31.03.98
Building (Others)	17	--	17	--	--
PLANT & MACHINERY					
(including associated civil works)					
a) On own A/C & on supply					
cum-erection contract	232,139	65,852	4,366	118,289	175,336
b) Others	4	-	4	--	--
Electrical installations	66	--	66	--	--
Survey, Investigation, Consultancy					
& Supervision charge	1,531	261	-2,209	80	3,921
Survey & Soil Investigation	78	--	78	-	--
Difference in Exchange on Foreign Loans	-1054	3349	221	2057	17
TOTAL (A)	232,781	69,462	2,543	120,426	179,274

SCHEDULE 5B - CAPITAL WORK IN PROGRESS - SUBSTATIONS

(Rupees in Lacs)

	Balance as at 31.03.97	Additions During The Year	Adjustment	Capitalised During The Year	Balance At as 31.03.98
Development of land	308	149	14	--	443
Road, Bridge, culverts & helipads	534	136	-19	300	389
Building (Others)	1,302	378	-941	1,684	937
Temporary erection	5	16	3	6	12
Water supply, drainage and sewrage	234	34	-74	324	18
PLANT & MACHINERY					
(including associated civil works)					
a) On own A/C & on supply					
cum-erection contract	123,370	19,026	-1,965	114,692	29,669
b) Others	225	9	211	23	--
Electrical installations	125	78	28	116	59
Furniture, fixtures & other					
office eqipment	102	150	-1	--	253
Survey, Investigation, Consultancy					
& Supervision charge	2,676	335	1,492	--	1,519
Survey & Soil Investigation	796	-1	795	--	--
Difference in Exchange on Foreign Loans	225	8090	3403	3470	1442
TOTAL (B)	129,902	28,400	2,946	120,615	34,741

SCHEDULE 5C - CAPITAL WORK IN PROGRESS - RESEARCH AND DEVELOPMENT

(Rupees in Lacs)

	Balance as at 31.03.97	Additions During The Year	Adjustments	Capitalised During The Year	Balance At as 31.03.98
Buildings (Others)	--	2	--	2	--
TOTAL (C)	--	2	--	2	--

SCHEDULE 5D - CAPITAL WORK IN PROGRESS -OFFICE COMPLEX

(Rupees in Lacs)

	Balance as at 31.03.97	Additions During The Year	Adjustments	Capitalised During The Year	Balance At as 31.03.98
Roads, bridges, culverts & helipads	--	3	--	--	3
Building (Others)	227	625	-221	54	1,019
Temporary erection	--	1	--	--	1
water supply, drainage and sewerage	--	--	--1	--	1
Furniture, fixtures & other office eqipment	--	63	--	--	63
TOTAL (D)	227	692	-222	54	1,087

SCHEDULE 5E - CAPITAL WORK IN PROGRESS - TOWNSHIP ASSETS

(Rupees in Lacs)

	Balance as at 31.03.97	Additions During The Year	Adjustments	Capitalised During The Year	Balance At as 31.03.98
Development of land	26	--	25	--	1
Roads, bridges, culverts & helipads	60	21	-22	26	77
Buildings (Others)	1,106	453	329	329	901
Temporary erection	5	6	4	5	2
water supply, drainage and sewerage	116	62	-11	69	120
Electrical Installations	68	28	4	16	76
Furniture, fixtures & other office eqipment	3	--	--	--	3
TOTAL (E)	1,384	570	329	445	1,180

SCHEDULE 5F - CAPITAL WORK IN PROGRESS - INCIDENTAL EXPENSES DURING CONSTRUCTION

(Rupees in Lacs)

	Balance as at 31.03.97	Additions During The Year	Adjustments	Capitalised During The Year	Balance At as 31.03.98
INCIDENTAL EXPENDITURE DURING CONTRUCTION	1,273	38,607	--	--	39,880
Less : Allocated to Capital Work in Progress	--	37,987	--	--	37,987
TOTAL (F)	1,273	620	--	--	1,893

SCHEDULE 5 - CAPITAL WORK IN PROGRESS

(Rupees in Lacs)

	Balance as at 31.03.97	Additions During The Year	Adjustment	Capitalised During The Year	Balance At as 31.03.98
Development of land	334	149	39	--	444
Roads, bridges, culverts & helipads	594	160	-41	326	469
Building (Others)	2,652	1,458	-816	2,069	2,857
Temporary erection	10	23	7	11	15
water supply, drainage and sewerage	350	96	-86	393	139
PLANT & MACHINERY					
(including associated civil works)					
a) On own account & on supply					
cum-erection contract	355,509	84,878	2,401	232,981	205,005
b) Others	229	9	215	23	--
Electrical Installations	259	106	98	132	135
Furniture, fixtures & other					
office eqipment	105	213	-1	--	319
Survey , Investigation, Consultancy					
& Supervision Charges	4,207	596	-717	80	5,440
Survey & soil Investigation	874	-1	873	--	--
Difference in Exchange on foreign Loans	-829	11439	3624	5527	1459
Incidental Expenditure During Construction	1,273	620	--	--	1,893
TOTAL	365,567	99,746	5,596	241,542	218,175
Previous Year	246,760	125355	-1522	8070	365567

SCHEDULE 6 - CONSTRUCTION STORES & ADVANCES

(Rupees in Lacs)

			As at 31st March, 1998	As at 31st March, 1997
CONSTRUCTION STORES (at cost)				
(As certified by the Management)				
Steel	708			1,920
Cement	60			244
Others	124,236			59,.835
		125,004		61,999
Less: Provision for likely shortages		917		863
			124,087	61,136
ADVANCE FOR CAPITAL EXPENDITURE				
Secured		105		919
Unsecured considered good				
a) against Bank Gurantees	4,987			10,237
b) Others (without B.G)	19,182			13,187
		24,169	24,274	24,343
			148,361	85,479
Construction Stores Includes				
Materials in Transit			55,788	28,241
under Inspection and with Contractors				

SCHEDULE 7 - CURRENT ASSET, LOANS & ADVANCES

(Rupees in Lacs)

			As at 31st March, 1998	As at 31st March, 1997
CURRENT ASSETS				
INVENTORIES				
(Valued at cost as certified by Management)				
Loose tools		82		96
Consumable stores		62		79
Components, Spares & other spare parts		13,442		10,664
		13,586		10,839
Less: Provision for Shortages		57		43
			13,529	10,796
Inventories includes stores in transit Rs.35 Lacs (Previous Year Rs.40 lacs)				
Sundry Debtors				
Outstanding				
for a period exceeding six months		41,409		27,078
Other debts		32,394		23,989
		73,803		51,067
Less: Provision for doubtful debts		386		---
			73,417	51,067
Particulars of Sundry debtors	31.03.98	31.03.97		
Unsecured Considered Good	73,417	51,067		
Considered doubtful	386	---		
CASH & BANK BALANCE				
Cash, Stamps and Imprest		12		15
Drafts/Cheques in Hand		477		2,261
Remittance in transit		14		18
Balance with Scheduled Banks on				
Term Deposit		2,756		3,540
Current Accounts		3,680		14,001
			6,939	19,835
OTH**ER CURRENT ASSETS**				
Term Deposit with Subsidiaries of Scheduled Banks		11,550		11,550
Balance of Unutilised money out of the Bonds issues kept in Public Deposit Account with Government of India		1,370		13,000
Interest accrued		1,619		2,119
Others		53		130
			14,592	26,799

SCHEDULE 7 - CURRENT ASSET, LOANS & ADVANCES (Contd.)

(Rupees in Lacs)

			As at 31st March, 1998	As at 31st March, 1997
LOAN AND ADVANCES				
Loan To				
Employees	4,872			4,268
Others	46			46
		4,918		4,314
ADVANCES				
Advances Recoverable in Cash or in Kind For Value To Be Received From Contractors & Suppliers including				
Material issued on loan	600			320
Employees	406			395
Claims recoverable	566			617
Others	1,888			1,867
	3,460			3,199
Less : Provision for bad and doudful Advance and Claims	323			370
	3,137			2,829
Deposits with customs, Port trust and other authorities	389			377
		3,526		3,206
			8,444	7,520
			116,921	116,017
Particulars Of Loans And Advances				
Secured			3,602	3,649
Unsecured considered good				4,842
3,871				
Considered doudful			323	370
			8,767	7,890
Less : Provision made			323	370
			8,444	7,520

Due from Directors & Officers of the company	Maximum amount 1997-98	Maximum amount 1996-97		
Director	2	4	1	2
Officers	176	171	154	139

(Term deposit includes Rs. 2000 lacs FDR pledged with consortium of Banks led by State Bank of India as margin money for overseas Bank Gurantee issued in favour of West Merchant Bank and. 700 lacs FDR pledged with Chief Conservator Forest, Shimla against compensatory afforestation.)

