



2051MW Parbati River Basin (H.P.) foundation stone laid by Hon'ble Prime Minister Shri Atal Bihari Vajpayee on 12.12.1999





390 MW Dul Hasti Project (J&K) - Concrete Dam under construction

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#### **CORPORATE MISSION**

The mission of NHPC is to harness the vast hydro, tidal, wind, geo-thermal and gas potential of the country to produce cheap/pollution free and inexhaustible power. NHPC would play a significant role in the integrated and efficient development of hydroelectrical, tidal, gas, geo-thermal and wind power potential in the Central Sector covering all aspects such as investigations, planning, designs, construction, operation and maintenance of hydroelectric, tidal, geo-thermal, gas and wind power projects.

### **CORPORATE OBJECTIVES**

To achieve planned development of hydro projects expeditiously adopting modern methodologies and latest technologies as well as integrated project management system to achieve speedy execution with least cost and in the shortest time frame.

To ensure maximum utilisation of installed capacity (commissioned power stations) by adopting modern methods of operations and maintenance including renovations, modernisation, uprating of power generating stations, wherever necessary.

To prepare a comprehensive Corporate Plan and a long term perspective plan and constantly reorient it to be in line with the changing political and economical scenario of the country and closely monitor its implementation to create and build up an image for the Corporation in the Power Sector.

To aim at and achieve suitable organisational development with simultaneous human resource development through need based training etc.

To undertake long term feasibility studies for optimum and rapid development of hydropower resources of river basins with a view to improve the share of hydro in the country's power mix.

To take up the execution of hydroelectric, tidal, geo-thermal, gas and wind power projects in the country.

To undertake consultancy assignments in the field of project investigation, design, engineering and project implementation. To undertake turnkey execution on deposit basis within and outside the country.

To adopt an environmental and ecological conscious approach in building hydro power projects by taking various environmental and ecological protection measures.

### FINANCIAL OBJECTIVES

To generate sufficient internal resources for short term and long term financing for expansion and setting up of new projects.

To strategically formulate long term Corporate Plans to achieve desired growth of the activities of the Corporation commensurate with national objectives.

To continue efforts to maximise output and generation at most economic costs.

To complete all on-going projects within the stipulated time and cost without any overruns.



CORPORATE PROFILE					
FINANCIAL		1999-2000	1998-99	1997-98	1996-97
Sales & Wheeling charges	*	10757	11944	9930	5344
Miscellaneous income	@	2026	391	44	217
Profit before interest & depreciation	\$	10707	9992	8491	4811
Profit after interest & depreciation		4012	3053	2994	1067
Dividend		150	150	150	150
Reserves & surplus(cumulative)		16906	12721	9486	6345
WHAT CORPORATION OWNS					
Gross Fixed Assets		77527	70904	69036	38938
Depreciation		10290	8111	5986	6228
Net Fixed Assets		67237	62793	63050	32710
Capital Work in progress		27686	25760	20731	48957
Construction Stores & Advances		5115	3228	3320	1167
Net Current Assets		21009	14718	12525	4868
Miscellaneous Expenditure		19	4	17	50
		121066	106503	99643	87752
WHAT CORPORATION OWES					
Net Worth					•
- Share Capital		44462	38250	33930	29174
- Reserves		16906	12721	9486	6345
<ul> <li>Income received in advance on account of advance against depreciation</li> </ul>		3861	2455	1305	0
Borrowings		55837	53077	54922	52233
		121066	106503	99643	87752
OPERATING PERFORMANCE		1999-2000	1998-99	1997-98	1996-97
Generation (M.U.)		8691	9917	8816	5614
Machine availability (%)		91.05	88.39	83.00	83.25
Sales (Rs.in crores)		1076	1194	993	534
Man power (Nos.)		12150	11860	11799	12119

<sup>\*</sup> Sales are net after tariff adjustment and advance against depreciation

<sup>@</sup> Includes receipts against contracts

<sup>\$</sup> After prior period adjustments

Rs. in Millions					
1990-91	1991-92	1992-93	1993-94	1994-95	1995-96
2093	2306	1552	2087	4805	5091
236	257	53	22	16	20
1601	1671	1244	1714	3714	4330
528	493	415	705	937	774
(	0	0	50	100	150
2419	2912	3327	3982	4819	5443
14423	14832	12293	16040	35978	37275
2079	2517	2662	2912	3698	4901
1234	12315	9631	13128	32280	32374
18483	26993	29941	31487	33801	44447
7310	9270	10246	13682	2265	1690
3148	1537	6390	8351	5243	3954
	0	31	45	106	86
41286	50115	56239	66693	73695	82551
2045	23225	26325	28325	28327	28903
2419	2912	3327	3982	4819	5443
(	0	0	0	0	0
1041	22079	24505			
1841	23978	26587	34386	40549	48205
4128	50115	56239	66693	73695	82551
1990-9	1991-92	1992-93	1993-94	1994-95	1995-96
361	3567	3474	3587	6058	6141
83.2	90.18	87.43	84.66	83.99	85.30
20	228	152	206	478	509
1494	13015	12952	12449	12145	11984

### DIGEST OF IMPORTANT DATA (TEN YEARS)

· · ·	1999-2000	1998-1999	1997-1998
A SALE OF ENERGY \$	12163	13094	11235
B ADVANCE AGAINST DEPRECIATION	1406	1150	1305
C MISCELLANEOUS INCOME #	2026	391	44
D TOTAL INCOME (A)-(B)+(C)	12783	12335	9974
E GENERATION & OTHER EXPENSES	2076	2343	1483
F GROSS MARGIN (D) - (E)	10707	9992	8491
G DEPRECIATION	2198	2152	1140
H GROSS PROFIT (F) - (G)	8509	7840	7351
I INTEREST AND FINANCE CHARGES	4497	4787	4357
J NET PROFIT (H) - (I)	4012	3053	2994
K INTERNAL RESOURCE GENERATED (G)+(J)+(B)	7616	6355	5439
L AUTHORISED CAPITAL	50000	50000	35000
M EQUITY PAID UP CAPITAL *	44462	38250	33930
N RESERVE AND SURPLUS	16906	12721	9486
O LOAN FUND	55837	53077	54922
P INCOME RECEIVED IN ADVANCE ON ACCOUNT OF ADVANCE AGAINST DEP. (AAD)	3861	2455	1305
Q GROSS FIXED ASSETS	77527	70904	69036
R DEPRECIATION	10290	8111	5986
S NET FIXED ASSETS (Q) - (R.)	67237	62793	63050
T CAPITAL WORK-IN-PROGRESS	27686	25760	20731
U CONSTRUCTION STORES AND ADVANCES	5115	3228	3320
V WORKING CAPITAL	21009	14718	12525
W MISC. EXPENDITURE TO THE EXTENT NOT WRITTEN OFF	19	4	17
X GROSS CAPITAL EMPLOYED (S)+(T)+(U)+(V)	121047	106499	99626
Y NET WORTH $(M)+(N)+(P)-(W)$	65210	53422	44704
Z INV. CONSUMED AS PER GEN. & ADM.& PURCHASE OF POWER	60	133	60
AA VALUE ADDED	10697	11811	9870

<sup>\$</sup> INCLUDING TARIFF ADJUSTMENT, WHEELING CHARGES AND PROVISION FOR DOUBTFUL DEBTS # INCLUDES RECEIPTS AGAINST CONTRACTS

### **RATIOS**

1. RETURN ON GROSS CAPITAL EMPLOYED (H) / (X)	7.03%	7.369	7.38%
2. RETURN ON NET WORTH (J) / (Y)	6.15%	5.719	% 6.70%
3. NET SALES TO GROSS CAPITAL EMPLOYED ((A)-(B))	8.89%	11.229	% 9.97%
4. VALUE ADDED TO NET SALES (AA) / ((A)-(B))	99.44%	98.89	% 99.40%
5. DEBT TO EQUITY RATIO (O) / ((M)+(N)+(P))	0.86	0.9	9 1.23
6. NET PROFIT TO NET SALES (J) / ((A)-(B))	37.30%	25.569	% 30.15%

<sup>\*</sup> INCLUDING SHARE DEPOSIT & GOI FUND ADJUSTABLE TO EQUITY

. in Millions)	(Rs					
1990-1991	1991-1992	1992-1993	1993-1994	1994-1995	1995-1996	996-1997
2093	2306	1552	2087	4805	5091	5344
0	0	0	0	0	0	0
235	257	53	22	16	20	217
2328	2563	1605	2109	4821	5111	5561
727	892	361	395	1107	781	750
1601	1671	1244	1714	3714	4330	4811
184	214	226	230	365	1029	1111
1417	1457	1018	1484	3349	3301	3700
889	964	603	779	2412	2527	2633
528	493	415	705	937	774	1067
712	707	641	935	1302	1803	2178
25000	25000	25000	25000	25000	25000	35000
20453	23225	26325	28325	28327	28903	29174
2419	2912	3327	3982	4819	5443	6345
18414	23978	26587	34386	40549	48205	52233
0	0	0	0	0	0	0
14423	14832	12293	16040	35978	37275	38938
2079	2517	2662	2912	3698	4901	6228
12344	12315	9631	13128	32280	32374	32710
18483	26993	29941	31487	33801	44447	48957
7310	9270	10246	13682	2265	1690	1167
3148	1537	6390	8351	5243	3954	4868
1	0	31	45	106	86	50
41285	50115	56208	66648	73589	82465	87702
22871	26137	29621	32262	33040	34260	35469
389	412	18	18	37	13	48
1676	1865	1506	2044	4744	5078	5296
	· .					
3.43%	2.19%	1.18%	2.23%	4.55%	4.00%	4.22%
2.31%	1.89%	1.40%	2.19%	2.84%	2.26%	3.01%
5.07%	4.60%	2.76%	3.13%	6.53%	6.17%	6.09%
80.08%	80.88%	97.04%	97.94%	98.73%	99.74%	99.10%
0.83	0.92	0.90	1.06	1.22	1.40	1.47
25.23%	21.38%					



## Board of Directors

(As on 01.10.2000)



Shri Yogendra Prasad Chairman & Managing Director



Shri A.I. Bunet
Director (Personnel)



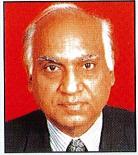
Shri R. Natarajan
Director (Finance)



Shri A.K. Gangopadhyay Director (Projects)



Shri R.K. Sharma Director (Technical)



Shri D.V. Khera Member (Hydro) Central Electricity Authority



Shri Ajay Shankar Joint Secretary (Hydro) Ministry of Power



Shri Sanjay Tandon

### Company Secretary SHRI VIJAY GUPTA

#### STATUTORY AUDITORS

#### M/S JAIN CHOPRA & COMPANY

CHARTERED ACCOUNTANTS 105,JYOTI BHAWAN, DR. MUKHERJEE NAGAR COMMERCIAL COMPLEX, NEW DELHI-110009

#### **BRANCH AUDITORS**

#### M/S K.B. SHARMA & CO

CHARTERED ACCOUNTANTS VIDYA BHAWAN, PARADE ROAD, JAMMU - 180001

### M/S SAHA GANGULI & ASSOCIATES

CHARTERED ACCOUNTANTS SHANTINIKETAN, 8, CAMAC STREET (6TH FLOOR), CALCUTTA-700017

### M/S K.K. GHEI & CO

CHARTERED ACCOUNTANTS 806,HEMKUNT HOUSE, 6,RAJENDRA PLACE, NEW DELHI-110008

#### BANKERS

STATE BANK OF INDIA
INDIAN OVERSEAS BANK
DENA BANK
CANARA BANK
PUNJAB NATIONAL BANK
CENTRAL BANK OF INDIA
BANK OF INDIA
CORPORATION BANK
BANK OF BHUTAN
SKANDINAVISKA ENSKILDA BANKEN
STATE BANK OF PATIALA
STANDARD CHARTERED BANK
J&K BANK LTD.
ICICI BANK LTD.

Regd. Office: N.H.P.C. Office Complex, Sector-33, Faridabad-121003 (Haryana)



# Chairman's Speech

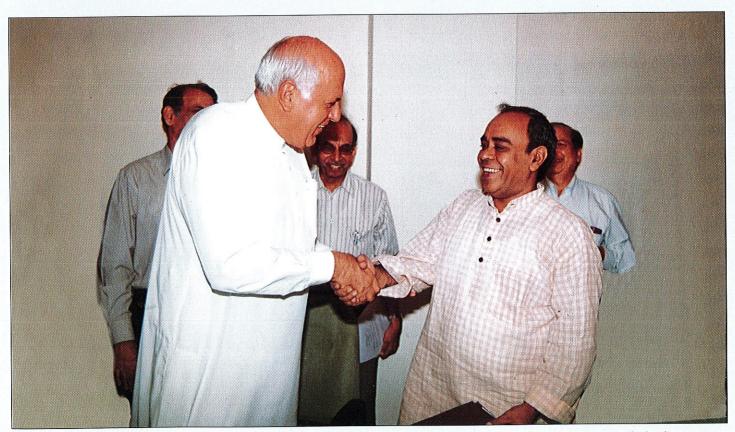
Zear Share Holders and my colleagues in the Board,

I have great pleasure in extending a warm welcome to you to the 24<sup>th</sup> Annual General Meeting of National Hydroelectric Power Corporation Limited. The Directors' Report, the financial accounts of your Company for 1999-2000 along with Auditor's Report and the comments of the Comptroller and Auditor General of India are all with you and with your permission I shall take them as read.

The year started on a buoyant note and witnessed a flurry of activities on all fronts in an unprecedented magnitude. The year ended in a happy note derived from a sense of achievements. For the year 1999-2000, the Corporation's sales turnover was Rs.12,163 million as against Rs.13,094 million in 1998-99. The reduction



was due to poor inflows in the rivers and particularly Jhelum which feeds the 480 MW Uri Hydroelectric Project in the Kashmir Valley. However, the prudential economic measures, dispersal and redeployment of surplus staff to new projects for pre-construction works and for execution, enabled the Corporation to achieve a net profit of Rs.4,012 million as against Rs.3,053 million in the previous year, an increase of about 31 per cent.



Shri P.R. Kumaramangalam, the then Union Minister of Power and Dr. Farooq Abdullah, Chief Minister of J&K at the MOU signing ceremony for handing over seven projects in J&K to NHPC



Smt. Jayawanti Mehta, Hon'ble Union Minister of State for Power addressing NHPC Officers at Corporate Office.

As in the previous year, your Corporation has recommended a dividend of Rs.150 million for the year 1999-2000.