SCHEDULE 8 - CURRENT LIABILITIES & PROVISIONS

(Rupees in Lacs)

			As at 31st March, 1998	As at 31st March, 1997
CURRENT LIABILITIES				
SUNDRY CREDITORS				
For capital expenditure	13,177		8,729	
Other goods and services	9,638		1,468	
Book overdraft (Banks)	222		--	
		23,037		10,197
Deposits, retention money from Contractors and others	26,111			26,017
Less : Investments held as security	54			36
		26,057		25,981
Other Liabilities		9,215		9,383
INTEREST ACCRUED BUT NOT DUE ON LOANS FROM				
Government of India	4,350			3,004
Foreign Banks & Financial Institutions	3,129			2,090
Secured/Unsecured Redeemable Bonds	3,438			3,490
Others	675			727
		11,592		9.311
			69,901	54,872
PROVISIONS				
Taxation (including tax on proposed dividend)	9,972			201
Less : Advance tax and T.D.S	10,248			--
		-276		201
Proposed Dividend		2,000		2,000
Others		991		3
			2,715	2,204
			72,616	57,076

SCHEDULE 9 - MISCELLANEOUS EXPENSES (To the extent not written off or adjusted)

(Rupees in Lacs)

	Balance as at 31st March, 1997	**Additions**	**Deductions**	**Balance as at 31st March, 1998**
Deferred Revenue expenditure	608	6	179	435
	608	6	179	435

SCHEDULE 10 - CONTINGENT LIABILITIES

(Rupees in Lacs)

	As at 31st March, 1998	As as at March, 1997
Claims against the Company not acknowledged as debts	54,979	40,513
Others	30,904	22,323
	85,883	62,836

SCHEDULE 11 - OTHER INCOME

(Rupees in Lacs)

			For the Year Ended 31st March, 1998	For the Year Ended 31st March, 1997
Hire charges for equipment		7		5
Interest from				
Indian Bank	593			967
Others	1,796			1,271
		2389		2,238
Profit on sale of fixed assets		12		41
Miscellaneous income		367		556
			2,775	2,840
Less : Income transferred to incidental			1,262	1,152
expenditure during construction-Sch 15c			1,513	1,688

SCHEDULE 12 - TRANSMISSION, ADMINISTRATION & OTHER EXPENSES

(Rupees in Lacs)

			For the Year Ended 31st March, 1998	For the Year Ended 31st March, 1997
EMPLOYEE COST				
EMPLOYEES' REMUNERATION AND BENEFITS				
Salaries, wages, allowances & benefits		9,492		7,134
Contribution to provident and other funds		732		650
Welfare expenses		1,487		1,379
			11,711	9,163
TRANSMISSION EXPENSES				
REPAIRS & MAINTENANCE				
Buildings	397			330
PLANT & MACHINERY				
Sub Station	859			755
Transmission lines	1,321			228
Construction equipment	18			3
Others	188			171
		2,783		1,487
Powwer charges		1,541		1,649
Stores consumed		1		
Water charges		11		10
			4,336	3,146
ADMINISTRATION EXPENSES				
Training & Recruitment expenses	229			194
Less : Fees for training and application	5			6
		224		188

SCHEDULE 12 - TRANSMISSION, ADMINISTRATION & OTHER EXPENSES (Contd.)

(Rupees in Lacs)

			For the Year Ended 31st March, 1998	For the Year Ended 31st March, 1997
Legal expenses		69		27
Professional charges (including TA/DA)		45		55
Consultancy expenses (including TA/DA)		138		216
Communication expenses		1,055		997
Travelling & Conveyances expenses	1,794			1,441
(Excluding foreign travel)				
foreign travel	81			60
		1,875		1,501
Tender expenses	102			81
Less: Sale of tenders	38			24
		64		57
PAYMENT TO STATUTORY AUDITORS				
Audit Fee	4			4
Tax Audit Fees	1			1
Expenses	22			17
		27		22
Advertisment and publicity		89		26
Printing and stationery		230		207
EDP hire and other charges		39		37
Entertainment expenses		62		56
Brokerage & Commission		6		4
Donations		--		30
Research & development expenses		--		14
Rent		473		494
Miscellaneous expenses		1,812		1,620
Insurance		1,430		707
Rates and taxes		31		28
Non operating expenses		36		3
Expenses for Guest House	15			15
Less : Income from Guest House	1			1
		14		14
			7,719	6,30
			23,766	18,612
Stores consumption included in repairs and maintenance			332	263

SCHEDULE 13 - PROVISIONS

(Rupees in Lacs)

	For the Year Ended 31st March, 1998	For the Year Ended 31st March, 1997
Shortage in stores	13	7
Doudful debts, loans and advances	386	49
Doudful claims	--	6
Theft of Material in NER	--	244
Material issued to Contractor	54	863
	453	1,169

SCHEDULE 14 - INTEREST AND FINANCE CHARGES

(Rupees in Lacs)

	For the Year Ended 31st March, 1998		For the Year Ended 31st March, 1997
Interest on Loans from			
Government of India	20,223		13,111
Indian Bank & Financial Institutions	3,365		3,704
Foreign Banks & Financial Institutions	10,123		7,803
Secured/Unsecured Redeemable Bonds	22,644		19,698
Others	1,505		720
		57,860	45,036
Interest paid u/s 234(b) & 234 (C) of Income Tax Act		1,282	----
FINANCE CHARGES			
Rebate to Customers	1,908		1,520
Commitment charges	351		295
Other finance charges	7,494		1,488
		9,753	3,303
		68,895	48,339

SCHEDULE 15 - INCIDENTAL EXPENDITURE DURING CONSTRUCTION

(Rupees in Lacs)

		For the Year Ended 31st March, 1998		**For the Year Ended 31st March, 1997**
A. EXPENSES				
EMPLOYEES' REMUNERATION AND BENEFITS				
Salaries, wages, allowances and benefits		2,606		2,224
Contribution to provident and other funds		215		215
welfare expenses		356		386
			3,177	2,825
REPAIR & MAINTENANCE				
Buildings	68			55
Construction equipment	2			2
Others	56			43
		126		100
Power charges		194		100
Water charges		3		2
			323	202
ADMINISTRATION EXPENSES				
Legal expenses		28		9
Professional charges		18		31
Consultancy expenses		71		149
Communication expenses		209		238
Travelling expenses (including foreign Travel)		554		518
Tender expenses	61			58
Less : Income from sale of tenders	20			14
		41		44
Payment to Auditors (including expenses)		11		10

SCHEDULE 15 - INCIDENTAL EXPENDITURE DURING CONSTRUCTION (Contd.)

(Rupees in Lacs)

		For the Year Ended 31st March, 1998		For the Year Ended 31st March, 1997
Advertisment and Publicity		47		15
Printing and stationery		87		83
EDP hire and other charges		10		11
Entertainment expenses		27		29
Rent		236		294
Miscellaneous expenses		470		503
Insurance		11		123
Rates and taxes		7		8
Depreciation		206		199
Guest House Expenses		3		3
Non Operation Expenses		4		1
			2,040	2,268
Prior Period adjustment (net)			8	58
Total (A)			5,548	5,353
B. INTEREST AND FINANCE CHARGES				
Interest on loans from				
Government of India	13,082			8,354
Indian Banks & Financial Institutions	1,856			2,649
Foreign Banks & Financial Institutions	5,951	4,240		
Secured/Unsecured Redeemable Bonds	11,552			11,483
		32,441		26,726
FINANCE CHARGES				
Commitment charges	319			288
Other finance charges	1,561			1,358
		1,880		1,646
Total (B)			34,321	28,372
C. LESS OTHER INCOME				
Hire charges			1	1
INTEREST FROM				
Indian banks	56			70
Others	1,139			1,007
		1,195		1,007
Profit on fixed assets sold/discarded		1		1
Miscellaneous income		65		73
Total (C)			1,262	1,152
GRAND TOTAL (A+B-C)			38,607	32,573

SCHEDULE 16 - PRIOR PERIOD ADJUSTMENT (NET)

(Rupees in Lacs)

	For the Year Ended 31st March, 1998		For the Year Ended 31st March, 1997
INCOME			
Depreciation written back- others	147		32
Excess provision written back	146		22
Transmission charges	2,797		255
Interest written Back- Others	5		8
Others	87		53
		3,182	370
EXPENDITURE			
Salary, wages, allowances & benefits	26		25
Power charges	11		16
Rates and taxes	2		2
Insurance	3		1
Depreciation	379		147
Transmission charges written back	21		199
Interest	19		15
Others	426		
			243
		887	648
Prior period expenditure/income (Net)		-2,295	278

SCHEDULE - 17 NOTES ON ACCOUNTS

1. The Transmission system situated in Jammu and Kashmir associated with National Hydroelectric Power Corporation (NHPC) has been taken over w.e.f. 1.4.93 as mutually agreed upon by NHPC and the company but regularisation is pending on account of completion of legal formalities.

2. The Regional Load Despatch Centres (RLDC) of Central Electricity Authority were transferred to the company along with associated manpower as per the orders of Ministry of Power, Govt. of India, from time to time. The Assets of RLDC are being used by Power Grid pending transfer of ownership and determination of cost of assets so taken over. The operational expenses amounting to Rs. 1504 lacs (Previos Year Rs. 1408 lacs) have been charged to profit and loss account During the year company has also incurred capital expenditure of Rs. 171 lacs (Previous year Rs. 245 lacs).

3. (a) The land owned by the company has been classified into freehold and leasehold to the extent possible, based on available documentation and the balannce has been shown as unclassified.

   (b) The conveyancing of the title to the free-hold land and execution of lease agreement in certain cases (value not ascertained) in favour of the company are awaiting completion of legal formalities.

   (c) Leasehold land includes Rs. 756 lacs (Previous year Rs. 743 lacs) relating to land acquired in Katwaria Sarai, New Delhi on perpetual lease for which title deel is not yet executed. As the land is acquired on perpetual lease and it does not have a limited useful life, no depreciation has been charged in accounts.

   (d) Building includes Rs. 722 lacs (Previous year Rs. 544 lacs for 20 flats) for 28 flats at Mumbai, possession of which was taken but registration is pending in favour of the company.

4. Pending reconciliation, material amounting to Rs. 1071 lacs (Previous year Rs. 1334 Lacs) in commissioned lines is shown as construction stores lying with contractors. However, an amount of Rs. 54 lacs(Previous year Rs. 863 Lacs) has been provided during the year for likely shortages.

5. Certain assets like Building,furniture,fixtures etc. retained by the transfor organisations, which are in-cluded in the assets of the company and deprecation charged there on will be settled/adjusted in subsequent years.

6. Fixed assets include company's share of Rs. 562 lacs (Previous year Rs. 562 lacs) in common services and facilities of 400 KV sub-station of Uttar Pradesh State Electricity Board (UPSEB) and Rajesthan State Eletricity Board (RSEB) pending execution of formal agreement for joint owership.

7. Materials in transit/under inspection/with contractors,are subject to confirmation/reconciliation and con-sequential adjustments.

8. During the year :-

   i) An amount of Rs. 11439 lacs being exchange rate difference (Previous year Rs. 10140 Lacs) in respact of Fixed Assets and capital Work in Progress is adjusted in the carrying amount.

   ii) An amount of Rs. 12 Lacs (Previous year Rs. 116 lacs) being exchange rate difference on current assets is accounted for in profit and Loss Account as misc. income.

9. Balance shown under advances, sundry debtors sundry creditors and loans are subject to confirmation. In the opinion of the management,the value of current assets, loans and advances on realisation in the ordinary course of business,will not be less then the value at which these are stated in the Balance sheet.

10. In the year 1993-94 the company had forfeited the bonds of Rs. 12420 lacs (CANFINA Rs. 10320 lacs, ABFSL Rs.2100 lacs) and had set off the deposits with those companies of Rs. 11206 lacs and front-end fee of Rs. 1214 lacs. However, in the year 1994-95 the company has restored the said deposits by crediting Capital Reserve account to protect the financial interest of the company in accordance with legal advice. Pending settlement of the issue with CANFINA and ABFSL relating to Ist series, 1992 Bonds.

   (a) Rs. 50 lacs paid by ABSFL during the year 1993-94 has been accounted by the company as interest income due on deposits in that year.

   (b) As in previous year :

   (i) The company has not accounted for interest income on deposits,amounting to Rs. 1424 lacs (previous year Rs. 1424 lacs) (cumulative Interest Rs. 8628 lacs)

   (ii) The company has also not accounted for interest payable of Rs. 304 lacs (Previous year Rs. 304 lacs) (cumulative Rs. 1842 lacs) on bonds of Rs. 1977 lacs.

11. Share Capital Deposit of Rs. 15789 lacs (Previous year Rs. 16289 lacs) represents the value of shares to be allotted against purchase Consideration payable to Government of India for lines situated in Jammu & Kashmir.

12. A sum of Rs. 62 Lacs on account of refund of Excise Duty was credited to capital reserve during 96-97 as the refund could not be identified assets wise. During the year Rs. 613 lacs has been credited to respective fixed assets and depreciation has been written back with retrospective effect and Rs. 8 lacs has been credited to current assets (inventory account).

13. During the year (1997-98) the company has paid minimum alternative tax under section 115 JA of the Income Tax Act, 1961 pertaining to income for the year 1996-97 (Assessment Year 97-98) and also advance tax for the year 1997-98 (Assessment Year 98-99). A sum of Rs. 3950 lacs has been billed on the respective SEBs towards recovery of Income Tax against which Rs. 1250 lacs has been accounted for on receipt basis vide accounting Policy No. 7.4

14. Estimated amount of capital commitments is Rs. 140418 lacs (Previous year Rs. 172335 lacs).

15. No payment is overdue for the purchases made from small scale/ancillary industries. Hence no provision of interest is made in the accounts.

16. Provision has not been made for entry tax and sales tax on work contracts and materials issued to contractors for which appeals are pending and/or the amounts are not ascertainable.

17. Guarantee fee on loans transferred from NTPC/NHPC as demanded by Govt.of India vide memo of 04.06.93 amounting to Rs. 5298 lacs has been provided during the year on receipt of demand from transferor organisations.

18. Liability for gratuity and leave encashment upto 31.03.98 has been provided as per Actuarial Valuation vide certificate dated 14.02.98 & dated 23.03.98 respectively.

19. (a) Government of India vide their notification No. F: No. 2/3/ Powergrid/Tariff/97 dated 16.12.97 has prescribed the norms and factors in accordance which the tariff is leviable for transmission of Electricity by Powergrid w.e.f. 01.04.97. Pending final notification of tariff from Govt. of India the transmission charges including recovery on account of foreign exchange variation has been accounted for on provisional basis on all lines. However, in case of line situated in NER transmission charges are accounting for on the basis of decision taken in NEREB meeting.

(b) Pending notification of Government of India, the transmission charges amounting to Rs. 2797 lacs for the year 92-93 to 96-97 and Rs. 1843 lacs for the year 97-98 on account of additional capital expenditure incurred in the respective financial years has been accounted for during the year under prior period income and current year income respectively.

(c) As per decision taken in 40th NEREB meeting the transmision tariff for NER was frozen at 30 paise per unit for two years and also there would be no annual adjustment bill till 31st March'98.However,pending annual adjustment bill which is to be raised on beneficiaries after 31st March 98,short billing of transmission charges of Rs. 89 lacs (previous (-) 261 lacs) has been considered as income for the year.

(d) In accordance with the decision taken in the 40th NEREB meeting, the transmission line namely 400 KV Miryani - Misa line which is ready for commercial operation, has not been capitalised till 31.03.98 as the line was not been declared as commissioned. As per the said decision, all expenditure including IDC, till the date of declaration of commissioning will be capitalised. therefore total capital cost upto 31.03.98 amounting to Rs. 11883 lacs is shown under capital work in progress. The impact on profitability is not ascertainable at this stage.

20. Income from consultancy, Project Management and Supervision fees include Rs. 195 lacs (previous year Rs. 70 lacs) for management fee for Mandola sub-station and GRIDCO for which the agreement is yet to be finalised with SEBs.

21. In terms Accounting policy No. 7.3 total Surcharge on outstanding dues from State Electircity Boards upto 31.03.98 amounting to Rs. 29049 lacs (Previous year Rs. 22041 lacs) has not been accounted for.