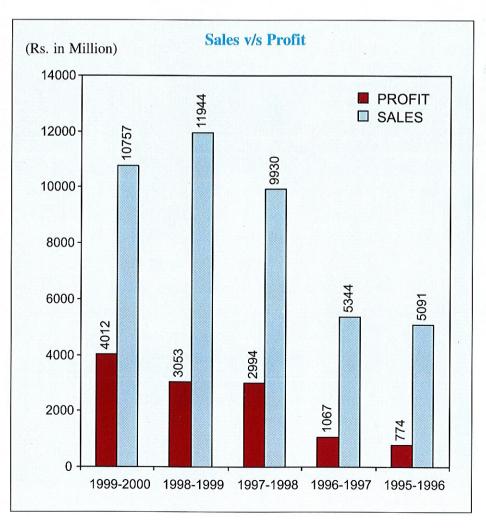
You would recall that your Corporation submitted a proposal in July, 1999 for increasing the authorised share capital of your Corporation

from Rs.50,000 million to Rs.100,000 million to cater to the requirement of new projects. I am happy to announce that Government of India approved in August, 2000 the enhancement of the authorised share capital to Rs.70,000 million in the first instance.

You would be glad to know that your Corporation maintained the consistent track record of timely discharge of commitments towards Bond Holders and lending institutions and successfully redeemed Bonds aggregating to Rs.5,961.8 million including Rs.1,638.5 million by prepayment thus saving Rs.155 million by way of interest. In addition, your Corporation repaid term loans of UTI, HDFC and Canara Bank totalling Rs.1,227.2 million.

The Corporation realised Rs.7,996.75 million from beneficiary States for energy supplied. This included an amount of Rs.672 million received through Central Plan Assistance. The outstanding dues at the end of the year stood at Rs.22,809 million (excluding surcharge of Rs.15,248 million). The financial conditions of some of the States and their inability to pay your Corporation adequately continue to cause concern and be a big burgeoning burden on the Corporation. All out efforts are being made at all level to realise the dues from various SEBs but their deplorable financial condition is causing great concern to your Corporation. The sliver line is the issue of bonds for Rs.3,000 million by Government of Uttar Pradesh in June, 2000.

The performance of the power stations in operation had been excellent with a high average availability factor



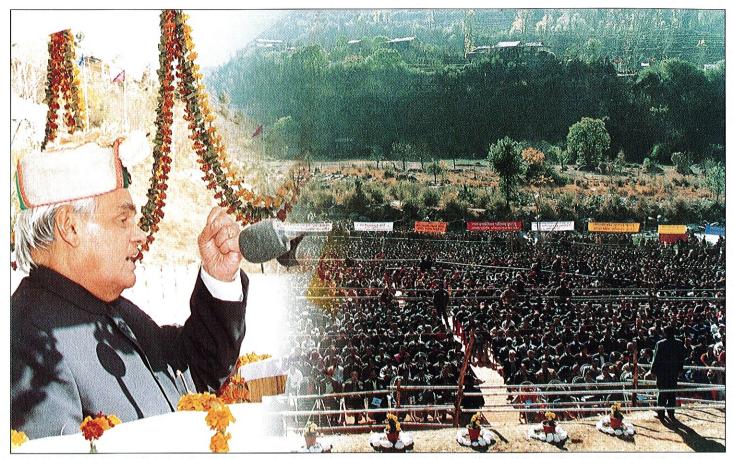


60 MW Kurichu Project (Bhutan) - Dam under construction

of 91.05%. However, the actual generation was marginally less than the target on account of reduced inflow in the rivers. The generation in the current year 2000-01 is expected to match the target, judging by the performance so far. The power station personnel and the Corporation O&M Division have now matured into a dynamic and powerful group eager to introduce bold and innovative initiatives which would reduce breakdowns and outages and speed up annual maintenance and re-commissioning. The repairs to one of the 400 KV power transformers of Chamera-I in-situ and re-commissioning by innovative ideas without factory facilities is a testimonial to their skill, confidence and zeal to venture daring experiments. In-situ repair to transformers of 400 KV level is unique and perhaps has been done for the first time in India. On your behalf and on my own, I wish to compliment them for this unique achievement and would assure you that your power stations are in safe and skillful hands.

The progress of on-going projects has been quite satisfactory except in the case of Dul Hasti where the TBM got buried under an avalanche of rockfall from a cavity already formed. Due to this and due to adverse overall environment of terror, fear and insecurity due to increased activities of militants from across the border, there has been a shortfall in progress in Dul Hasti. Barring this, the progress in Chamera-II, Kurichu and Kalpong is exemplary and these projects are poised for completion ahead of schedule in May 2004, September 2001 and in June 2001, respectively. All the major contracts have been awarded and rehabilitation of PAPs almost completed in respect of Dhauliganga Project. The progress at Dhauliganga is as per programme and this project is visualized for completion by March, 2005.

In respect of Koel Karo Project, a fresh proposal has been sent in January, 2000 for CCEA approval for



Shri Atal Bihari Vajpayee, Hon'ble Prime Minister addressing the public meeting after laying foundation stone of 2051 MW Parbati River Basin in Himachal Pradesh

pre-construction works to kick start major activities once the MOEF approval is accorded. The entire generation from the project will be consumed by DVC and Bihar for which power purchase agreements have been signed.

In the year 1999-2000, your Corporation made active start in the new projects viz. the 510 MW Teesta Stage-V in Sikkim and 90 MW Loktak Downstream in Manipur. The Teesta-V received the Government's sanction in January, 2000 for Rs.21,980 million. The construction of Infrastructural and enabling works were taken up and completed partially. Confirmatory surveys have been almost completed. The contract for the diversion tunnel has been awarded and pre-qualification for HRT works has been done and the bid documents were issued. In the case of Loktak Downstream pre-construction and enabling works were started. Confirmatory and pre-qualification surveys were commenced. Pre-qualification of contractors were

completed and the bid documents will be issued shortly. The prevailing law & order conditions have a retarding effect on project works.

The survey and investigation works at Parbati-II (800 MW) in Himachal Pradesh and in Subansiri (7300 MW) and Dihang (13400 MW) both in Arunachal Pradesh were taken up earnestly. The foundation stone for Parbati Basin development was laid by the Hon'ble Prime Minister of India, Shri Atal Bihari Vajpayee on 12.12.1999, flagging off an energetic start of project activities. Another major development which I would be happy to inform is that a separate company named 'Narmada Hydroelectric Development Corporation Limited' has been formed with your Corporation having a 51 per cent stake to develop the 1000 MW Indira Sagar and 520 MW Omkareshwar Hydro Projects in Madhya Pradesh. Another similar subsidiary of NHPC is also likely to be constituted to develop the 400 MW Lakwar Vyasi

Hydroelectric Project in Uttar Pradesh. Yet another major development is the transfer of seven new hdyro projects in J&K for execution by your Corporation. We are in the process of completing the DPRs and obtaining the statutory clearances.

The activities of your Company continue in building the small hydro projects in Bihar and Arunachal Pradesh and to bring the lock jammed Cauvery Basin projects to the stage of fruition.

I am happy and proud to inform you that your Corporation continue to keep pace with global developments in the fields of information technology, computerization and communication. Your Company was the first to achieve Y2K compliance in the power sector. The power stations and projects will soon be linked with the Corporate Office and Load Despatch Centres with VSAT based Wide Area Network. This

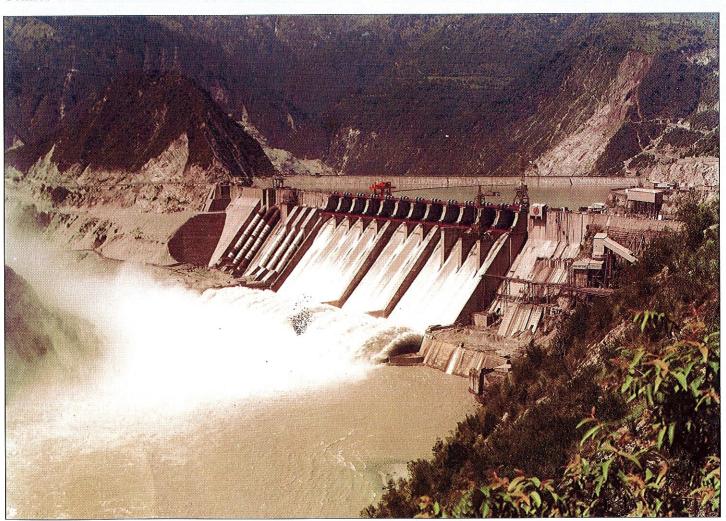
will be in addition to INMARSAT based satellite phones and LDST.

ISO - 9001 certification was another land mark achievement by your Corporation in this year.

The Corporation achieved significant success in the fields of consultancy, HRD, conservation of energy, implementation of official language, cultural activities, sports activities, staff welfare measures etc.

I am happy and proud that your Corporation has been provisionally accorded an 'Excellent' grading for the performance as per MOU norms in 1999-2000, the last year of the previous millennium.

I am sure that you would share my elation that the presence of NHPC is noticed all over the country - from Arunachal Pradesh in North East to Andaman & Nicobar in South East; from Madhya



690 MW Salal Complex (J&K) - Concrete Dam



Signing of Contract Agreement of Electrical-Mechnical package of Dhauliganga project (U.P.)

Pradesh in the West to Sikkim and Bihar in the East and of course in J&K, Himachal Pradesh and Uttar Pradesh in the North. I, on behalf of the Board of Directors, express deep and genuine gratitude for the help and co-operation, guidance and advice extended by the Ministry of Power, Ministry of Finance, Ministry of Environment & Forests, Planning Commission, State Governments, CEA, CWC, State and Regional Electricity Boards, Department of Public Enterprises, Department of Company Affairs and others not specifically mentioned here.

I wish to thank sincerely the International and National financing institutions and investors for the confidence reposed by them on NHPC. I wish to record the Corporation's appreciation of the efforts made by the beneficiary States drawing power from our power stations to make maximum payments for

the electricity consumed in spite of their own grave fiscal problems.

I take this opportunity to make special mention of the dedication, diligence and commitment of the staff of NHPC at all levels and for their excellent performance under the most difficult, dangerous and dreadful conditions braving the chilliest weather and the fiercest fusillades, leaving their wife and children, parents and others thousands of miles away. In this context, I would like to recall the supreme sacrifice made by Shri S.C. Sher, the Chief Engineer of Loktak Hydroelectric Project, who was gunned down in a gruesome manner by a band of armed militants in Manipur. Notwithstanding such blood chilling experiences, the staff of NHPC are ready to make supreme sacrifices, bear hardships and shed tears, sweat and blood for exploiting bounties of nature to produce

clean power for betterment of fellow country men. In this context, I am constrained to state more in anguish than in anger and more in agony than in acrimony that while the road to hydro development is not a garden path with bed of roses, delay in statutory approvals and in acquisition of land, act as spikes to retard our strides. I would wish to remind the concerned organizations that they too have a responsibility towards power development and Nation building and it is our prerogative to execute and our right to implement. I am constrained to voice my concern that some seem to think that it is their prerogative to obstruct and it is our responsibility to overcome the obstacles. I will call upon them to shed their outdated attitudes and to desist from holding eristic views, anachronistic approaches and obscurantist ideas and join us in fostering faster development of hydro projects. If not, the hydro thermal mix which is already lopsided will further worsen and plunge the system into greater imbroglio.

I would conclude my statement on a melancholic note recalling the patronage NHPC received from Late Shri P.R. Kumaramangalam, Minister of Power who had a passion for hydro development and penchant for NHPC. A man of vision and mission, he nurtured NHPC with unmatched fondness and unforgettable tenderness. We in NHPC vow to carry his dreams of a faster hydro development into the realms of reality.

I would like to thank all the Directors of the Board for their valuable contribution and co-operation which enabled the Corporation to scale new heights and achieve excellence in performance.

Date: 27.9.2000

(YOGENDRA PRASAD)
Chairman & Managing Director





# Directors' Report

Your Directors have great pleasure in presenting the 24<sup>th</sup> Annual Report of your company together with the Audited Accounts, Auditors' Report and the Review of Accounts by the Comptroller and Auditor General of India for the financial year ended 31st March 2000.

#### 1. FINANCIAL PERFORMANCE

The summary of the financial results of the company for the year ended 31<sup>st</sup> March, 2000 is given in Table-1 below.

### 2. TURNOVER AND PROFIT

As may be seen from the results, the turnover of the company during the year 1999-2000 was Rs. 12,163 million and your company made a net profit of Rs. 4,012 million after setting aside for depreciation, interest on loans, financing charges and allowing prior period adjustment. The profit



300 MW Chamera Stage-II Project (H.P.) - Adit to Power tunnel

for the year ended March 2000 was higher than the profit in the previous year by about Rs. 100 million or by about 33%.

### 3. PROPOSED DIVIDEND

Your Directors have recommended, as in the last year, a lump sum dividend of Rs. 150 million subject to the approval of the shareholders in the forthcoming General Meeting.

### 4. REVENUE REALISATION

During the year, the Corporation collected an amount of Rs. 7,996.75 million towards electric

Table 1. FINANCIAL RI	ESULTS	(Rs. in Million)
	1999-2000	1998-99
Sales	12163	13094
Profit before Depreciation, Interest and financing charges	10675	9545
Interest & Financing Charges	4497	4787
Profit before Depreciation	6178	4758
Depreciation	2198	2152
Profit for the year after Interest ,financing charges and Depreciation	3980	2606
Prior period Adjustments	32	447
Profit for the year after prior period Adjustments	4012	3053
Add:		
Surplus of Profit and Loss Account of earlier year	4885	1997
Profit available for appropriations	8897	5050
APPROPRIATIONS:		
1. Transfer to Capital Reserve		
2. Bonds Redemption Reserve	2	
3. Proposed dividend	150	150
4. Provision for Income Tax on dividend.	33	15
5. Income Tax on Dividend (1998-99)	2	
6. Total	185	165
7. Balance carried over to Balance Sheet	8712	4885

energy sold to the beneficiaries including the sum received through CPA and surcharge. It will be heartening to know that the Govt. of U.P. has issued in June 2000 Rs.3,000 million worth of bonds in favour of NHPC against its outstandings.