22. During the year, the company has changed/discontinued certain accounting policies. The consequential impact of the same on the accounts for the year are as under :-

a) Steel scrap conductor scrap which was hitheto being valued at estimated realizable value is now valued at estimated ealizable value or book value whichever is less. The change is accounting policy has resulted in decrease in profit for the year by Rs. 10 lacs.

b) Insurance reserve @0.1% of the gross value of fixed assets expert on certain fixed assets as specified vide accounting policy No. 8.4 has been created bycharging to the Profit and Loss Account. This Change in accounting policy has resulted in decrease in profit for the year by Rs. 629 lacs. However, the reserve which was created by appropriation on estimated basis in earlieryears of Rs. 800 lacs has been reversed during the year.

c) The expenditure incurred of Rs, 10 lacs and above on account of renovation and modernization which was hitherto being capitalized has now been charged to the Profit and Loss Account. The discontinuance of such policy has resulted in decrease of profit for the year by Rs. 1047 lacs.

d) The company has determined interest on loans chargeable to the Profit ans Loss Account in respect of projects on actual loan availment basis which was previously being determined on approved debt equity ratio for the projects. Due to the change in accounting policy, Fixed assets are lower by Rs. 2078 lacs and profit for the year is lower by Rs. 2078 lacs.

e) Unconsumed materials in supply cum erection contracts has been shown as Construction stores with contractors. The same were being shown as Capital Work in Progress in earlier years. Due to the change in accounting policy, construction stores with contractors for the year is higher by Rs. 41881 lacs and Capital work in progress is lower by a similar amount.

f) The leave encashment of employees which was earlier accounted for on cash basis is now accounted for on the basis of actuarial valuation. This change in accounting policy has resulted in desrease in profit for the year by Rs. 236 lacs and increase in Capital work-in-progress by Rs. 276 lacs.

g) Grant in aid received from overseas Development Authority, Great Britain for HVDC, Chandrapur project, which has been capitalized during the year is shown under Reserves and Surplus due to change in accounting policy. According to the earlier policy, the grant would have been reduced from fixed assets after capitalization of HVDC, Chandrapur project. Consequent to the change in accounting policy, Fixed assets and capital reserve are higher by Rs. 32155 lacs.

23. Pay revision for Executives, Supervisors and Workers is due w.e.f. 1.1.97. Pending final settlement provision of Rs. 1152 Lacs has been made during the year.

24. Depreciation charged in the Accounts as per Accounting Policy No. 8.1(a) is Higher by Rs. 5227 lacs (Previous year higher by Rs. 5007 lacs) if calculated as per Section 205(2)(b) of Companies Act. 1956. The cumulative effect of the same upto 31st March, 1998 is higher by Rs. Rs. 4250 lacs (upto previous year lower by Rs. 947 lacs)

25. a) Figures haave been rounded off to nearest rupees in lacs.
b) Previous years figures have been regrouped/rearranged wherever necessary.

26. a) Employees remuneration and benefit include the following for the Directors including Chairman & Managing Director :

	Current Year	Previous Year
	(Rs./lacs)	**(Rs./lacs)**
	9	11
Salaries & Allowances		
Contribution to Provident Fund & Other Funds including Gratuity & Group Insurance	1	1
Other Benefits	3	3

b) In addition to the above remuneration, the Whole Time Director have been allowed to use the staff car (including private journeys) on payment of Rs. 400 upto 31.12.97 and Rs. 600 from 01.01.1998 per month, as contained in the Ministry of Finance (BPE) Circular No.2(18)/pc/64 dt. 29.11.64 as amended.

27. Quantitative information in respect of Purchase & Sale of Power

		Current Year	Previous Year
a)	Purchase of Power(Million Units)	1311	1433
b)	Sale of Power (Million Units)	1296	1416

28. a) Value of imports calculated on CIF basis :

		Current Year (Rs./lacs)	Previous Year (Rs./lacs)
i)	Capital goods	29298	29605
ii)	Spare parts	--	

b) Expenditure in foreign currency :

		Current Year (Rs./lacs)	Previous Year (Rs./lacs)
i)	Professional and consultancy fees	135	672
ii)	Interest	10035	4653
iii)	Others	10895	14658

c) Value of Components, stores and spare parts consumed

		% age	Current Year (Rs./lacs)	%age	Previous Year (Rs./lacs)
i)	Imported		--		--
			--		--
ii)	Indigenous (Including fuel)	100%	332	100%	263

d) Earnings in foreign exchange

		Current Year (Rs./lacs)	Previous Year (Rs./lacs)
i)	Interest	107	71
ii)	Grant-in-aid (HVDC Chandrapur)	--	3792
iii)	Others	114	4

29. Additional information as required undeer part IV of schedule VI of the Companies Act, 1956, as certified by the management.

i) Registration Details

Registration No.	55-38121
State Code	56
Balance Sheet Date	31st March'1998

ii) Capital raised during the year

	(Rs. in lacs)
Public Issue	--
Right Issue	--
Bonus Issue	--
Private Placement (Issued to Govt. of India)	1650

iii) Position of mobilisation and deployment of funds

Total Liabilities	1055488
Total Assets	1055488

	Sources of Funds	
	Paid up capital	303654
	Reserves & surplus	192789
	Secured Loans	243844
	Unsecured Loans	315201
	Application of Funds	
	Net Fixed Assets	644212
	Capital work in Progress	
	Including Construction stores & advances	366536
	Investments	--
	Net Current Assets	44305
	Miscellaneous Expenditure	435
iv)	**Performance of Company**	
	Turnover / Income	141188
	Other Income (including consultancy)	2280
	Total Expenditure	101262
	Profit before Tax	42206
	Profit after Tax	37667
	Earning per Share (Rs.)	124.05
	Dividend Amount	2000
v)	Generic Names of Principal product / service of company.	
	Item code No.	
	Product Description : Transmission and Sale of Power	

(DIVYA TANDON)
Secretary

(Dr. V. K. GARG)
Director (Finance)

(R. P. SINGH)
Chairman & Managing Director

As per our report of even date

For RASOOL SINGHAL & CO.
Chartered Accounts
(M. H. SINGHAL)
Partner

For UMAMAHESHWARA RAO & CO.
Chartered Accounts
(V.V.S. RAVI)
Partner

For B.M. CHATRATH & CO.
Chartered Accounts
(P.R. PAUL)
Partner

Place : New Delhi
Date : 26th June, 1998

AUDITOR'S REPORT

The Members,
Pwer Grid Corporation of India Ltd.
Nehru Place,
New Delhi - 110 019

We have audited the attached Balance Sheet of Power Grid Corporation of India Ltd. as at 31st March, 1998 and annexed Profit & Loss Account for the year ended on that date together with the Schedules, and report that :-

1. The Company is governed by the Electricity (Supply) Act, 1948; the provisions of the said Act read with the rules thereunder, have prevailed wherever that same have been inconsistent with the provisions of the Companies Act 1956.

2. As required by the Manufacturing and the Other Companies (Auditors' Report) Order, 1998 issued by the Company Law Board in terms of section 227 (4A) of the Companies Act, 1956 we give in the Annexure a statement on the matters specified in paragraphs 4 and 5 of the said order.

3. Further to our comments in the annexure referred to in paragraph 2 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 the books;

   c) The Balance Sheet and Profit & Loss Account dealt with by this report are in agreement with the books of account.

   d) Depreciation on fixed assets has been charged, as per Accounting Policy No. 8.1, in preference to Accounting standard 6 of the Institute of Chartered Accountants of India.

   e) Schedule - 17 Notes on Accounts :

   i) Note No. 10 dealing with the forfeiture of Ist issue of Bonds, 1992 in 1993-1994 and exhibiting the same with adjustment of deposits kept with Canbank Financial Services Ltd. (CANFINA) and Andhra Bank Financial Services Ltd. (ABFSL) and treatment of front-end fee and deferred revenue expenditure and restoration of the said deposits of Rs. 11206 lacs by crediting capital reserve in the year 1994-95.

   In our opinion, there is an over statement of capital reserve to the extent of Rs. 11206 lacs. Liability under"Loan Funds" of principal amount of Rs. 12420 lacs and cumulative interest of Rs. 11680 lacs have not been accounted for. However, the same has been shown as contingent liability.

   Provision for interest payable of Rs. 1927 lacs on bonds has not been made and interest income of Rs. 1424 lacs on the deposits made with CANFINA & ABFSL has not been accounted for, resulting in higher profit by Rs. 503 lacs.

ii) 1. Note No. 5, regarding withholding of certain assets by transferor organisations pending settlement/ad justment and charging of depreciation thereon;

2. Note No. 6 regarding inclusion of Rs. 562 lacs of common services in fixed assets.

3. Note no. 13 regarding recovery of Income tax of Rs. 1250 lacs on receipt basis.

4. Note No. 16 regarding no provision for Entry Tax and Sales Tax on works contracts and material issued to contracts.

5. a) Note No. 19 (a) & (b) regarding Transmission charges accounted for in the absence of final Notification of Government of India.

   b) Note No. 19 (d) regarding capitalisation of 400 KV Miryani-Misa Line and impact on profitability.

6. Note No. 20 regarding inclusion of Rs. 195 lacs for consultancy, project management and supervision fees;

7. Note No. 23 regarding provision for pay revision for Executives, supervisors and workers in absence of final settlement.

8. The confirmation of balance shown under advances, sundry debtors, sundry creditors,loans,material in transit/ under inspection/with contractors and reconcilation thereof is pending. The impact of the above on assets and liabilities and on the profit cannot be ascertained.

Subject to our comments, referred to in para 3(d) &(e) above,and their consequential effect on Balance Sheet and Profit and Loss Account, in our opinion and the best of our information and according to the explanations given to us,the said accounts read with the notes on Accounts given in Schedule -17 and Accounting Policies,give the information required by the Companies Act,1956, in the manner so required as applicable to the Companies governed by Electricity (Supply) Act,1948 and give a true and fair view:

i) In the case of Balance Sheet, the state of affairs of the Company as at 31st March,1998; and

ii) In the case of Profit and Loss Account of the Profit for the year ended on that date.

For RASOOL SINGHAL & CO.	**For UMAMAHESHWARA RAO & CO.**	**For B.M. CHATRATH & CO.**
Chartered Accounts	Chartered Accounts	Chartered Accounts
(M. H. SINGHAL)	(V.V.S. RAVI)	(P.R. PAUL)
Partner	Partner	Partner

Place : New Delhi
Date: 26th June,1998

ANNEXURE TO THE AUDITORS'REPORT

1. The company has generally maintained proper records,except in some cases where it is in the process of updation showing full particulars,including quantitative details and situation/location,as far as practicable of its fixed assets.Most of the fixed assets have been physically verified by the professional agencies,during the year except certain assets held by Transferor Organisations. The materiality in discrepancies,if any,between book records and physical inventory could not be ascertained in the absence of comparison with Books Records.

2. None of the fixed assets have been revalued during the year.

3. According to the information and explanation given to us,the stocks of stores and spare parts at most of the places have been physically verified during the year by the professional agencies. In our opinion the frequeny of verification is reasonable.

4. According to the information and explanations given to us, in our opinion,the procedures of physical verification of stocks followed by the professional agencies are reasonable and adequate in relation to the size of the company and the nature of its business.

5. The material discrepancies, if any between physical and Book balances of stocks could not be ascertained in the absence of comparison between the physical balance and Book balance. Hence the question of properly dealing with the discrepancies in the Books of Accounts can not be commented upon.

6. In our opinion and on the basis of our examination of the stock records,the valuation of stocks is fair and proper in accordance with the normally accepted accounting principles ,and is on the same basis as in the last year except as commented in para 5 above and identification of the obsolete stock and depreciation in the value if necessary.

7. The Company has not taken any loans from the companies,firms or other parties listed in the register maintained under section 301 of the Companies Act, 1956.There are no Companies under the same management as defined under the said Section

8. The company has not granted any lonas , secured or unsecued to companies, firms or the others parties listed in the register maintance under section 301 of the Companies Act , 1956. Thers are no companies under the same management as defined under the said Section.

9. The company has given deposit to Canbank Financial Services Ltd. and Andhra Bank Financial Services Ltd. and advances in the nature of loans to employees. The employees are generally repaying the principal amount and interst as per stipulation.The Canbank Financial Services Ltd.,andAndhra Bank Financial Services Ltd. have not repaid the principal amount and interest thereon as stipulated.The Company has informed that they are taking reasonable steps for recovery of principal and interest

10. In our opinion and according to the information and explanations given to us,there are adequate internal control procedures commensurate with the size of the company and the nature of its business with regard to purchases of stores,components,plant and machinery,equipment and other assets and for the sale of goods/services.

11. According to the information and explanations,given to us, there are no transactions of purchase and sale of goods and materials made in pursuance of contracts or arrangements entered in the register maintained U/S 301 of the Companies Act,1956 aggregating during the year to Rs.50,000/-(Rupees fifty thousand only) or more in respect of each party.

12. According to the information and explanations given to us, the company does not have unserviceable or damaged stores.

13. The Company has not accepted any deposits from the Public, Under Section 58-A of the Companies Act, 1956 and rules made thereunder.

14. The Company does not have any by-product. In our opinion, reasonable records have been maintained by the Company for the sale and disposal of scrap.

15. The Company has a system of Internal Audit. In our opinion, it requres to be further strengthened to commensurate with the size and nature of its business.

16. The Central Govt. has not prescribed maintenance of cost records U/S 209(1) (d) of the Companies Act, 1956 in respect of the Company.

17. The Company is regular in depositing Provident Funds dues with appropriate authority.

18. According to the information and explanations given to us, there were no undisputed amounts payable in respect of Income Tax, Wealth Tax, Sales Tax, Customs Duty and Excise Duty which have remained outstanding, as at 31st march, 1998 for a period of more than six months from the date they became payable.

19. According to the information and explanations given to us,no personal expenese have been charged to revenue account other then those payble under contractual obligations or in accordance with generally accepted business practice.

20. The Company is not a Sick Industrial Company as defined in section 3(1) (O) of the Sick Industrial Companies (Special Provisions)Act,1985.

21. In regard to the company's activities relating to consultancy,project management,supervision and contracts,we report that.

    i) The company has a reasonable system of allocation of man hours consumed on the respective activities.

    ii) The Company has a reasonable system of internal control of allocation of man hours commensurate with the size of the company and the nature of its business.

    iii) The company has a reasonable system of recording receipts,issues and consumption of materials and stores commensurate with the size and the nature of its busness.

22. In regard to Company's activities relating to the trading :

    There are no damaged goods to be determined. Hence, the question of providing for loss does not arise.

For RASOOL SINGHAL & CO.	**For UMAMAHESHWARA RAO & CO.**	**For B.M. CHATRATH & CO.**
Chartered Accounts	Chartered Accounts	Chartered Accounts
(M. H. SINGHAL)	(V.V.S. RAVI)	(P.R. PAUL)
Partner	Partner	Partner

Place : New Delhi
Date : 26th June, 1998

ANNEXURE-I

ANNEXURE TO DIRECTORS' REEPORT

PARTICULARS OF EMPLOYEES PURSUANT TO SECTION 217 (2A) OF THE COMPANIES ACT, 1956 FOR THE YEAR 1997-98

Sl. No.	Name	Designation	Qualification	Remuneration (Rs.)	Experience (Years)	Date of Commencement of Employment	Age (Years)	last Employment held
EMPLOYED FOR THE FULL YEAR								
1.	Agarwal A.R.	ED (NER)	B.E.(Elect.)	367094	26	19/11/91	50	NHPC
2.	Agarwal V.C	Addl. General Manager	M.E.(Civil)	304571	20	16/08/91	55	NTPC
3.	Asthana A.K	Chief Manager	B.E.(Civil)	632169	18	16/08/91	52	NTPC
4.	Baba Srinivasa K.V.	Chief Manager	B.Tech	352363	14	16/08/91	36	NTPC
5.	Banerjee B.K	Executive Director	B.E. (Civil)	317287	33	16/08/91	57	NTPC
6.	Bhatnagar A.K.	Executive Director	B.Sc.Engg.	384291	16	27/08/91	57	CMC
7.	Bhushan Bhanu	Director (Operation)	B.S.C.Engg (Elect.)	387215	32	16/08/91	54	NTPC
8.	Bire S.G	G.M (SRTS)	B.E.(Elect.),MBA	301305	31	16/08/91	55	NTPC
9.	Borgoin S.B.	Chief Manager (HRM)	B.S.C.,MSW.LLB	326546	15	14/11/91	39	NEEPCO
10.	Chakraborty D.	DCDE	B.E. (Elect),MBA	335041	14	16/08/91	37	NTPC
11.	Chaturvedi S.K.	Addl. General Manager	M.Sc., PG Diploma in IR	332378	17	16/08/91	47	NTPC
12.	De Bhowmick A.K	Chief Manager	M.E. (Elect.)	315490	12	16/08/91	46	NTPC
13.	Dua V.L.	Dy. General Manager	Dip.in Mech. Engg.	315979	19	28/01/91	51	NTPC
14.	Dubay. S.N.	Chief Manager	B.E. (Elect.)	323639	21	19/11/91	44	NHPC
15.	Dwivedi M.G.	Addl. General Manager	B.Sc.(Engg.) M.E.(Elect.)	316054	16	19/11/91	53	NHPC
16.	Ganguli.R.	Manager	B.E.(Elect.)	322530	16	16/08/91	37	NTPC
17.	Gupta Paras Nath	Dy. General Manager	B.E.(Elect.),LLB	331277	14	16/08/91	54	NTPC
18.	Gupta Rakesh	Manager	B.Sc.Engg.(Elect.)	419823	13	16/08/91	38	NTPC
19.	Haque Jainul	General Manager	B.E.(Elect.)	357882	15	16/12/91	51	NTPC
20.	Jha I.N	Manager	B.Sc.(Engg.)	325450	14	07/08/92	38	NTPC
21.	Job Anbalagan T.	Manager	B.Com., PGDPM	346435	11	01/12/92	49	NLC
22.	Jouhari Deepak	Sr. A. O.	A.C.A	1247000	9	16/08/91	33	NTPC
23.	Kapur Guljit	Chief Manager	B.Sc.Engg.(Elct.)	360552	10	19/11/91	47	NHPC
24.	Kumar Binay	General Manager	M.A.(Sociology.), Dip.in.I.R. & Welfare	356905	13	19/05/92	50	THDC
25.	Kumar davinder	Dy. General Manager	B.E.(Elect.),M.E. (Power Sys.EHVAC)	370784	20	16/08/91	40	NTPC
26.	Kumar Virendra	Executive Director	M.Tech.(Struct.Engg.)	387088	21	16/08/91	57	NTPC
27.	Madan R.K.	Director (Project)	B.Sc.Engg. (Elect.)	458654	19	19/11/91	57	NHPC
28.	Majumdar S.K.	General Manager	B.E. (Mech.)	300832	19	14/01/91	49	NTPC
29.	Mandal J.B.	Chief Manager	B.Tech. (Elect.)	645715	17	16/08/91	40	NTPC
30.	Mishra B.	Chief Manager	B.Sc.Engg.,Dip.inBuss. Management	667044	18	16/08/91	42	NTPC
31.	Mishra S.B.C.	General Manager	B.E. (Elect.)	341423	28	19/11/91	50	NHPC
32.	Mishra S.C.	Executive Director	B.Sc.Engg. (Elect.)	375529	32	16/08/91	53	NTPC
33.	Nagpal A.K.	DGM (F)	SAS,Dip.in Biss.Mgmt	324000	16	16/08/91	45	NTPC