### 5. PERFORMANCE HIGHLIGHTS

#### A. Generation

During the year, projects of your Corporation in operation generated 8,690.73 million units of energy against the target of 9,250 million units. The shortfall of about 6% in generation was mainly due to poor discharge in the rivers feeding the power stations and particularly in river Jhelum catering to the 480MW Uri project in Kashmir valley. Financial impact on account of shortfall of generation in Uri HE Project expected to be nil as full protection is provided under tariff against shortfall in generation due to reasons beyond control which entitles 630 million units as deemed energy. The generation from the various Power Stations is presented in Table-2 below:

The generation upto July, 2000 far exceeded the target and your company is confident that there will be no shortfall in the generation in 2000-01

### B. Capacity addition

You would be glad to know that Rangit HE Project, (3x20MW) in Sikkim started commercial operation w.e.f. 15.02.2000 and that the performance has been good, the actual generation exceeding the target.

### C. Power supply to Nepal

With the completion and commissioning of an additional 132 KV bay along with the 220/132 KV step down transformer at Tanakpur Project, your Corporation started, power supply to Nepal (Mahendra Nagar) at 132 KV from 01.01.2000 in fulfillment of the commitment by Government of India to Government of Nepal.

### D. Renovation and Modernisation

You would be pleased to know that the schemes

S.	Power	Effective		Generation	in million units			
No.	. Stations	ons Capacity as on 31.3.2000 (In MW)	1999-2000			1998-99	2000-2001 upto July, 2000	
			Target (MU)	Actual (MU)	Target Achievement in percentage	Actual (MU)	Target (MU)	Actual (MU)
1	2	3	4	5	6	7	8	9
1	Baira Siul	180	750	425.57	56.74	750.26	408	389.86
2.	Loktak	105	450	506.75	112.61	532.42	144	165.21
3.	Salal Stage-I&II	690	3000	3249.14	108.30	3222.96	1485	1546.72
4.	Tanakpur	94.20#	440	408.88	92.93	469.33	163	182.89
5.	Chamera Stage-I	540	1860	2125.73	114.29	2367.27	855	1235.69
6.	Uri	480	2600	1948.92	74.96	2575.02	1332	918.12
7.	Rangit	60	**150 *24	*25.74	107.25	-	88	100.18
	Total	2149.20	9250	8690.73	-	9917.26	4475	4538.67

<sup>\*</sup> With reference to date of commissioning.

<sup>\*\*</sup> Target as per MOU.

for renovation and modernisation for Salal and Baira Siul Projects were implemented during the year and it is expected that this would reduce the forced outages and duration of outage for annual maintenance and improve the machine availability and efficiency and increase the overall life of machines.

### E. Unique Achievement

One of the 400 KV power transformers of Chamera Stage-I power station in Himachal Pradesh was successfully repaired at site and energised in June, 1999 by bold and innovative measures. The repair of a 400 KV at site is unique and perhaps the first of its kind. This enabled advancing the recommissioning of the generating unit at least by 3 months.

# 6. PROGRESS OF ON GOING/SANCTIONED PROJECTS

The Directors are pleased to inform that the progress of ongoing projects had been generally satisfactory and in the case of Chamera-II, Kurichu and Kalpong exemplary. The projects-wise progress is mentioned as under:

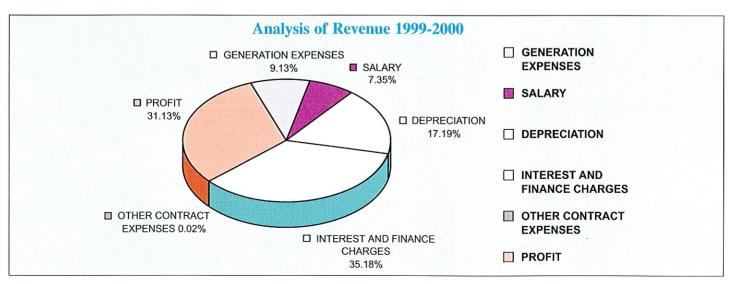
### Chamera H.E. Project Stage-II (300 MW) - H.P.

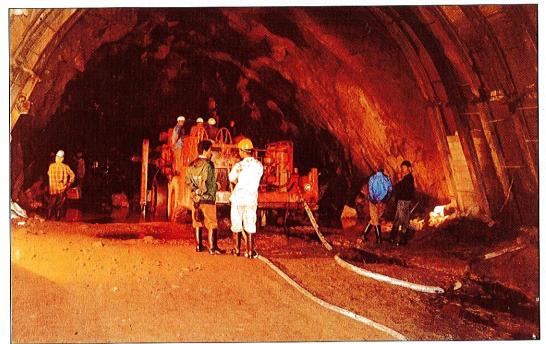
Mobilisation at site by the contractor has been completed. The Infrastructural development is

under progress. Diversion Tunnel has been day lighted and concrete lining has been started. The river is expected to be diverted one year ahead of schedule. Acquisition of land is almost complete. The construction of residential and non-residential buildings is in full swing. The excavation for various Adits for HRT has been completed and 1748 m. of HRT and 907 m. of TRT have been excavated. The civil works of power house, disilting basins and dam are in progress. The progress so far has been ahead of schedule. The project is expected to be completed by May 2004.

### Dhauliganga H.E. Project (280 MW) - U.P.

The work on infrastructure development like land acquisition and construction of approach road is almost complete and construction activities on buildings are progressing satisfactorily. 100% excavation in the heading portion and 93% in the benching portion had been completed for Diversion Tunnel. All the four contract packages viz. Main civil works (Lots 1 & II), Electro-mechanical works (Lot-III) and Hydro-mechanical works (Lot-IV) were awarded and mobilisation is in progress at site by the Lot I and II contractors. Rehabilitation of the affected families including employment as per the parameters of the policy for appointment/job in the project has been almost completed.





280 MW Dhauliganga Project (U.P.) - Diversion tunnel under construction

The project is expected to be commissioned by March 2005.

### Dul Hasti H.E. Project (390 MW) - J&K

The Progress of works at this project since last report is satisfactory except in the area of HRT which suffered due to a severe rock burst on the face of Tunnel Boring Machine on 21.7.2000. Conventional drilling and blasting method has been

resorted to by passing the Tunnel Boring Machine. Length of HRT excavation achieved is 7.218 kms. (68.09%) out of total length of 10.6 kms. as on 31.08.2000. Erection work on all the three generating units is in progress. River diverted through spillway blocks in December 99, and concreting of blocks 1,2,3,4,5 & 7 of the dam completed. Concreting of other blocks is in progress.

The project is expected to be completed by December 2003.

# Kurichu Project (45 MW) - Bhutan

Infrastructural development is almost complete. 100% Excavation and 84.49% of concreting of dam have been achieved. In the Power house, 1,90,905 cum.of excavation against the total quantity of 1,93,000 cum., and

67,267 cum. of concreting against the total quantity of 93,060 cum., have been achieved up to Aug.'2000. In the hydro-mechanical works, embedment of first and second stage embedded parts is in progress. First unit of the project is expected to be completed by March 2001, six months ahead of the Schedule. The Project is programmed for overall completion by Sept. '2001 and the machines are visualised for commissioning ahead of schedule.



390 MW Dul Hasti Project (J&K) - Installation of lower bracket for unit-I in Power House



5.25 MW Kalpong Project (Andaman & Nicobar Islands) -Concrete Dam under construction

### Kalpong H.E. Project (5.25 MW) -Andaman & Nicobar Islands

The excavation for Concrete Dam, Rockfill Dam and Power House has been completed and at concrete dam 25,495 cum. of concreting out of 32,060 cum. has been poured and 530 cum. has been completed in the Power house. Tunnel boring has

been completed and concrete lining to the tune of 118 m. has been done out of 127 m. The project is now visualised for completion 15 months ahead of schedule.

# Koel Karo H.E. Project (710 MW) - Bihar

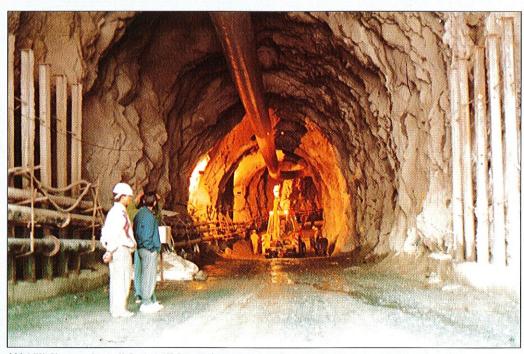
A revised note was submitted afresh on 03.01.2000 for approval of CCEA to start pre-construction and infrastructure activities

at cost of about 3,630 Rs. million. December, 98 price level in the first phase. The PPA with DVC was signed on 31.12.99. and with Government of Bihar on 14.07.2000 for remaining portion of power generation after adjusting 12% of free power to Bihar and 10 % to DVC as the Governments of Orissa and West Bengal had indicated that power from the Project

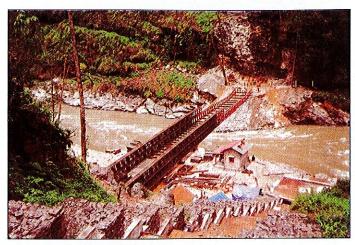
may not be drawn by them. Environmental clearance from MOEF as requested by CCEA is awaited. Start of major works of the project will be made after MOEF clearance and CCEA's approval for investment are obtained.

### 7. NEW STARTS

Your Directors are pleased to inform the status of new schemes under implementation since the last report:



300 MW Chamera Stage-II Project (H.P.) - Tailrace tunnel under construction



510 MW Teesta Stage-V Project (Sikkim) - Erection of Bailey Bridge at Dam site

### Teesta-V H.E. Project (510 MW) - Sikkim

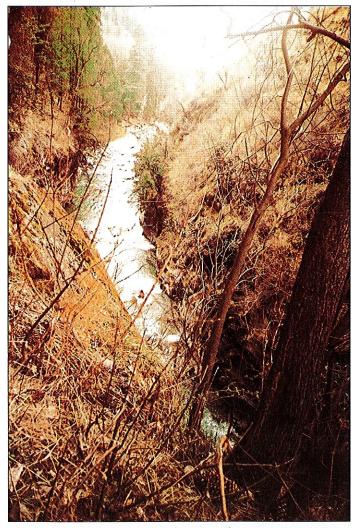
The project was sanctioned at a cost of Rs. 21,980.4 million in January 2000. Pre-construction and enabling works are in progress. Construction of 72 prefab single room structures has been completed. Launching of Bailey bridge at dam site has been completed and construction of approach roads to project work sites is in progress. Survey work of various adits, roads to adits and quarry area is nearing completion. Survey along the main HRT has been completed. Confirmatory survey by Survey of India has been completed. Exploratory drilling & geological explorations are in progress. Topographical survey of the steep Dam/Power House slope by Laser Beam Survey has been completed. Various State Government authorities including Forest Department have undertaken detailed planning of Catchment Area Treatment work.

The contract for construction of Diversion Tunnel was awarded on 29.08.2000. The prequalification of contractors for the HRT work has been completed and bids for HRT were issued on 31.08.2000

# Loktak Downstream H.E. Project (90 MW) - Manipur

Pre-construction activities and development of infrastructure facilities have commenced at the project site. The construction of some office and residential accommodation has been completed. Gauge discharge observations downstream of Loktak Power House are in progress. Geological and geo-technical exploration works at Dam and Power House site are in progress. Topographical survey work is in progress. Steps have been taken for land acquisition and provision of electricity at dam site. Border Road Organisation has already started the Reconnaissance Survey and trace cut for the project road works.

Pre-qualification for the contractors for project component works has been completed and bids are expected to be issued shortly. The adverse law and order condition and lack of proper security are hampering the project work.



800 MW Parbati Stage-II Project (H.P.) - Proposed Dam site



Shri Yogendra Prasad, CMD, NHPC and Shri P.P. Kherel, Secretary (Power), Govt. of Sikkim signing the agreement for executing Teesta Stage-V Project in Sikkim by NHPC

### 8. PROJECTS UNDER INVESTIGATIONS

### Parbati H.E. Project Stage-II (800 MW) -Himachal Pradesh

PIB clearance was accorded in the first week of December 1999. CCEA clearance for Rs. 776.2 million has been obtained for taking

up detailed investigations and enabling works, and development of infrastructure facilities of the project. The Hon'ble Prime Minister Shri Atal Bihari Vajpayee laid the foundation stone on 12.12.1999 for Hydro Power development of Parbati River Basin (first phase 800 MW Stage-II, second phase-1251 MW, Stage I & III). Ministry of Environment and Forest accorded site clearance to Parbati Project Stage-II on 01.06.99. All additional exploratory works for revision of DPR are complete and preparation of revised DPR is in progress. Strengthening of Manikaran-Pulga Dam site road of 16 Kms. length has been completed.

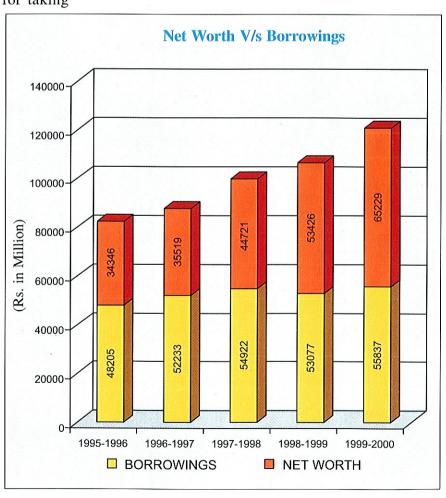
# Dihang and Subansiri Projects (16200 MW) - Arunachal Pradesh

The estimates for survey and investigation and for essential infrastructural works in respect of upper/middle schemes Dihang/Subansiri have been submitted to Ministry of Power in March 2000. The estimated aggregate cost of investigation for all the four projects is around Rs. 3,000 million. Sanction of estimates is likely to be received shortly.

### 9. SMALL HYDEL PROJECTS

The Corporation has been undertaking the execution of small/mini hydroelectric projects to serve local needs in remote areas.

In the State of Bihar, DPRs in respect of small hydroelectric projects have been completed. The liaison office has been set up at Patna for co-ordination with the state authorities.





Shri Yogendra Prasad, CMD, NHPC and Shri K.S. Sharma, Chief Secretary, Govt. of Madhya Pradesh exchanging the document after signing the MOU for executing Indira Sagar & Omkareshwar Projects in Madhya Pradesh

The State of Arunachal Pradesh is interested to hand over 12 projects to NHPC. A team of experts of NHPC had gone to Kambang Project to assess the quantum of works already executed at site. MOU with Arunachal Pradesh for Kambang Project has been signed. MOU for execution of Sippi and Judgin Projects is likely to be signed shortly.