Sl. No.	Name	Designation	Qualification	Remuneration (Rs.)	Experience (Years)	Date of Commencement of Employment	Age (Years)	last Employment held
34.	Nandi D.K.	Executive Director	B.Sc.(Hons.),M.Tech.	367899	26	16/08/91	56	NTPC
35.	Pandey. B.S.	Dy.General Manager	B.E. (Elect.)	378580	19	16/08/91	44	NTPC
36.	Prasad Y. S.	Manager (F)	B.Com.,A.C.A.	517463	19	23/09/91	48	NTPC
37.	Puri Surinder K.	ACDE	Diploma in Mech. Engg.	343794	17	16/08/91	48	NTPC
38.	Raghunathan K.S.	General Manager	B.E.	404134	20	16/08/91	54	NTPC
39.	Rai Anand Kumar	Supervisor	Dip.in Civil Engg.	384784	7	05/08/91	30	
40.	Rao Sunil K.	Dy General Manager	B.E.(Elect.) MBA	414240	18	16/08/91	41	NTPC
41.	Rath. G. K.	Chief Manager	B.Sc.Engg	656719	15	16/08/91	45	NTPC
42.	Roy Nabarun	Dy. Manager	B.E. (Elect.)	342085	9	14/11/91	33	NEEPCO
43.	Satyam. K.	General Manager	B.E.(Civil)	329338	29	16/08/91	52	NTPC
44.	Saxena V.B.	Executive Director (F)	B.Sc.LLB,ICWA,CS	330612	32	29/11/96	55	ONGC
45.	Sharma A.K.	Chief Manager	B.E. (Elect.)	340274	14	16/08/91	37	NTPC
46.	Sharma C.M.	Dy. General Manager	B.Sc. (Engg.)	345414	25	16/08/91	48	NTPC
47.	Shyamsunder R.	Chief Manager (T/L)	B.E. (Telecom.)	441281	14	07/12/91	58	NLC
48.	Singh Jagdish	Dy.General Manager	B.E. (Elect.)	413695	17	19/11/91	53	NHPC
49.	Singh Kailash	Executive Director	B.A.,LLB	331353	29	01/05/91	57	HSCL
50.	Singh R.P.	CMD	M.Sc.Engg.	453311	22	21/01/91	50	NTPC
51.	Singh K.P.	Chief Manager	B.Tech. (Elect.)	300537	17	16/08/91	41	NTPC
52.	Sinha. N.K.	Manager (F)	B.Sc.,SAS	330064	31	19/11/91	54	NHPC
53.	Sreeramulu.P.	Dy.General Manager	B.C om.,A.C.A.	405537	24	16/08/91	47	NTPC
54.	Tyagi U.K.	Chief Manager	B.E. (Elect.)	398617	16	19/11/91	44	NHPC
55.	Veeraraju M.	AGM (SRTS)	B.E.(Elect.), M.I.E.	400681	15	16/08/91	58	NTPC
EMPLOYED FOR THE PART YEAR								
1.	Dwivedi K.N.	Chief Manager	M.A.,MSW	256852	13	26/02/91	58	FCI
2.	Jaggi A.L.	Director	B.E. (Elect.)	215892	33	19/11/91	58	NHPC
3.	Khurana A. Mohan	Chief Manager	B.Sc. (Hons.)	253083	14	16/08/91	44	NTPC
4.	Kumar Mahendra	General Manager	B.E. (Elect.) Adv. Dip.in Management	189059	16	16/08/91	50	NTPC
5.	Narula S.K.	Executive Director	B.A., PG Dip.in Labour Law	185700	20	19/02/91	54	NTPC
6.	Ramachandran A.K.	General Manager	Mechanical Engg.	174863	22	06/12/91	58	NTPC
7.	Talwar S.K.	Chief Manager	ICWA	276846	17	19/11/91	58	NHPC
8.	Venkataramani S.	DGM (Finance)	B.Sc. (Physics),AICWA,SAS (Commercial)	563078	29	08/11/91	58	NTPC

Notes : 1.) Remuneration includes Salary, Salary dues to revision, Allowances, Leave encashment, Leave travel concession, Payment for Subsidises leased accomodation, reimbursement of medical expenses to employees and employer's contribution to Provident funds and other funds. In addition employees are entitled to Gratuity/Group Insurance in accordance with Company's reles.

2.) None of the Employees listed above is related to any Director of the Company.

ANNEXURE-II

PARTICULARS REQUIRED UNDER THE COMPANIES (DISCLOSURE OR PARTICULARS IN THE REPORT OF THE BOARD OF DIRECTORS) RULES, 1988 READ WITH SECTION 217 (i) (e) OF THE COMPANIES ACT, 1956.

A. CONSERVATION OF ENERGY

a) Energy Conservation Measures taken and on hand..

The POWERGRID transmission system is designed in an optimal manner such that the losses in the transmission system are minimised. The various equipment parameters and types are so shosen such that the losses are optimised.

b) Additional investment and proposals, if any, being implemented for reduction of consumption of Energy.

POWERGRID has taken up the project of installation of shunt capacitors in the power distribution network on behalf of SEBs on no-loss-no-profit basis. This shall reduce the distribution losses significantly and conserve energy.

c) Impact of measures at (a) and (b) above for reduction of Energy consumption and consequent impact on the cost of production of goods.

Overall optimisation is achived above.

d) Total Energy consumption and energy consumption per unit of production as per for,"A" of the Annexure in respect of industries specified thereto.

This is not applicable for POWERGRID since it does not fall under any of the industries mentioned in the schedule.

B. TECHNOLOGY ABSORPTION

Research & Development

i) Application of series compensation/FACTS on POWERGRID's Kanpur-Ballabgarh 400 kv line has been finalised to improve the stability and to increase the load carrying capability of line.

ii) POWERGRID in association with IIT Kharagpur is devloping a real Time Digital Simulator (RTDS) for power system analysis in real time operation.

iii) POWERGRID has successfully carried out the simulator studies to ensure that the controllers of HVDC back to back at Chanderpur (POWERGRID) and Chandrapur-Padghe HVDC bipople of MSEB act in unison to help the system under normal and dynamic conditions. The studies were carried out in U.K. Utilising the actual controllers of ABB and GEC.