### 10. JOINT VENTURE

Your Directors are pleased to inform that the Corporation has entered into Joint Venture agreement with the Government of Madhya Pradesh for the execution of Indira Sagar (1000MW) and Omkareshwar (520MW) Hydroelectric Projects to promote the hydel power in the State. A separate company has been formed as "Narmada Hydroelectric Development Corporation Ltd." in which the Corporation's stake would be 51% of Issued and paid up share capital of the said joint venture company.

### 11. CONSULTANCY

During the year under report, Corporation has taken up a number of consultancy assignments with various organisations. The Corporation has been engaged as "Lenders Independent Engineers" by IFCI Ltd. and a consortium of Indian Banks promoting the 400 MW Maheshwar Project in Madhya Pradesh and 300 MW Baspa—II Project in Himachal Pradesh both in the private sector. The Corporation has also signed a MOU with Harza Engineering Company International L.P, USA to take

up jointly consultancy assignments in the area of hydro power development in India and abroad. The Corporation has signed MOU with Bhakra Beas Management Board to pool each others technical expertise for Renovation, Modernisation and Updating/ Life extension studies of existing hydro power plants and development of new hydro power projects. The Corporation has been registered as a consultant with World Bank, Asian Development Bank, African Development Bank, Kuwait Fund for Arab Economic Development, Central Water Commission and Consultancy Development Centre in the area of hydro power.

### 12. CAPITAL STRUCTURE

The present authorised Share capital of the Corporation stood at Rs. 50,000 million and a proposal was sent to Ministry of Power for increasing the authorised share capital to Rs.100, 000 Million in July, 1999 to meet the requirements of new Projects.

The Ministry of Power vide Letter No.16/36/99-DO (NHPC) dated 04.08.2000 has conveyed the approval of President of India under

Article-13 of Articles of Association of Corporation to increase the authorised Share Capital from Rs. 50,000 million to Rs. 70,000 million by creation of 20 million additional Shares of Rs. 1000/each ranking pari passu with existing shares of the Corporation.

The total paid-up capital was Rs. 39,972 million as on 31.03.2000 and it was further increased by Rs. 2,810.8 million in the current financial year.

### **13. BONDS**

You would be glad to know that the Corporation has maintained its consistent track record of timely discharge of its committed liabilities towards Bondholders and other institutions. During the year, the Corporation has successfully redeemed Bonds of D Series, E Series, H Series (partially), I Series, K Series, L Series amounting to Rs. 5,961.8 million, and has repaid the term loan of UTI, HDFC and Canara Bank amounting to Rs. 1,227.2 million.

Out of above redemption of Series of Bonds, an amount of Rs. 1,638.5 million have been redeemed by exercising prepayment of Bonds by Call Option resulting in saving of interest to the Corporation to an extent of Rs. 155 million.

### 14. COMMUNICATION & INFORMATION

During the year, additional desktop computers were procured to improve and increase the performance of the work. Local Area Net work with 200 nodes was also started to facilitate cross-functional Integrated data processing. Work was also initiated for installation of a VSAT- based Wide Area Network (WAN) connecting all major Projects, Corporate Office and Load Despatch Centers.

You would be glad to know that the communication has vastly improved by installing INMARSAT

based satellite phones in all Projects, in addition to LDST, which continues to be the reliable communication system.

The INTRANET has been developed in Corporate Office to interact and access the information among the divisions. A model for CPSU-NET for connecting all Central Power Sector Undertakings has been developed.

You would be proud to know that NHPC was the first Government Organisation under the MOP to achieve Y2K compliance.

### 15. ISO-9001 CERTIFICATION

During the year under review, your Corporation was able to achieve the coveted ISO-9001 Certification for quality system for its Corporate Office, Faridabad.

This certificate covers all the activities i.e. Planning, Design, Monitoring operation/maintenance, financing and Procurement of works and services of hydroelectric power stations and is valid for three years.

#### 16. MEMORANDUM OF UNDERSTANDING

A Memorandum of Understanding was signed between the Government of India and NHPC during the year under report. You would be glad to know that the Corporation has maintained its performance graded as excellent in 8 out of 12 parameters. In respect of other 4 parameters, the "excellent" rating was not possible due to shortfall in achievement inspite of the best efforts of the Corporation. These related to generation (due to less inflow in the river), revenue realisation (due to financial problems of SEBs), milestone achievement (due to geology related problems in Dul Hasti) and redeployment (due to surplus staff). The overall rating is "Excellent" for the sixth consecutive year.

# 17. CONSERVATION OF ENERGY, TECHNOLOGY ABSORPTION AND FOREIGN EXCHANGE EARNINGS AND OUTGO

Information in accordance with the provisions of Section 217(1)(e) of the Companies Act, 1956 read with companies (Disclosure of particulars in the report of Board of Directors) Rules, 1988 regarding conservation of energy, technology absorption, and foreign exchange earnings and outgo is given in the Annexure -IV to this report.

### 18. ENVIRONMENTAL COMMITMENTS

Being conscious of its responsibility towards environment, NHPC is taking all steps in this direction while implementing its various hydro projects. Commitment towards protection of environment and preservation of ecology is an integral part of the Quality Policy of the Organisation. Right from the planning stage, environmental protection measures are internalised and financial provisions are made in the cost estimates of the projects. Environment friendly approach of NHPC is reflected in its strategy of ensuring that environment awareness trickles down to the lowest working level in the projects as

well as the message is being spread to the local residents of the area. Post—Construction Environment Impact Assessments are made to validate the efficacy of the mitigatory measures adopted during the construction stage and to know whether the results are satisfactory. All the projects of NHPC, which are taken up for

implementation, are assessed environmentally and construction is so planned that there is bare minimum impact on the environment and the environmental measures go hand in hand with the progress of the works. The Corporation has also applied to appropriate authority for ISO-14001 certificate and action has been taken in this direction.

### 19. HUMAN RESOURCES DEVELOPMENT

Considering the Human Resource as a valuable asset, the Corporation is making constant and strenuous efforts to develop and up-grade the skills by organising various in house training Programmes and nominating the employees for various development Programmes conducted by the reputed organisations and Institutions. During the year under report the Corporation has also arranged a number of long duration residential Inductioncum-Orientation Programmes for newly recruited Engineers in order to make them familiar with the organisation's culture. New thrust has been given by Corporation for training of the employees in the field of information technology. Executives were also deputed abroad for attending seminars, conferences and training programmes during the



Training programme in progress for employees

year to enable them to meet challenges of changing business environment.

Training programmes were also organised from time to time for various levels of employees to improve their efficiency of the work performance and productivity.

# 20. STAFF WELFARE AND INDUSTRIAL RELATIONS

During the year under report Industrial Relations at all the Projects and in Corporate Office were cordial, peaceful and harmonious. Your Corporation has decided to implement Presidential Directives, in principle, in respect of revision of pay scales of Board level and below Board level Executives including Non-unionised supervisors w.e.f. 01.01.1997.

Shri S.C. Sher, Chief Engineer, Loktak HE Project was brutally killed by militants in Manipur. Shri S.C. Sher has laid down his life for the services of the Corporation. The Board of Directors in recognition of his services rendered to the Corporation approved payment of compensation to his family in addition to other benefits. The Corporation has instituted an award in memory of Shri S. C. Sher which is to be given to the Best Trainee Engineer of the Corporation for his outstanding performance during training period.

The Corporation has purchased land near Sarai Khawaja for construction of residential complex for the employees of Corporation at Corporate Office.

### 21. RESERVATION FOR SC/ST

During the year under report, the Corporation had made special efforts to reduce the backlog of reserved vacancies and candidates belonging to SC and ST were appointed.

### 22. VIGILANCE ACTIVITIES

During the year, Corporation conducted various Vigilance activities, surprise inspections etc.

including Training Programmes at Corporate Office and Projects. The Corporation organised a Seminar on "Vigilance Management in PSUs" which was inaugurated by Shri N. Vittal, Chief Vigilance Commissioner. The Chief Vigilance Commissioner during the Seminar released a Compendium of Circulars on Vigilance Matters prepared and published by Vigilance Division

# 23. OFFICIAL LANGUAGE IMPLEMENTATION

During the year, the Corporation made sincere efforts for extensive use of Hindi in official working by issue of necessary orders/instructions. Review of the progress was made by the Committees for implementation of Official Language in the Projects as well as in Corporate Office. Training Programmes were organised for officers and non-Hindi speaking employees. In the Golden Jubilee Year of Official Language, Hindi workshops, Training Programmes were also conducted. 'Akshar Hindi Software' was made available to the different divisions in Corporate Office and Projects. NHPC Web site in Hindi was also launched. 'Rajbhasha Shield' was awarded to Corporate Office for the second consequent year by Town Official Language Implementation Committee, Faridabad. Besides above, Corporate Office has also been awarded various awards, viz Vidyut Rajbhasha Shield (Second Prize) by Ministry





NHPC team which participated in the Athletic Meet hosted by NHPC under the aegis of Power Sports Control Board

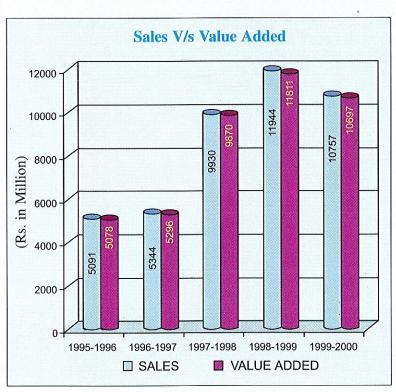
of Power, Nagar Rajbhasha Shield (First Prize) by Nagar Rajbhasha Committee Faridabad, NTPC Rajbhasha Shield by NTPC, for it's excellent achievement in progressive use of Hindi.

### 24. SOCIAL INITIATIVES

NHPC employees continue their efforts to help people affected by natural calamities. During the year employees of the Corporation contributed one day's salary to the Prime Minister's National Relief Fund for the benefit of Orissa Cyclone victims. NHPC Ladies Welfare Association also contributed Rs.One lakh to the Prime Minister's National Relief Fund. They have organised many community Welfare Programmes in locations nearby the projects. Their activities include helping the widows of Kargil conflict, organising family planning, health awareness and adult education programmes, etc.

### 25. SPORTS AND CULTURAL ACTIVITIES

The Corporation continued its efforts to encourage sports activities and hosted the Third Inter Power Sector Athletic Meet in New Delhi.



NHPC team also participated in various tournaments organised by the Power Sports Control Board.

# 26. REGIONAL OFFICES OF THE CORPORATION

With a view to decentralise the process of decision making and effective Project Management, the Corporation has established Regional offices at Jammu, Banikhet, Lucknow, Chandigarh and Siliguri.

### 27. SILVER JUBILEE YEAR OF CORPORATION

The year 2000 marks the Silver Jubilee Year of the Corporation. An ambitious plan has been drawn up to celebrate the Silver Jubilee Year. It has been decided to set up Hydro Power museum at Salal Project, Hydro Power Research & Development Centre at Chamera Project and institute an award

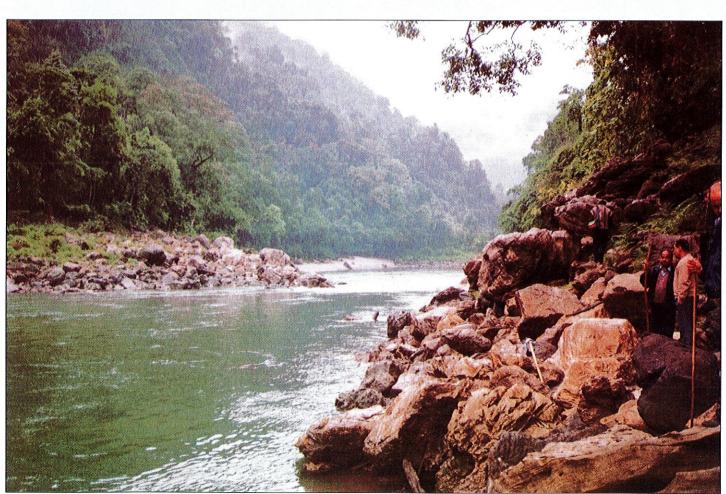
for life time achievement in promoting the cause of hydro power in the Country.

#### 28. AUDITORS

M/s. Jain Chopra & Company, Chartered Accountants, New Delhi, were appointed as Statutory Auditors for conducting Audit for the year 1999-2000. M/s.K.K.Ghei & Co, Chartered Accountants, New Delhi, M/s Saha Ganguli & Associates, Chartered Accountants, Calcutta and M/s.K.B.Sharma & Co, Chartered Accountants, Jammu were appointed as Branch Auditors of the Corporation.

### 29. AUDITOR'S REPORT

The Auditor's Report refers to various notes incorporated by the Corporation in Schedule-XVI, which are self-explanatory. The replies to the comments of the auditors are furnished as



Subansiri Project - Downstream view of proposed axis of Dam



180 MW Baira Siul Project (H.P.) - Power House

Annexure-I. The comments of the Comptroller and Auditor General of India and replies thereon are at Annexure-II.

Review of the accounts for the year ending 31<sup>st</sup> March 2000 by Comptroller and Auditor General of India is enclosed as Annexure-III to the report

### **30. PARTICULARS OF EMPLOYEES**

Information required under section 217(2A) of the Companies Act, 1956 read with Companies (Particulars of Employees) Rules 1975 is given in Annexure-V to the report.

### 31. PARTICULARS OF DIRECTORS

Shri.A.K.Gangopadhyay, Executive Director has been appointed as Director (Projects) of the Corporation w.e.f. 7<sup>th</sup> July, 2000. Consequent to retirement of Shri N. Visvanathan, Director (Technical) from the services on attaining the age

of superannuation on 31st July, 2000, Shri R.K.Sharma, Executive Director (Commercial) has been appointed as Director (Technical) w.e.f. September 11, 2000. Shri J. Vasudevan, Additional Secretary ceased to be a Director from 24.12.1999. The Board expresses its gratitude for the contribution and guidance made by Shri. N.Visvanathan, and Shri J. Vasudevan as Directors on the Board.

Shri Ajay Shankar, Joint Secretary (Hydro), Ministry of Power was appointed as part-time Director on the Board of Corporation w.e.f. 24.12.1999.