C. FOREIGN EXCHANGE EARNINGS AND OUTGO

FOREIGN EXCHANGE EARNINGS:

		(Rupees in Lacs)
i)	Interest	107
ii)	Others	114
	Total	221

FOREIGN EXCHANGE OUTGO :

i)	Capital Goods	29298
ii)	Professional & Consultancy Fees	135
iii)	Interest	10035
iv)	Others	10895
	Total	50363

ANNEXURE-III

COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 619 (4) OF THE COMPANIES ACT, 1956 AND MANAGEMENT REPLIES THEREON FOR THE YEAR ENDED 31ST MARCH, 1998

COMMENTS OF CAG	MANAGEMENT REPLY
A. Balance Sheet **Reserves and Surplus (Schedule 2)-Rs. 192789 lakh** **i) Capital Reserve-Rs.11206 lakh** Areference is invited to para 3(e) (i) of the Auditor's Report read with item 10 of Notes on Accounts (Schedule 17). The deposit of Rs. 11206 lakh placed with Andhra Bank Financial Services Limited (CANFINA) out of proceeds of Ist bonds issue was not paid on due dates by ABFSL/ CANFINA. With a view to protect its financial interest, the Company forfeited bonds of Rs. 12420 lakh by crediting to Capital Reserve (Rs. 11206 lakh) and to front end fee (Rs. 1214 lakh). The subject matter of dispute between the Company, ABFs1/CANFINA, Canara Bank etc. was referred to Commitee on Disputes of Government of India. Pending decision on the reference, provision for interest payable of Rs. 1927 lakh on the bonds (cumulative interest 11680 lakh) and interest income of Rs. 1424 lakh (cumulative interest Rs. 8628 lakh) on the deposits has not been accounted for in the accounts. Showing an external liability as Capital Reserve is a distoration of accounts, as also pointed out in successive comments of the Comptroller & Auditor General of India on the accounts of the Company for the last three years ended 31st March, 1997.	The Company Considers the accounting of for-feited value of Bonds under "Capital Reserve" as appropriate.
B. Profit and Loss Account **Income-Rs. 143468 lakh** ii) This is overstated by Rs. 1079.34 lakh due to inclusion of element of interest (Rs.2178 lakh) and actual ruoee liability on account of Exchange Rate Variation (Rs. 150.60 lakh) instead of Rs. 1170.56 lakh and Rs. 78.70 lakh respectively based upon actual date of commercial commissioning of poles-I (Oct. 1997) and II (March, 1998) of the HVDC, Chandrapur. Consequently profit for the year is also overstated by Rs. 1079.34 lakh.	The interest for provisional transmission charges was worked out without bifurcating between Pole-I and Pole-II. The adjustments, if any, shall be carried out after receipt of Tariff notification from Ministry of Power.

Sale of Electric Power-Rs. 16535 lakh

iii) This is overstated by Rs. 98.78 lakh due to inclusion of element of interest on working capital for 2 months receivables instead of 1.5 months as provided in the agreement between the Company and the EREB constituents. Consequently the profit for the year is also overstated by Rs. 98.75 lakh.

The interest on working capital for 2 months receivable has been considered as per norms and factors mentioned in notification dated 16.12.97 issued by Ministry of Power. The adjustment, if any, shall be carried out after receipt of notification from Ministry of Power.

Contingent liabilities (Schedule-10)
Rs. 85883 lakh

iv) This is overstated by Rs. 1137.94 lakh due to (i) Excess provision of interest of Rs. 1930.81 lakh @ 18% on compounded basis instead of simple rate of interest @ 21% as claimed by M/s. Bhanu Construction Company over the period of 9 year and (ii) under-provision of interest of Rs. 792.87 lakh owing to non calcuation of additional interest for the period from 24the May, 1996 to 31st March, 1998 as claimed by M/s. EMC for the construction of Fatehpur HVDC transmission system.

Noted

Sd/-
(T. K. Sanyal)

For and on Behalf of the Board
Principal Director of Commercial Audit
Ex- office Member, Audit Board - II

Date : 18th August, 1998
Place : New Delhi

FOR AND BEHALF OF THE BOARD

Sd/-
(R. P. Singh)

Chairman & Managing Director

Dated : 28th August, 1998
Placed : New Delhi

REVIEW OF ACCOUNT OF POWER GRID CORPORATION OF INDIA LIMITED, NEW DELHI FOR THE YEAR ENDED 31ST MARCH 1998 BY THE COMPTROLLER & AUDITOR GENERAL OF INDIA

NOTE : This Review of Accounts has been prepared without taking into account comments under Section 619 (4) of the companies, Act, 1956 and qualifications contained in the statutory Auditor's Report.

1. FINANCIAL POSITION

The table below summarises the financial position of the company under headings for the last three years :

		1995-96	1996-97	1997-98
LIABILITIES				**(Rs. in Crores)**
a)	Paid-up capital			
	Government (including share application			
	money pending allotment	2992.24	3020.04	3036.54
b)	Reserves and Surplus			
	i) Free Reserves and urplus	886.21	1169.96	1491.41
	ii) Share Premium Account	--	--	--
	iii) Capital Reserves	398	442.94	436.48
c)	Borrowing from :			
	i) Government of India	885.17	1175.59	1456.22
	ii) Financial Institutions	183.57	175.79	169.01
	iii) Foreign Currency loans	1409.35	1695.45	2153.56
	iv) Cash Credit	--	--	--
	v) Others	1421.53	1724.88	1811.96
d)	i) Current Liabilities and Provisions	561.41	570.76	726.16
	ii) Provision for Gratuity	--	--	--
	Total	**8738.28**	**9975.41**	**11281.04**
ASSETS				
e)	Gross Block	5491.68	5582.18	8095.60
f)	Less : Depreciation	950.76	1283.48	1653.48
g)	Net Blocck	4540.92	4298.70	6442.12
h)	Capital Work-in-progress & Construction			
	stores & Advances	3081.52	4510.46	3665.36
i)	Investments	--	--	--
j)	Current Assets, Loans and Advances	1109.46	1160.17	1169.21
k)	Misc. Expenditure not written off	6.38	6.08	4.35
l)	Accumulated Loss	--	--	--
	Total	**8738.28**	**9975.41**	**11281.04**
m)	Working Capital [j-d(i)]	548.05	589.41	443.05
n)	Capital Employed (g+m)	5088.97	4888.11	6885.17
o)	Net Worth **[a+b(i)+b(ii)-k]**	3872.07	4183.92	4523.60
p)	Net Worth per rupee of paid-up Capital (In Rupees)	1.29	1.39	1.49

2. SOURCES AND UTILISATION OF FUNDS

Funds amounting to 1696.84 Crores from internal and external sources were realised and utilised during the year as detailed below :

SOURCES OF UNIT

			(Rs. in Crores)
a)	Funds generated from operations		
	Profit after tax	337.16	
	Add : Deprecition	370.00	
	Add : Misc.expenditure written off	1.79	
	Add : Increase in Insurance Reserve	6.29	
			715.24
b)	Increase in paid-up capital		16.50
c)	Increase in Borrowed funds		818.74
d)	Decrease in working capital		146.36
	Total		1696.84

UTILISATION OF FUNDS

a)	Net Increase in Fixed assets	2513.42	
	Less : Decrease in Capital Work In Progress	845.10	
	& Construction Stores & Advances		1668.32
b)	Decrease in Capital Reserve		6.21
c)	Grant Utilised		0.25
d)	Dividend paid (including Tax on Proposed Dividend)		22.00
e)	Increase in Misc. expenditure		0.06
	Total		1696.84

3. Working Results

The working results of the Company for the last three years ending 31st March 1998 are given below :

		1995-96	**1996-97**	**1997-98**
				(Rs.in Crores)
i)	Sales	969.96	1041.27	1419.55
ii)	Profit before ffor tax	275.96	305.76	422.06
iii)	Provision for tax	0.01	0.01	84.90
iv)	Profit after tax	275.95	305.75	337.16

4. RATIO ANALYSIS

Some important retios on the financial health and working of the Company at the end of last three years ending 31st March 1998 are as under :

		1995-96	**1996-97**	**1997-98**
A.	Liquidity Ratio [j/d(i)]	1.98	2.03	1.61
B.	Debt Equity Ratio			
	Long term debt to Net Worth	1.01	1.14	1,24
	[c(i to v) but excluding short term loans/0]			
C.	Profitability Ratios			**(in percentage)**
	a)Profit after tax to			
	i) Capital Employed	5.42	6.25	4.90
	ii) Net Worth	7.13	7.31	7.45
	iii) Sales (Including excise duty)	28.45	29.36	23.75
	b) Profit after tax to Equity	9.22	10.12	11.10
	c) Earning per share (In Rupees)	92.22	101.24	111.03

5. Inventory Levels

The inventory Levels at the close of the last three years ending 31st March 1998 are as under :

(Rs.in Crores)

	1995-96	**1996-97**	**1997-98**
Stores and Spares and loose tools	107.43	107.96	1350.29

6. SUNDRY DEBTORS

The Sundry Debtors and Sales during the three years ending 31st March 1998 are as followa :

(Rs.in Crores)

	Sundry Debtors				
As on 31st March	Considered good	Considered doudful	Total	Sales (including excise duty)	Percentage of Sundry Debtors to sales
1996	407.46	--	407.46	969.96	42.01
1997	510.67	--	510.67	1041.27	49.04
1998	734.17	3.86	738.03	1419.55	51.99