# 32. TRIBUTES TO LATE SHRI P.R. KUMARAMANGALAM

Late Shri P.R.Kumaramangalam took over the reins of the Ministry of Power in the year 1998 and in a period of about two years he brought about

spectacular transformation not only in the Ministry but also in the entire Power Sector. He was personally instrumental for conceiving and bringing to fruition many new policies and reforms, such as the new policy on Hydro Power Development, Mega Power Policy, enactment of Electricity Regulatory Commission, finalisation of Electricity Bill 2000 and setting up of Power Trading Corporation. Shri Kumaramangalam had a passion for hydro development and for this, he pinned high hopes on NHPC. He brought many prestigious hydro projects to NHPC for execution such as Parbati, Narmada Sagar, Subansiri, Dihang, Teesta-V, Loktak Downstream, Hydro projects in J&K, Cauvery basin projects, etc. Under his patronage the position of NHPC as the symbol for hydro development gained greater recognition. His passing away is a great loss to the country and to NHPC in particular. The Board of Directors pays homage to the memory of Shri Kumaramangalam and vows to carry out his vision with missionaries' zeal.

#### 33. ACKNOWLEDGEMENTS

The Board of Directors acknowledge with thanks the guidance and cooperation extended by the Government of India and particularly the Ministry of Power, Ministry of Finance (Department of Economic Affairs), Planning Commission, Ministry of Environment and Forest, Reserve Bank of India, Department of Public Enterprises, Department of Company Affairs, Central Electricity

Authority, Central Water Commission as well as the State Governments, the Regional and State Electricity Boards.

The Board expresses its gratitude to the International and Indian Financing Institutions as well as to investors for the confidence reposed by them in NHPC. The Board places its special appreciation to the beneficiaries drawing power from your power stations and to other valuable clients who have reposed confidence in NHPC by awarding the contracts for Consultancy assignments.

The Board records its deep appreciation of valued cooperation extended by the office of the Comptroller & Auditor General of India, the Statutory Auditors and the Bankers.

Further, the Board takes the opportunity to thank all the dedicated employees of the Corporation but for whose valuable contributions and unstinted support, the achievements of the Company would not have been possible.

For and on behalf of the Board of Directors

(YOGENDRA PRASAD)

Chairman & Managing Director

Date: September 26, 2000

Place: Faridabad



### SIGNIFICANT ACCOUNTING POLICIES

### 1. ACCOUNTING CONVENTIONS

- 1.1 The financial statements are drawn up on historical cost basis.
- 1.2 Interest/Surcharge recoverable from debtors is recognised as revenue on being received / reasonably determinable for collection.

### 2. FIXED ASSETS

- 2.1 Fixed assets are carried at cost of acquisition/ construction. However, where actual cost is not ascertainable due to non submission/ adjustment of contractors/suppliers bills, these are carried at estimated cost. The contribution received from outside agencies, if any, towards fixed assets are netted out.
- 2.2 Fixed Assets created on land not belonging to the Corporation are included under fixed assets.
- 2.3 Payments made provisionally towards compensation and other expenses relatable to land are treated as cost of land.
- 2.4 Assets procured/created in projects on grants-in-aid/agency or deposit basis are not included in the assets as ownership does not vest with the Corporation.
- 2.5 Construction equipments declared surplus in the projects are shown at lower of book value and net realisable value.

### 3. CAPITAL WORK IN PROGRESS

- 3.1 Expenditure on maintenance, upgradation etc. of common public facilities in projects under construction is charged to 'Incidental Expenditure During Construction'.
- 3.2 On start of commercial production, the entire amount of 'Incidental Expenditure During Construction' is allocated on immovable major components of the project excluding land and infrastructure works.

### 4. MISCELLANEOUS EXPENDITURE

Miscellaneous expenditure of the project is written off over a period of 5 years after start of commercial operation.

### 5. DEPRECIATION & AMORTISATION

- 5.1 Premium on lease hold land is amortised over the period of lease.
- 5.2 Depreciation is charged on Straight Line Method in the year following that in which the assets become available for use, as per rates prescribed under the Electricity (Supply) Act,1948 & as notified from time to time, except in case of assets valuing Rs.5,000/- or less purchased during the year and those with similar W.D.V. (excluding immovable assets) at the beginning of the year, which are depreciated fully during the year. In respect of assets where the rates are not available as per the said Act, the rates as prescribed in Schedule XIV to the Companies Act, 1956 are adopted.

### 6. VALUATION OF INVENTORIES

- 6.1 Stores & spares are valued at weighted average cost. However scrap is valued at net realisable value.
- 6.2 Loose tools issued during the year are charged to consumption account where cost of individual items is Rs. 5,000/- or less and in other cases written off in 5 yearly equated installments.
- 6.3 Stores issued for operation and maintenance at operational projects but lying unused at site at the year end are evaluated at engineering estimates and taken as stores.

### 7. EXCHANGE FLUCTUATIONS

Foreign currency loans/balances are translated/ converted with reference to the rates of exchange ruling at the year end. The difference is transferred to Capital work-in-progress /fixed assets in case of capital assets and to Profit & Loss/I.E.D.C. in case of current assets.



### 8. RETIREMENT BENEFITS

Provision for gratuity, leave encashment and post-retirement Medical Health Scheme is made on actuarial valuation basis every year.

### 9. TURNOVER

- a) (i) Sale of energy including changes in Exchange Rate Variation is accounted for either at rates notified or at provisional rates arrived at on the principles of tariff fixation under the Electricity (Supply) Act,1948.
  - (ii) Incentives are recognised on the basis of rates as per tariff notifications and settlement with beneficiaries. Pending settlements with beneficiaries or where tariff notifications have not been issued, the same is recognised on provisional basis keeping in view the likelihood of its acceptance.
  - (iii) Adjustments arising out of finalisation of global accounts, though not material, are effected in the year of respective finalisation.
- b) Revenue from Construction Contracts on Cost Plus/Deposit/Turnkey/ Project Management/Contracts is recognised on %age of completion method as under:

	Progress of Work	Recognition of Revenue
a)	upto 66.67%	Nil
b)	above 66.67 to 90%	80%
c)	above 90%	100%

Losses including those anticipated in the contracts are recognised immediately.

### 10. SELF INSURANCE

0.5% p.a. of Gross Block of O&M Projects as on the date of Balance Sheet is transferred to Self Insurance Reserve Account on year to year basis by charge to Profit & Loss Account. Reserve so created will be utilised for losses of Assets for specified contingencies.

### 11. MISCELLANEOUS

- 11.1 Liabilities for Goods in transit/Capital works executed but not certified are not provided for, pending inspection and acceptance by the Corporation.
- Power supplied from operational projects to Projects under construction is charged as per normal tariff.
- Prepaid expenses and prior period expenses/income of items of Rs. 50,000/- and below are charged to natural heads of accounts.

# 12. ALLOCATION OF CORPORATE OFFICE EXPENSES

The Corporate Office Expenses are allocated as under:

- i) On operational projects @ 1% of Sale of Power for the year excluding taxes & duties.
- ii) In case of construction contract Projects @ 5% of the expenditure incurred during the year.
- iii) The balance expenditure is allocated to other projects in the ratio of net capital expenditure incurred during the year.

BALA	NCE	SHEET	AS AT 31.03.2000

(Rs. in millions)

PARTICULARS	SCHEDULE NO.		AS AT 31ST MARCH, 2000		AS A 31ST MARCH, 199		
SOURCES OF FUNDS							
SHAREHOLDERS' FUNDS							
Share Capital	1		39972			33376	
Share Capital deposit			232			689	
Government of India Fund							
adjustable to equity			4258		*	4185	
Reserves and Surplus	2		16906	61368		12721	50,971
LOAN FUNDS	3						
Secured Loans			31912			28239	
Unsecured Loans			23925	55837		24838	53,077
INCOME RECEIVED IN ADVANCE ON ACCOUNT OF ADVANCE AGAINST							
DEPRECIATION				3861			2,455
				121066			106,503
A DDI TCATRIONI OE EUNIDO				121000			100,505
APPLICATION OF FUNDS FIXED CAPITAL EXPENDITURE							
Fixed Assets	4						
Gross Block	-	77527			70904		
Depreciation		10290			8111		
Net Block			67237			62793	
Capital Work-In-Progress	5		27686			25760	
Construction Stores and Advances	6		5115	100038		3228	91,781
CURRENT ASSETS, LOANS AND ADVANCES	7						71,701
Inventories	/	830			420		
Construction Work In Progress (Contracts)		2142			567		
Sundry Debtors		22809			16694		
Cash and Bank Balances		1117			1022		
Other Current Assets		269			243		
Loans and Advances		1608	28775		1840	20786	
Less: Current Liabilities and Provisions	8						
Liabilities		6139			4468		
Provisions		1627	7766		1600	6068	
NET CURRENT ASSETS				21009			14,718
MISCELLANEOUS EXPENDITURE	9			19			4
(To the extent not written off							
or adjusted)							
				121066			106,503
NOTES TO THE ACCOUNTS AND	16						
CONTINGENT LIABILITIES							

Schedule 1 to 16 and Accounting

Policies form integral part of the Accounts

VIJAY GUPTA

Secretary

R.NATARAJAN Director (Finance) YOGENDRA PRASAD

Chairman & Managing Director

As per our report of even date attached For JAIN CHOPRA & COMPANY

Chartered Accountants

Place : Delhi

Dated: 20th July, 2000

ASHOK CHOPRA

Partner



# PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31ST MARCH, 2000

(Rs. in millions)

PARTICULARS	SCHEDULE NO.	FOR THE YEAR ENDED 31ST MARCH,2000		FOR THE YEAR 31ST MA	
INCOME					
Sales		12163		13094	
Less: Advance against depreciation		1406	10757	1150	11,944
Contracts and Consultancy(Net)			12		47
Other Income	10		2014		344
TOTAL INCOME			12783		12,335
EXPENDITURE					
Generation, Administration and Other Expenses	11		1167		1,119
Employees' Remuneration and Benefits	12		939		1,425
Depreciation			2198		2,152
Interest and Finance charges	13		4497		4,787
Other Contract Expenses	14		2		18
Expenses Written off			-		228
Prior period adjustment(Net)	15		(32)		(447
TOTAL EXPENDITURE			8771		9,282
Profit for the year			4012		3,053
Balance Profit brought forward from last y	/ear		4885		1,997
Proposed Dividend			150		150
Provision for Income Tax(on Dividend)			33		1:
Income Tax on Dividend 1998-99			2		
Transfer to Capital Reserve			-		
Transfer to Bonds Redemption Reserve					
<b>Balance Profit carried to Reserves and Sur</b>	plus		8712		488

VIJAY GUPTA Secretary R.NATARAJAN
Director (Finance)

YOGENDRA PRASAD Chairman & Managing Director

As per our report of even date attached For JAIN CHOPRA & COMPANY Chartered Accountants

ASHOK CHOPRA

Partner

Place : Delhi

Dated: 20th July, 2000

### SHARE CAPITAL

SCHEDULE - I

		(Rs. in millions)
PARTICULARS	AS AT 31st MARCH,2000	AS AT 31ST MARCH,1999
AUTHORISED		
50000000 Equity Shares of Rs.1000/- each	<u>50000</u>	50000
ISSUED, SUBSCRIBED AND PAID UP		
39972447 Equity Shares (Previous year 33375947) of		
Rs.1000/- each fully paid up (Out of above, 6,29,529	39972	33376
Shares have been alloted for consideration other than		
cash persuant to contracts and one Share has been		
allotted for part consideration other than cash.)		
TOTAL	39972	33376

### RESERVES AND SURPLUS

SCHEDULE - 2 (Rs. in millions)

PARTICULARS	BALANCE AS AT 31st.MARCH,1999	ADDITIONS	DEDUCTION	BALANCE AS AT 31st.MARCH,2000
Capital Reserve (Sale of Fixed Assets)	1	-	-	1
Bond Redemption Reserve	5076	17	<b>5</b>	5076
Self Insurance Reserve	659	358	15	1017
General Reserve	2100	-	-	2100
Surplus as per Profit and Loss Account	4885	3827	-	8712
TOTAL	12721	4185	-	16906



# LOAN FUNDS

SCHEDULE - 3 (Rs. in millions)

DA DELCHIA DE		AS AT		AS AT
PARTICULARS	31s	31st MARCH,2000		RCH,1999
SECURED LOANS				
I. BONDS (Non-convertible, Non-cumulative)				
BONDS - D SERIES *1 (PRIVATE PLACEMENT)				
9% (Tax-Free) 10 year bonds of Rs.1000/- each redeemable at par on 27th September,1999.		-		2,200
BONDS - E SERIES *1 (PRIVATE PLACEMENT)				
9%(Tax-Free) 10 year bonds of Rs.1000/- each redeemable at par on 9th February,2000.				1,500
BONDS - G SERIES *1 (PRIVATE PLACEMENT)				
9%(Tax-Free) 10 year bonds of Rs.1000/- each redeemable at par on 31st March,2002.	70	70	70	70
BONDS - H SERIES *1 (PRIVATE PLACEMENT)				
18% 7 year bonds of Rs.1000/- each redeemable at par on 7th August, 1999.	-		500	
17% 7 year bonds of Rs.1000/- each redeemable at par (Due for repayment within one year Rs.162 millions)	162		252	
(Earliest date of redemption is 14th May,2000.)		162		752
BONDS - I SERIES *1 (PRIVATE PLACEMENT)	e d	4		
17% 7 year bonds of Rs.1000/- each redeemable at par on 4th January,2001. (Due for repayment within one year Rs. 8 millions)	8		8	
15.5% 7 year bonds of Rs.1000/- each redeemable at par on 20th January,2001 (Due for repayment within one year Rs. 34 millions)	34		-66	
14% 7 year bonds of Rs.1000/- each redeemable at par on 24th March, 2001 (Due for repayment within one year Rs. 1909 millions)	1,909	)	1,909	
10.5% (Tax-Free) 7 year bonds of Rs.1000/- each redeemable at par on 29th March, 2001. (Due for repayment within one year Rs. 1000 millions)	1,000	2,951	1,000	2,983
BONDS - J SERIES *2 (PRIVATE PLACEMENT)				
13% 7 year bonds of Rs.1000/- each redeemable at par on 1st December, 2001.	500	)	500	