The agewise break up of Sundry Debtors at the end of 1997-98 is as under :

Debtors outstanding for	**Amount (Rs. in Crores)**
Less then 6 Months	323.94
6 Months to 1 year	106.87
1 year to 3 years	157.26
More than 3 years	149.96
Total	738.03

(T.K. Sanyal)
Principal Director of Commercial Audit and
Ex-officio Member, Audit Board-III
New Delhi

Place : New Delhi
Date : 18.8.98

CURRENT COST ACCOUNTS

In the context of persistent inflation in the Indian economy, the corporation has attempted to perceive the impact of price changes on its financial position and working results. The current cost accounts shown hereunder reflect the current values of assets of the Corporation which mainly comprise fixed assets. We believe that current cost accounting assumes special importance in the case of a public utility like the Corporation, the prices of whose service are determined by reference to the related costs rather than by the market forces of demand and supply as in the case of other business enterprises. If the prices of the services rendered by a public utility are determined on the basis of costs as indicated by the historical cost-based accounts, they would not cover the current cost depreciation and other current costs being incurred. Over a period of time, the enterprices will not be able to maintain its operating capability even though it may show profit as per conventional historical cost based accounts. It is perhaps for this reason that internationally, many public utilities prepare even their main accounts on the basis of current cost accounting.

Basis of Accounting under current Cost Accounting for the Corporation

1. The exercise has been conducted on the basis of the principles enunciated in the Guidance Note on Accounting for Changing prices issued by the Institute of Chartered Accountants of India.

2. The current cost adjustments have generally been made on the basis of specific indices for various items. These indices have been computed by the Corporation as below :

   Plant and Machinery constitutes about 95% of the total fixed assets of the Corporation. Further, out of the various items of plant and machinery, ten specific items constitute about 95% of the total value of plant and changes in prices of these items. The indices for various items of plant and machinery have been worked out on the basis of an appropriate combination of-

   i) Detailed indices comprising the wholesale price index published by the Office of the Econimic Association, Ministry of Industry, Govt. of India, and

   ii) Indices of specific items as circulated by the Indian Electrical and electronics manufactures Association.

FIXED ASSETS

Fixed Assets are stated at their gross current replacement cost by applying the relevant specific indices to the gross book value of each category of fixed assets. The net current replacement cost has been arrived at by charging depreciation on the gross current replacement cost at the rates specified under the Electricity (Supply) Act. 1948.

The lives of Fixed assets acquired from other enterprises have been worked out on the basis of the original cost, rate of depreciation and the written down value.

CAPITAL WORK IN PROGRESS

Since the gestaion period is 3-5 years for the each project, capital work-in progress has also been stated at its current replacement cost.

INVENTORIES

Since inventories comprise mainly machinery spares, they have been restated on the basis of the indices used for the relevant items of plant and machinery.

OTHER ASSETS AND LIABILITIES

Cash, sundry debtors, loans and other liabilities have not been revalued since these are already expressed in current monetary terms.

DEPRECIATION ADJUSTMENT

The depreciation adjustment represents the difference between the amount of depreciation computed on the current cost of fixed assets and the amount of depreciation charged in the historical cost accounts.

GEARING ADJUSTMENT

As a part of the operating assets of the Corporation is financed through borrowings which are to be repaid in the same monetary amount irrespective of changes in prices, the full impact of price changes as reflected by the depreciation adjustment has been reduced by adding back a proportionate amount while determining the current cost profit attributable to shareholders.

The current cost reserve represents, unrealised revaluation surplus on fixed assets, adjustment in respect of depreciation and the gearing adjustment.

CURRENT COST BALANCE SHEET
AS AT 31ST MARCH, 1998

(Rupees in Lacs)

		As at 31st March, 1998	As at 31st March, 1997 As at
NET ASSETS EMPLOYED			
Gross Block	1405812		1107490
Less : Accumulated Depreciation	344975		269846
Net Block		1060837	837644
Capital Work-in Progress		270159	411285
Construction Stores and Advances		154789	88401
NEW CURRENT ASSETS			
Inventories	13694		11009
Other Current Assets	103392		105221
	117086		116230
Less : Current Liabilities and Provisions	72616		57119
		44470	59111
Miscellanceous Expenditure (to the extent not written off or adjusted)		435	608
		1530690	1397049
FINANCED BY			
SHAREHOLDERS FUNDS			
Share Capital	303654		302004
Current Cost Reserve	499569		478341
Other Reserves and surplus	168422		139533
		971645	919878
LOAN FUNDS			
Secured Loans	243844		180315
Unsecured Loans	315201		296856
		559045	477171
		1530690	1397049

CURRENT COST PROFIT AND LOSS ACCOUNT
FOR THE YEAR ENDED 31ST MARCH, 1998

(Rupees in Lacs)

		As at 31st March, 1998	As as at March, 1997 As at
Profit before Interest and Finance Charges and Taxation (On Historical cost basis)	76780		50543
Less : Depreciation Adjustment	36139		30728
Current Cost operating Profit	40641		19815
Add : Gearing Adjustment	11772		8972
		52413	28787
Less : Interest and Finance Charges	34574		19967
Provision for Taxation	8490		
		43064	19967
Current Cost profit Attributable to Shareholders		9349	8820

CASH FLOW STATEMENT
PURSUANT TO CLAUSE 32 OF THE LISTING AGREEMENT WITH STOCK EXECHANGE

(Rupees in Lacs)

`	For the Year Ended 31st March, 98	For the Year Ended 31st March, 97
A. CASH FLOW FROM OPERATING ACTIVITIES		
Net profit before tax and extraordinary items	42206	30576
Adjustment for :		
Despreciation-	36858	33119
Amortised Expenditure	179	181
Provision	1082	1169
Interest	34574	19967
Operating profit before Working Capital Changes	114899	85012
Adjustment for :		
Trade and Other Receivables	-22736	-1321
Inventories	-2746	-103
Trade payble and Other Liabilities	17298	-222
Other current assets	12207	-14086
Deferred Revenue Expenditure	-6	-151
Cash generated from operations	4017	-15883
Interest paid	-34574	-19967
Direct taxes paid	-10248	-1
Net cash from operating Actuvities	74094	49161
B. CASH FLOW FROM FINANCING ACTIVITIES		
Purchase of fixed assets	-10420	-980
Capital work-in-progress	-94009	-126724
Advance for capital Good	-62936	-24950
Loans and Advances	-924	5445
Refund of Exice Duty Credited to Capital Reserve	---	200
Net Cash used in Investing Activities	-168289	-147009
C. CASH FLOW FROM FINANCING ACTIVITIES		
Proceeds from issue of Share Capital	1650	2780
Proceeds from Long term Borrowings	81874	87209
Proceeds from Grants in Aid	-25	3793
Dividend paid	-2200	-1000
Net Cash from Financing Activities	81299	92782
D Others		
New Increase/Decrease in Cash & Cash Equivalents	-12896	-5066
Cash and Cash Equivalents (Opening Balance)	19835	24901
Cash and Cash Equivalents (Closing Balance)	6939	19835

Note :-

1. Cash and Cash Equivalents consist of Cash in hans and balance with Banks.
2. Interest paid includes Rs. 1282 lacs u/s 234 (B) & (C) of income tax Act, 1961.

(DIVYA TANDON)	**(V. K. GARG)**	**(R. P. SINGH)**
Secretary	Director (Finance)	Chairman & Managing Director
For RASOOL SINGHAL & CO.	**For UMAMAHESHWARA RAO & CO.**	**For B.M. CHATRATH & CO.**
Chartered Accounts	Chartered Accounts	Chartered Accounts

Place : New Delhi
Date : 26.06.1998

AUDITORS' CERTIFICATE

To
The Board of Directors,
Powergrid Corporation of India Ltd.
New Delhi.

We have examined the attached Cash flow Satement of Power Grid Corporation of India Limited, for the period ended March 31st, 1998. The statement has been prepared by the Company in accordance with the requirements of listing agreement Clause-32 with Stock Exchange and is based on and is in agreement with the corresponding profit & Loss Account and Balance Sheet of the Company covered bu our report of 26th June, 1998 to the Member of the Company.

For RASOOL SINGHAL & CO.	**For UMAMAHESHWARA RAO & CO.**	**For B.M. CHATRATH & CO.**
Chartered Accounts	Chartered Accounts	Chartered Accounts
(M. H. SINGHAL)	**(V.V.S. RAVI)**	**(P.R. PAUL)**
Partner	Partner	Partner

Place : New Delhi
Date : 26.06.1998