LOAN FUNDS				DULE - 3 in millions)
PARTICULARS	31st MA	AS AT ARCH,2000	31st MA	ÀS AT ARCH,1999
13.25% 7 year bonds of Rs.1000/- each redeemable at par. (Earliest date of redemption is 8th October, 2001)	1,550		1,550	
9.25%(Tax-Free) 7 year bonds of Rs.1000/- each redeemable at par. (Earliest date of redemption is 15th November, 2001)	1,000		1,000	
16.5% 7 year bonds of Rs.1000/- each redeemable at par on 21st July,2002.	250		250	
16% 5 year bonds of Rs.1000/- each redeemable at par on 30th September, 2000. (Due for repayment within one year Rs. 50 millions)	50		50	
16.25% 7 year bonds of Rs.1000/- each redeemable at par. (Earliest date of redemption is 30th September, 2000)	674	4,024	674	4,024
Interest Accrued and Due ( J-SERIES)		30		1
BOND - K SERIES *2 (PRIVATE PLACEMENT)				
18% 5 year bonds of Rs. 1000/- each redeemable at par on 30th March, 2001	250		250	
17.5% 5 year bonds of Rs. 1000/- each redeemable at par on 1st August, 2001	300		1,375	
17.5% 7 year bonds of Rs. 1000/- each redeemable at par (Earliest date of Redemption is 30th September, 2001)	500	1,050	500	2,125
BONDS - L SERIES *2 (PRIVATE PLACEMENT)				
17% 5 year bonds of Rs. 1000/- each redeemable at par (Earliest date of Redemption is 22nd October, 1999)			564	* J
16% 7 year bonds of Rs. 1000/- each redeemable at par on 31st March, 2004	633		633	
10.5% (Tax-Free) 7 year bonds of Rs. 1000/- each redeemable at par on 31st March, 2004	510	1,143	510	1,707
Interest Accrued and Due (L-SERIES)		1		1
II. OTHER TERM LOANS				
UNIT TRUST OF INDIA *1 (Due for repayment within one year 1000 millions.)	1,500		2,500	
ICICILtd. *2	4,000		1,000	
INDUSTRIAL DEVELOPMENT BANK OF INDIA *2 (Due for repayment within one year Rs.2000 million.)	3,000		1,000	



# LOAN FUNDS

SCHEDULE - 3 (Rs. in millions)

PARTICULARS	31st MA	AS AT 31st MARCH,2000		AS AT 31st MARCH,1999	
STATE BANK OF INDIA Term loan *2	2,000		2,000		
CORPORATION BANK *2	1,000		1,000		
INDIAN OVERSEAS BANK *2	500		500		
CANARA BANK *2 (Due for repayment within one year Rs.214 millions.)	1,286		1,500		
CENTRAL BANK OF INDIA *2 (Due for repayment within one year Rs.100 millions.)	500		•		
STATE BANK OF PATIALA *2	500		<u>-</u>		
BANK OF MAHARASHTRA *2	1,000		-		
LIFE INSURANCE CORPORATION OF INDIA LTD. *1	2,500		-		
ORIENTAL BANK OF COMMERCE *2	1,000		-		
HOUSING DEVELOPMENT FINANCE CORPORATION Ltd. *2 (Due for repayment within one year Rs. 14.46millions.)	66	18,852	79	9,579	
WORKING CAPITAL DEMAND LOAN From Banks (Short Term) *3		1,615		2,555	
CASH CREDIT FROM BANKS (SHORT TERM) *3		2,044		742	
Total Secured Loans		31,912		28,239	

### **LOAN FUNDS**

**SCHEDULE - 3** 

			(Rs	in millions)
PARTICULARS	31st MA	AS AT ARCH,2000	AS AT 31st MARCH,1999	
UNSECURED LOANS				
A. LOAN FROM GOVERNMENT OF INDIA (Due for repayment within one year Rs 448 millions.)		4,845		5,490
Interest accured and due		2		456
B. LOAN FROM OTHERS (Gauranteed by Government of India)			×	
<ol> <li>Export Development Corporation (Canada) (Due for repayment within one year Rs. 736 millions.)</li> </ol>	2,209		2,818	
<ol> <li>West Merchant Bank Ltd., (Due for repayment within one year Rs. 254 millions.)</li> </ol>	1,525		1,728	
3. ABSEK (Due for repayment within one year Rs. 912 millions.)	5,469		6,507	
<ol> <li>Nordic Investment Bank (Due for repayment within one year Rs. 221 millions)</li> </ol>	2,428		2,172	
<ol> <li>Credit Commercial DE France (Due for repayment within one year Rs. 265 millions.)</li> </ol>	4,503		4,545	r e
6. Export Development Corporation (Chamera-II)	649		-	
7. Japan Bank for International Cooperation (Formerly O.E.C.F.) Tranche-II (Dhauliganga)	772		-	
8. Japan Bank for International Cooperation (Formerly O.E.C.F.) Tranche-I	1,005	18,560	604	18,374
C. OTHER LOAN AND ADVANCES (From Kurichu Project Authority) (Due for repayment within one year Rs. 517.80 millions.)		518		518
TOTAL Unsecured loan		23,925		24,838
TOTAL LOAN (Secured loan+ Unsecured loan)		55,837		53,077

### Note:

<sup>\*1.</sup> Secured by equitable mortgage/ hypothecation against assets of Chamera H.E. Project.(Stage-I)

<sup>\*2.</sup> Secured through equitable mortgage / hypothecation against assets of Uri H.E. Project.

<sup>\*3.</sup> Secured by hypothecation against Debtors and O&M Stores.



# **FIXED ASSETS**

SCHEDULE-4 (Rs. in millions)

PARTICULARS		GRO	OSS BLOC	K		DEPRE	CIATIO	N	NET I	BLOCK
	As at 1.4.99		Deductions/ Adjustment	As at 31.3.2000	As at 1.4.99	For the year	Adjust- ments	As at 31.3.2000	As at 31.3.2000	As at 31.3.99
Land Freehold	615	404	106	913	-	-	-	7	913	615
Land Leasehold	171	52	5	218	12	. 3		15	203	159
Buildings	6,419	301	156	6,564	998	219	(28)	1,189	5,375	5,421
Roads & Bridges	715	65	6	774	142	23	(6)	159	615	573
Construction Plant & Machinery	412	110	82	440	285	23	(54)	254	186	127
Generating Plant & Machinery	17,923	1,681	115	19,489	2,262	727	(55)	2,934	16,555	15,661
Sub-Station Equipments	100	299	4	395	49	9	1	59	336	51
Hydraulic Works (Dams, Tunnels, etc.)	43,289	3,911	8	47,192	3,701	1,206	24	4,931	42,261	39,588
Vehicles	144	82	26	200	81	19	(10)	90	110	63
Furniture Fixture & Equipments	146	229	96	279	55	21	14	90	189	91
Transmission lines	173	18	-	191	65	15	5	85	106	108
Miscellaneous assets/equipments	157	91	72	176	91	10	(38)	63	113	66
Const. Plant & Machinery Declared Surplus	640	30	20	650	370	2	. 6	378	272	270
Fixed Assets of Minor Value of Less than 5000/-		43	(3)	46	-	8	35	43	3	·
TOTAL	70,904	7,316	693	77,527	8,111	2,285	(106)	10,290	67,237	62,793
PREVIOUS YEAR	69,036	3,802	1,934	70,904	5,986	2,242	(117)	8,111	62,793	63,050

# CAPITAL WORK-IN-PROGRESS AS AT 31ST MARCH, 2000.

SCHEDULE-5 (Rs. in millions)

PARTICULARS	AS AT 1ST APRIL, 1999	ADDITIONS DURING THE YEAR	ADJUST- MENTS	CAPITALISED DURING THE YEAR	AS AT 31ST MARCH, 2000
Survey, Investigation and other expenses	122	106	(41)	=	187
Buildings. & Civil engg. Works and Communications	328	1,359	(36)	911	740
Roads & Bridges	84	347	(60)	65	306
Hydraulic Works, Barrages, Dams, Tunnels & Power Channel	6,476	2,608	29	1,828	7,285
Penstock	204		_	-	204
Plant & Machinery in Generating Station	6,138	181	(2)	521	5,796
Elect.Install.& Sub-station equipments	8	14	-	2	20
Miscellaneous assets	9	5	(6)	4	4
Trunk Transmission lines	3	-	_	_	3
Incidental expend. during construction	12,388	3,009	10	2,266	13,141
TOTAL	25,760	7,629	(106)	5,597	27,686
PREVIOUS YEAR	20,731	5,931	(316)	586	25,760

### INCIDENTAL EXPENDITURE DURING CONSTRUCTION

Annexure to schedule-5 (Rs. in millions)

PARTICULARS	FOR THE YEA 31ST MA	R ENDED RCH,2000		FOR THE YEAR 31ST MAI	
EMPLOYEES' REMUNERATION & BENEFITS					
Salary, Wages, Allowances & Benefits	698			632	
Gratuity & Contribution to Provident Fund	82 .			100	
(including Administration Fee)			, i		
Staff welfare expenses	95			162	
Leave salary & pension contribution	2	877		4	898
REPAIRS & MAINTENANCE				-	
Buildings	26			26	
Machinery & construction equipments	48			33	
Others	47	121		40	99
ADMINISTRATION & OTHER EXPENSES					
Travelling & Conveyance	45			39	
Expenses on staff cars & inspection vehicles	37			31	
Rent Office	3			2	
Rent Residential	27			19	
Rates and Taxes	10			5	
Insurance	8			9	
Electricity charges	18			27	
Telephone, Telex & Postage	15			12	
Advertisement & Publicity	17			19	
Foreign consultancy charges	34			71	



# INCIDENTAL EXPENDITURE DURING CONSTRUCTION

(Rs. in millions)

PARTICULARS		FOR THE YEAR ENDED 31ST MARCH,2000		FOR THE YEAR ENDE 31ST MARCH,199		
Income Tax on Foreign contracts	39			11 3		
Design & Consultancy charges Entertainment	14			1		
Printing & Stationery	13			12		
Expenditure on land not belonging	112			52		
to Corporation	112					
Land acquisition & Rehabilitation	6			0		
Other expenses	130			147		
Payment to Auditors	1			1		
Loss on material/assets written off	13	543		0	461	
INTEREST & FINANCE CHARGES		•				
Interest on GOI loan	82			85		
Interest on bonds	542			799	_	
Interest on foreign loan	450			446		
Interest on cash credit facilities/term loan	181			98		
Bond issue expenses	1			-		
commitment fee	40			9		
Guarantee fee on foreign loan	62			50		
Other finance charges	347	1705		_20	1,507	
EXCHANGE RATE VARIATION-NET(GAIN)		146			56	
DEPRECIATION		81			89	
PRIOR PERIOD EXPENSES (NET)						
				_		
Less:						
b) EXPENDITURE				21		
i) Repairs and Maintenance	61			31		
ii) Insurance	(05)			(4)		
iii) Others	(95)			18 7	52	
iv) Depreciation	-	(24)		0	32	
v) Interest	0	(34)			2 162	
TOTAL EXPENDITURE		3439			3,162	
LESS: RECEIPTS AND RECOVERIES	300			0.5		
Hire charges/out turn of Plant & Machinery	113			97		
Interest on			2			
Term deposits/Bank Accounts	45 145		3	50		
Loans and advances	45 45		49	52 40		
Miscellaneous receipts & recoveries  Profit on sale of assets	59			27		
Sale of Power during Trial runs	1 15			0		
		222		·	216	
TOTAL RECEIPTS & RECOVERIES		233	E.,		216	
NET EXPENDITURE		3206			2,946	
LESS:						
Share of Corporate Office Allocated to O&M projects					1.44	
& Deposit / turn-key Contracts.		197			150	
AMOUNT TRANSFERRED TO C.W.I.P		3009			2,796	

### A) PARTICULARS OF REMUNERATION PAID TO DIRECTORS

(Rs. in millions)

		<u>1999-2000</u>	1998-99
(a) i)	Salaries & Allowances	2.6	1.3
ii	Contribution to Provident Fund	0.3	0.1
ii	i) Rent for Residential Accommodation	0.3	0.3
iv	Travelling Expenses	2.7	4.1
v)	Medical Reimbursement	0.2	0.1

(b) Whole time Directors were also allowed the use of company's car for official journeys and for private journeys upto 1000 kms. p.m. on payment as under:

	NON-AC CAR	AC-CAR
upto 16 HP	Rs 250/- P.M.	Rs 400/- P.M.
above 16 HP	Rs 375/- P.M.	Rs 600/- P.M.

### B) PARTICULARS OF PAYMENT TO STATUTORY AUDITORS

(Rs. in millions)

	<u>1999-2000</u>	<u>1998-99</u>
Audit Fees	0.43	0.35
Tax Audit Fees	0.11	0.10
Audit Expenses	0.51	0.40
Other matters	0.05	0.04

### CONSTRUCTION STORES AND ADVANCES

SCHEDULE-6

			(22.	s. in millions)
PARTICULARS	2100 14	AS AT	2107 34	AS AT
	3181 W	ARCH,2000	3181 M	ARCH,1999
CONSTRUCTION STORES				
(At cost as valued and certified by Management)				
Construction Material in Transit	9		4	
Stores	1696	1705	2507	2,511
ADVANCE FOR CAPITAL EXPENDITURE				
Secured (Considered good)	1015		247	
Unsecured (Considered good)	2395	3410	470	717
		5115		3,228

Advance due by Companies in which any Director of the Corporation is a Director or member amounts to Rs. NIL (Previous year Rs. NIL)



# CURRENT ASSETS, LOANS AND ADVANCES

SCHEDULE-7 (Rs. in millions)

PARTICULARS		AS AT 31ST MARCH,2000		AS A 31ST MARCH,199			AS AT RCH,1999
CURRENT ASSETS					i ne.		
Inventories (At Cost as taken, valued							
and certified by Management)							
Stores and spares		828				418	
Loose tools		_2	830			_2	420
Construction Work-In-Progress (contracts)			2142				567
Sundry Debtors(Unsecured)							
Debts outstanding for a period							
exceeding six months		18884				9216	
Other debts		4751				8302	
TOTAL DEBTORS		23635				17518	
LESS Provisions		826	22809			824	16,694
PARTICULARS OF SUNDRY DEBTORS (Unsecured)							
1999-2000 1998-99							
Considered good 22809 16694							
Considered doubtful and provided 826 824							
Cash & Bank Balances							
Cash,Imprest,Cheques & Drafts		278				221	
Balances with scheduled banks in							
Current account		406				353	
Cash credit account		-				60	
Deposit account(Short term)		-				•	
Balances with non-scheduled banks							
(With Skandinaviska Enskilda Banken							
Current account						354	
(With Bank of Bhutan)			1000				
Current account		433	1117			34	1022
Other Current Assets							
Interest accrued on deposits		11	2736			9	
Others		258	269				243
Loans and Advances							
ADVANCES RECOVERABLE IN CASH							
OR KIND OR FOR VALUE TO BE RECEIVED				4.50			
Beenied (Comments Sees)	05			159			
Unsecured(Considered good) 69				628	709		
	7 803	700		<u>11</u>	798	707	
LESS Provision for Doubtful	_7	796			11	787 162	
Loans to employees (Secured)		211 601	1608			891	1,840
Power Grid Corporation of India Ltd							
			28775				20,78

### A. PARTICULARS OF MAXIMUM BALANCE DURING THE YEAR WITH NON-SCHEDULED BANKS

		(Rs. in millions)
SKANDINAVISKA ENSKILDA BANKEN	<u>1999-2000</u>	<u>1998-99</u>
Current account	368	380
BANK OF BHUTAN		
Current account	433	34
Term Deposit	60	-
Saving account	_	-
B. PARTICULARS OF LOANS & ADVANCES DUE FROM DIRECTORS		
	<u>1999-2000</u>	<u>1998-99</u>
Amount due at the end of the year	0.4	0.3
Maximum balance at any time during the year	0.5	1.7

Advance due by Companies in which any Director of the Corporation is a Director or member amounts to Rs. NIL (Previous year Rs. NIL)

### CONSTRUCTION WORK-IN-PROGRESS(CONTRACTS)

Annexure to schedule-7

CONSTRUCTION WORK-IN-I ROUNESS(CONTRACTS)		Afflicative to (R	schedule-7		
PARTICULARS	FOR THE YE 31ST M	AR ENDED	FOR THE YEAR ENDEI 31ST MARCH,199		
DIRECT EXPENSES		1469		285	
(Includes labour,materials, Assets					
& payment to contractors/suppliers)					
EMPLOYEES' REMUNERATION & BENEFITS					
Salary,wages, allowances & benefits	38		31		
Gratuity & contribution to provident fund	2		2		
Staff welfare expenses	3	43	_3	36	
REPAIRS & MAINTENANCE			_		
Buildings	1		-		
Machinery & construction equipments	3		2		
Others	13	17	_2	4	
ADMINISTRATION & OTHER EXPENSES			_		
Travelling & conveyance	5		4		
Expenses on staff cars & insp. Veh.	4		3		
Rent office	1		1		
Insurance	3		, <del>,,</del>		
Telephone, telex & postage	. 2		2		
Advertisement& publicity	1		2		
Printing & stationery	1		1		
Bank charges	1		1		
Corporate office managment expenses	75		17		
Other expenses	_8	101	_3	34	
DEPRECIATION		5		4	
TOTAL EXPENDITURE		1635		363	
LESS: RECEIPTS AND RECOVERIES		60		30	
(Miscellaneous)					
NET EXPENDITURE DURING THE YEAR		1575		333	
Balance b/f from last year		567		237	
Adjustment during the year		0		(3)	
TOTAL EXPENDITURE CARRIED OVER TO SCHEDULE-7		2142			
TO THE EAST ONE CARRIED OVER TO SCHEDULE!		2142		567	



# CURRENT LIABILITIES AND PROVISIONS

SCHEDULE-8 (Rs. in millions)

PARTICULARS		31ST MA	AS AT RCH,2000		31ST MA	AS AT RCH,1999
LIABILITIES						
Sundry creditors						
Total Outstanding dues of small scale						
Industrial Undertaking(s).						
(Includes Rs 2 millions due over 30 days.)	3			-		
Total Outstanding dues of creditors				506	506	
other than small scale Industrial Undertaking(s).	1039	1042		596	596	
Unspent amount of Deposit/Agency		26			32	
Deposits/Retention money		153			98	
Other liabilities		1223			1264	
Interest accrued but not due on Loans		1124			1340	
Liability for Cheques issued		1			-	
Advances against construction contracts		2570	6139		1138	4,468
PROVISIONS						
Proposed Dividend		150			150	
Provision for Taxation(on dividend)		33			15	1.600
Provision for Staff benefits		1444	1627		1435	1,600
			7766			6,068

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(TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)

SCHEDULE-9 (Rs. in millions)

(TO THE EXTENT NOT WRITTEN OFF OR ADJUSTED)			(145:111	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
PARTICULARS	31ST MAR	AS AT CH,2000	31ST MARG	AS AT CH,1999
Deferred Revenue Expenses		19		4
Expenditure on Assets not				
belonging to Corporation		(*)		-
Losses awaiting write off sanction	28		47	
Less: Provided for	28	-	<u>47</u>	-
		19		4

OTHER INCOME				HEDULE-10 (Rs. in millions)
PARTICULARS	FOR THE YI 31ST M	EAR ENDED MARCH,2000		YEAR ENDED MARCH,1999
Profit on sale of assets		11		8
Liability not required written back		6		275
Other miscellaneous receipts		51		55
Income from scrap		-		1
Interest on loans and advance		8		5
Surcharge		1938		-
		2014		344
GENERATION, ADMINISTRATION AND OTHER EX	PENSES			HEDULE-11 (Rs. in millions)
PARTICULARS	FOR THE YI	EAR ENDED MARCH,2000	FOR THE	YEAR ENDED MARCH,1999
	3131 W	TARCH,2000	3131	MARCII,1999
GENERATION EXPENSES	Ti 100 00000 110		- 1	
Consumption of stores & spares REPAIRS & MAINTENANCE	60	×	133	
Buildings	23		18	
Machinery	195		46	
Others	67		132	
Other operational expenses	23		34	
Amount written off Against Deferred	3	371	2	365
Revenue Expenditure				
ADMINISTRATION & OTHER EXPENSES				
Rent	2		1 .	
Rates & Taxes	2		1	
Insurance	364		351	
Electricity charges	10		5	
Travelling & Conveyance	14		17	
Expenses on staff car	19		25	
Telephone, Telex & Postage	7		7	
Advertisement & Publicity	4		6	
Printing & Stationery	4		4	
Consultancy Charges	_	,	- <u>-</u>	
Donation (Includes Rs 20 Millions paid to National Defance Fund)	27		_	
Corporate office management expenses	122		134	F
Loss on sale of assets	. 1		2	
Other miscellaneous expenses	207	783	159	712
Exchange Rate Variation		. 13		42
		11/8		1 110
		1167		
EMPLOYEES REMUNERATION AND BENEFITS				HEDULE-12 (Rs. in millions)
PARTICULARS	FOR THE YE	EAR ENDED	FOR THE	YEAR ENDED MARCH,1999
Salaries, wages & allowances		730		1,016
Gratuity & Contribution to Provident Fund		750		1,010
Including Administration Fees)		76		145
Staff welfare expenses		133		264
		100		204
		939		1,425



# INTEREST AND FINANCE CHARGES

SCHEDULE-13 (Rs. in millions)

		(KS. III IIIIIIOIIS)
PARTICULARS	FOR THE YEAR ENDED 31ST MARCH,2000	FOR THE YEAR ENDED 31ST MARCH,1999
Interest on Government of India loans	754	. 892
Interest on bonds	1411	1,981
nterest on foreign loans	690	801
Interest on Toleign Tolais Interest on Cash credit facilities / Term loan	1384	833
Rebate to customers	107	101
Commitment fee	1	2
Guarantee fee on foreign loan	148	157
Other finance charges	2	20
	4497	4,787
OTHER CONTRACT EXPENSES		SCHEDULE-14 (Rs. in millions)
PARTICULARS	FOR THE YEAR ENDED 31ST MARCH,2000	FOR THE YEAR ENDED 31ST MARCH,1999
Payment to Sub-contractors/Suppliers	-	
Direct Expenses (Includes labour& materials)		18
Other expenses	2	
one expenses	2	18
PRIOR PERIOD ADJUSTMENT (NET)  PARTICULARS	FOR THE YEAR ENDED	SCHEDULE-15 (Rs. in millions) FOR THE YEAR ENDED
PARTICULARS	31ST MARCH,2000	31ST MARCH,1999
INCOME	(1)	67
Sale of Electricity	(1)	422
Interest / Surcharge received from Debtors	94	_11
others		
SUB TOTAL	93	500
EXPENDITURE	1	
Salaries & Wages	11	
Repair & Maintenance	12	4
Interest	7	
Others	7	
SUB TOTAL	31	<u>5</u>
Depreciation	30	(2
Prior Period Adjustment (Net)	32	44'

### NOTES TO THE ACCOUNTS

**SCHEDULE - 16** 

### 1. Contingent liabilities

- a) Claims against the Corporation not acknowledged as debts Rs.8782 millions (previous year Rs.12613 millions).
- b) Bonds for Rs.428 millions (previous year Rs. 428 millions) executed in favour of Customs Authorities by the Corporation. This includes contingent liability for Custom Duty in respect of 11 No. Bonds for which waival for duty has been sought and liability if arises shall be recoverable from the contractor.
- 2. Estimated amount of contracts remaining to be executed on capital account and not provided for is **Rs26703 millions** (previous year **Rs.6266 millions**).
- 3. a) Salal H.E. Project (Stage-I) had been transferred to the Corporation w.e.f. Nov. 87 vide Ministry of Power and NCES letter Nos. 4/1/78-DO (NHPC) dated 9.2.89 and dated 12.7.91. Pending completion of legal formalities for de jure transfer and based on legal opinion, the Accounts of this project have been incorporated on the same terms and conditions as stipulated by the Government of India in case of transfer of other projects to the Corporation. Accordingly, an amount of Rs.3316 millions (Rs.2976 millions being the first 50% of estimated revised cost and Rs.340 millions of 50% of IDC) has been treated as investment from Govt. and accounted for as GOI fund adjustable to equity.
  - b) Pending sanction, Rs. 942 millions, (previous year Rs. 869 millions) being the first 50% of interest accrued during construction on Govt. of India loan and capitalised in respect of Chamera -I, Tanakpur, Uri and Rangit Projects has been shown as Government of India fund adjustable to equity and balance 50% as Government of India loan in accordance with the then financing pattern followed in this regard.

#### 4. Land

- a) Title deeds/title in respect of land, in some cases, have yet to be executed/passed. Expenses on stamp duty etc. relating to registration thereof will be accounted for as and when incurred.
- b) In case of Dhauliganga Project out of 25.57 ha purchased, possession of 5.8 ha is yet to be handed over.
- c) Pending execution of lease deeds at some of the Projects in Jammu and Kashmir, period of lease has been taken at 99 years.

### 5. Sales

- a) Bills on account of adjustment of rates for deemed generation, incentive/disincentive have not been raised/ accounted for, pending certification by REBs/authorities.
- b) Sales include Rs.488.46 millions in respect of change of Foreign Exchange Rate accounted for, in terms of principles of tariff fixation, pending receipt of order from CERC.
- c) Sales include Rs.8.73 millions for power supplied to Nepal for which bills are yet to be raised.
- d) Sales at Rangit Project which was commissioned on Feb.15th, 2000, has been booked on the basis of provisional rates allowed by CERC.
- 6. Balances shown under Material issued to contractors, claims recoverable (including from PGCIL) advance for Capital Expenditure, Sundry Debtors, Advances to Contractors, Sundry Creditors (including due to Controller of Aid, Accounts and Audit, Ministry of Finance) and Deposit/Earnest money from contractors are subject to reconciliation/confirmation and respective consequential adjustments. Accordingly, a sum of Rs.29.62 millions, Rs.21.55 millions, Rs.10.70 millions, Rs.4.44 millions and Rs.0.69 millions included in Material Issued to Contractors, Advance to Contractors, Hire charges recoverable, interest accrued on advances and claims recoverable from contractors, respectively, in respect of Chamera-I and Tanakpur Projects have been shown as recoverable, pending settlement of Contractors' claims.
- 7. A sum of Rs.162.64 millions (including 87.60 millions which was charged to Profit and Loss Account last year and adjusted through Prior Period Adjustment in current year) incurred on renovation and modernisation of Power House of Baira-siul project has been capitalised considering the said amount incurred as resulting into capital spares/stand by equipments.
- 8. Deemed export benefits, if any, availed/available to Contractors at Uri Project and payable to the Corporation, are not yet fully resolved with concerned Authorities and are still pending for completion of certain formalities. The same shall be accounted for at the time of actual receipt.
- 9. Pending receipt of full amount of transfer consideration in respect of Sawalkot and Baglihar project, assets whereof have been agreed to be transferred to Jammu and Kashmir Government, are being treated as assets of the Corporation. Adhoc advance of **Rs. 54 millions** received is being shown under current liabilities. NHPC does not anticipate any loss out of this transaction.
- 10. Pending final decision of Hon'ble High court of Jammu and Kashmir the operation of Employees Pension Scheme, 1995 is kept in abeyance. Additional liability, if any, will be accounted for as and when settled.
- 11. Provision for the year on account of gratuity has been made as per actuary's report after adjusting the amount of Rs. 81.8 millions received/recoverable from N.H.P.C. Group Gratuity Trust.



12. The effect of foreign exchange fluctuation during the year is as under:

The effect of foreign exchange fluctuation during the year is as under	(Rs.in millions) 1999-2000
(i) Amount charged to Profit and Loss Account excluding depreciation	13
(ii) Net amount credited to profit and loss account for the year excluding depreciation	10
(iii) Amount charged to Incidental expenditure during construction	146
(iv) Amount charged to Capital work-in-progress	(-) 377
(v) Amount adjusted by addition to carrying amount of fixed assets	16

- 13. Pending receipt of completion certificate and demand notice from respective authorities, provision for property tax has not been made in respect of Faridabad, Office Complex.
- 14. Pay revision for Workmen is due w.e.f. 1.1.97. Adequate provision is held in this regard.
- 15. In the absence of taxable income/taxable wealth, no provision for Income Tax/Wealth Tax is considered necessary.
- 16. Even though Corporation's application for waiver of Guarantee fee in respect of External Commercial Borrowing raised by the company is still pending ,out of abundant caution provision of Rs.757millions has been made @ 1.2% p.a. and the additional guarantee fee @ 1.2% amounting to Rs.757 millions has been treated as contingent liability.

### 17. Quantitative details

	1999-2000	1998-99
<ul> <li>i) Licensed Capacity (M.W.)</li> <li>ii) Installed Capacity (M.W.)</li> <li>iii) Actual Generation (M.Us.)</li> <li>iv) Actual Sales (M.Us.)</li> </ul>	- Not Applicable - 2149.20 8690.73 @ 7572.46 #	- Not Applicable - 2089.20 9917.26 8694.09
iv) Actual Sales (M.Us.)  @ Including 3.8 M.Us during trial runs  # Including 3.35 M.Us during trial runs		
		Rs. in Millions
18. a) Value of imported Plant and Machinery and Spares on CIF basis	50	NIL
b) Expenditure in Foreign Currency		
i) Know- How	42	20
<ul><li>ii) Interest</li><li>iii) Other Misc. Matters</li></ul>	1121 892	1247 590
<ul> <li>Value of spare parts and Components consumed in operating units.</li> </ul>		
i) Imported	44	3
ii) Indigenous	85	130
d) Earnings in foreign currency		
Interest	3	10
Others	10	14
10 Previous year's figures have been regrouped/re-arranged wherever no	ecessary.	

Previous year's figures have been regrouped/re-arranged wherever necessary.

VIJAY GUPTA Secretary

R.NATARAJAN Director (Finance)

YOGENDRA PRASAD Chairman & Managing Director

N I L

@ Includes Capital Work-in-Progress Rs.27686 millions and

Construction Stores & Advances Rs.5115 millions.

# BALANCE SHEET ABSTRACT AND COMPANY'S GENERAL BUSINESS PROFILE

I	Registration Details		
	Registration No	State Code	Balance Sheet Date
	3 2 5 6 4	0 5	3 1 0 3 2 0 0 0
II	Capital Raised during the year (Rupees in millions)		
	Public Issue		Right Issue
	N I L		N I L
	Bond Issue		Private Placement *
	NIL		6 1 3 9
	* Share Capital Deposit received from Govt. of India.		
III	Position of Mobilisation and Deployment of Funds (Rupee	es in millions)	
	Total Liabilities		Total Assets
	1 2 8 8 3 2		1 2 8 8 3 2
	Sources of Funds		
	Paid-up Capital #		Reserves and Surplus
	4 4 4 6 2		1 7 0 8 9
	Secured Loan		Unsecured Loans
	3 1 9 1 2		2 3 9 2 5
	# Includes share capital deposit Rs.232 millions and Govt. of India Fund adjustable to equity Rs.4258 millions.		
	<b>Application of Funds</b>		
	Net Fixed Assets		Investments
	1 0 0 0 3 8 @		NIL
	Net Current Assets		Misc. Expenditure
	2 1 1 9 2		1 9
	Accumulated Losses		



Performance of Company (Rupees in millions)	
Turnover	Total Expenditure
1 0 7 6 9 **	8 7 7 1
	Profit After Tax
4 0 1 2	4 0 1 2
	Dividend Amount
earning per snare in Ks.	1 5 0
1 0 0 . 3 8	1 3 0
** Excludes Other Income Rs. 2014 millions.	
Generic Names of Three Principal Products/Services of Company	
Product Description	
G E N E R A T I O N O F E L E C T F	R I C I T Y
Item Code No.	
ii) Product Description	
C O N S T R U C T I O N C O N T R A	CTS
Item Code No.	
iii) Product Description	
C O N S U L T A N C Y S E R V I C E	S
Item Code No.	

VIJAY GUPTA Secretary R.NATARAJAN Director (Finance) YOGENDRA PRASAD Chairman & Managing Director

# **CASH FLOW STATEMENT**

# (PERSUANT TO CLAUSE 32 OF THE LISTING AGREEMENT WITH STOCK EXCHANGES)

						(Rs	in million)
		For the year end	led 31st	March,2000	For the year	r ended 31st N	<u> 1arch,1999</u>
A.	CASH FLOW FROM OPERATING ACTIVITIES						
	Net Profit before tax and extraordinary items			4012			3053
	ADD:						
	Depreciation		2199			2151	
	Interest Paid		4497			4786	
	Insurance Reserve		358			347	
	Deferred revenue Exp.		3			2	
	Loss on Sale of Assets		1			2	
	Exchange rate variation		13			42	
	Advance against Dep.		1406			1150	
			8477			8480	
	LESS: Profit on sale of assets	e New Arrest	11	8466		0	8480
	<b>Operating Profit before Working Capital Changes</b>						
	<b>Working Capital Changes</b>						
	Inventories		(62)			(24)	
	Sundry Debtors	(	6116)			(3712)	
	Const. W.I.P. (contracts)	(	1570)			(327)	5
	Loans and Advances		232			498	
	Other Current Assets		(26)			37	
	Current Liabilities and Provisions		1698	(5844)		1249	(2279)
	Cash generated from operations (A)			6634			9254
B.	CASH FLOW FROM INVESTING ACTIVITIES						
	Fixed assets	6622			1870		
	Add: Adjustment in Depreciation	106			118		
	Loss on Sale of assets	1			2		
		6729			1990		
	Less: Profit on Sale of Assets	11	6718		0	1990	
	Capital Work in Progress	1927			5027		
**	Less: Adjustment for Depreciation	81	1846		87	4940	
	Construction Stores & Advances	_	2234			(91)	
	Net cash used in Investing Activities (B)			(10798)			(6839)



C. CASH FLOW FROM FINANCING ACTIVI	TIES					
Proceeds from issue of Share Capital		5908			3649	
Proceeds from Share Capital Deposit		232			689	
GOI Fund Adjustable to Equity		73			(18)	
Proceeds from borrowings/Loans	2759			(1844)		
Less: Adjustment For Exchange rate Variation	on 13	2746		42	(1886)	
Interest paid		(4497)			(4786)	
CASH FLOW FROM FINANCING ACTIVITIE	ES(C)		4462			(2352)
D. Misc.Expenses (to the extenet not written off)		15			(13)	
Add: Adj. For Deferred revenue Exp.		3			1	
	(D)		(18)			12
E. Dividend / Dividend Tax	(E)		(185)			(165)
Net Increase/Decrease in Cash and Cash equi	valents		95			-90
(A+B+C+D+E)						
Cash and cash equivalents (Opening balance)			1022			1112
Cash and cash equivalents (Closing balance)			1117			1022

NOTE: Cash and Cash equivalents consist of Cash in hand and balance with banks.

VIJAY GUPTA Secretary **R.NATARAJAN**Director (Finance)

YOGENDRA PRASAD Chairman & Managing Director

As per our report of even date attached For JAIN CHOPRA & COMPANY Chartered Accountants

Place : Delhi

Dated: 20th July, 2000

ASHOK CHOPRA Partner

### **AUDITORS' REPORT**

### To the Members of National Hydroelectric Power Corporation Limited

We have audited the attached Balance Sheet of National Hydroelectric Power Corporation Limited as at 31st March, 2000 and the Profit & Loss Account for the year ended on that date annexed thereto, in which are incorporated the accounts of branches audited by other auditors appointed by the Company Law Board.

- 1. As required by the Manufacturing and Other Companies (Auditors' Report) order, 1988 we annex herewith a statement on the matters specified in paragraph 4 and 5 of the said order.
- 2. Further to our comments in the Annexure referred to in paragraph 1 above :
  - (a) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit;
  - (b) In our opinion, proper books of accounts as required by law have been kept by the Corporation so far as appears from our examination of such books:
  - (c) The Balance Sheet and Profit & Loss Account dealt with by this report are in agreement with the books of account;
  - (d) The reports on accounts of branches audited by other auditors have been forwarded to us and we have considered the same in preparing our report;
  - (e) In our opinion, the Profit & Loss Account and the Balance Sheet comply with the Accounting Standards referred to in sub section(3C) of Section 211 of the Companies Act, 1956 except to the extent hereinafter contained.

### 3. We report that:

- I. Sales include a sum of Rs. 488.4 millions on account of Exchange Rate Variation(ERV) claimed by the Corporation in respect of Chamera-I & Uri projects from its beneficiaries. Out of the above amount a sum of Rs. 358.6 millions is on account of ERV claimed on installments paid towards foreign debts during the year 1999-2000 in respect of Chamera-I and Uri projects. The increase in liability on account of ERV on foreign debt having been added to the carrying cost of the fixed assets at the end of each year, the amount on reimbursement towards ERV on such foreign debts should have been, in our opinion, reduced from carrying cost of the fixed assets. However, the Corporation contends that the claim of such ERV on installments is part of its sale proceeds. The effect on assets and profit of the Corporation could not be ascertained in absence of complete information regarding depreciation changes in this regard.
- II. The effect of non-adjustment of Rs. 51.6 millions, Rs. 156.6 millions and Rs. 52.8 millions at Baira Siul, Salal and Loktak respectively being depreciation charged during construction period in gross assets and accumulated depreciation of the projects, on determination of Tariff which is yet to be notified in respect of Baira Suil, Loktak and up to 1992 in case of Salal, and its consequent effect on turnover and profit up to the year 1999-2000 has not been determined and as such no adjustment could be carried out in the accounts up to 31st March, 2000.
- III. In respect of Chamera-I a sum of Rs. 0.71 millions on account of Exchange Rate Variation on lost assets, has been added to the carrying cost of the fixed assets, which, in our opinion, should have been charged to Profit & Loss Account. The effect on assets and profit of the Corporation could not be ascertained in absence of complete information regarding depreciation changes in this regard.
- IV. In respect of Loktak project claim of Rs. 6.96 millions due from Govt. of Manipur are outstanding for a long period of time and the recovery of the same is not ascertainable. No provision in this regard has been made.



V. In absence of complete deatails and the provision for doubtful debts and further in view of pending difference in reconciliation of respective accounts with beneficiaries, we are unable to comment on the adequacy or otherwise of the provision for doubtful debts retained at a sum of Rs. 758 millions by the Corporation.

We are unable to express the extent and impact on state of affairs/profitability in view of the amounts involved therein in respect of :

VI. (a) Note No. (4) of schedule 16

Regarding: Final Settlement of purchase consideration in respect of land at various projects and execution of title deeds in favour of the Corporation.

(b) Note No. (5) of schedule 16

Regarding: Provisional booking of sales in respect of changes in Foreign Exchange Rates, power supplied to Nepal and sale of power at Rangit project.

(c) Note No. (6) of schedule 16

Regarding: Non-reconciliation/Non-confirmation of balances lying against materials issued to contractors, advances to contractors, sundry creditors including dues to and from foreign suppliers, material in transit/under inspection, deposit/earnest money from contractors, claims recoverable including dues from PGCIL, advances for capital expenditure and account with Controller of Aid, Account and Audit including balances with the banks in some offices.

(d) Note No. (16) of schedule 16

Regarding: Provision for guarantee fees of Rs. 757 millions and non-provision for additional guarantee fee for default in its payment @ 1.20% amount to Rs. 757 millions though included in Contingent Liabilities.

We further report that, without considering items mentioned at paragraph I to III and V above the effect of which could not be determined, had the observations made by us in paragraph V above been considered, the profit for the year would have been Rs. 4005.04 millions (as against the reported figure of Rs. 4012 millions), Reserves & Surplus would have been Rs. 17082.04 millions (as against the reported figure of Rs. 17089 millions); and

Subject to our comments in para 3 (I), (II), (III) and (V) and adjustments that may arise in respect of matters referred to therein and its consequential effect on the profit for the year and other items of assets and liabilities, in our opinion, and to the best of our information and according to the explanations given to us, the said accounts read together with the Accounting Policies and Notes forming part thereof give the information required by the Companies Act, 1956 in the manner so required and give a true and fair view:

- (a) In the case of the Balance Sheet of the state of affairs of the Corporation as at 31st March, 2000 and;
- (b) In the case of the Profit & Loss Account, of the profit of the Corporation for the year ended on that date.

For JAIN CHOPRA & COMPANY Chartered Accountants

(Ashok Chopra)
Partner

Place: Delhi

Dated: 20th July, 2000

### ANNEXURE TO THE AUDITORS' REPORT

### ANNEXURE REFERRED TO IN PARAGRAPH 1 OF OUR REPORT OF EVEN DATE

- 1. The Corporation has maintained records for majority of fixed assets showing full particulars including quantitative details except that location and identification mark of fixed assets has not been mentioned in the fixed assets register in some cases. Management has not conducted physical verification of assets in some projects. In some projects differences are under reconciliation and we are unable to comment on the discrepancies. No serious discrepancies have been reported during the year where verification and reconciliation has been completed.
- 2. None of the fixed assets have been revalued during the year.
- 3. Physical verification of stores, spare parts, raw material has been conducted by the management at most of the projects following perpetual system of inventory. In our opinion, the system adopted by the management is reasonable according to the size and nature of its business.

  Materials lying with third parties have been confirmed/verified only in few cases.
- 4. According to the information and explanation given to us, the procedure of physical verification of stocks, spares, etc. followed by the management needs to be further strengthened keeping in view the size of the Corporation and the nature of its business.
- 5. The discrepancies noticed on verification between the physical stocks and records have been dealt with in the books of account except in case of some projects where discrepancies are reported to be under reconciliation and pending investigation. The stores lying with contractors are subject to reconciliation/confirmation in some cases.
- 6. On the basis of our examination of stocks records, we are of the opinion that the valuation of stocks is fair and proper, in accordance with normally accepted accounting principles and is on the same basis as in the previous year, except that stock lying at the sites at Operation & Maintenance projects, is valued on the basis of engineering estimates.
- 7. According to the information given to us, the Corporation has not taken any loans, secured or unsecured during the year from companies, firms or other parties listed in the registers maintained under section 301 of the Companies Act, 1956 and from Companies under the same Management under sub-section (1B) of Section 370 of the Companies Act, 1956.
- 8. According to the information given to us, the Corporation has not granted any loans secured or unsecured to companies, firms or other parties listed in the register maintained under section 301 of the Companies Act, 1956 and to Companies under the same management as defined under sub-section (1B) of Section 370 of the Companies Act, 1956.
- 9. The parties including employees to whom loans and advances in the nature of loans have been given are generally regular in repayment of principal amount and interest, wherever applicable except in case of advances considered doubtful. In some of the cases, the advances and interest, wherever applicable, are outstanding since long and matters in some cases are pending in arbitration/courts. The terms on which such loans/advances were given were not prejudicial to the interest of the Corporation.
- 10. In our opinion, and according to the information and explanation given to us, there are adequate internal control procedures commensurate with the size of the Corporation and the nature of its business with regards to purchase of Plant and Machinery, equipment and other assets and for the sale of goods. However strengthening and implementation is required in areas like purchases of stores, adjustment of old unreconciled debits and credits in banks, materials and equipment issued to contractors, follow up of debtors and contractors' advances, disposal of old plant and machinery, slow moving stores.
- 11. According to the information and explanation given to us, there are no transactions of purchase and sale of goods, material and services aggregating during the year to Rs. 50,000 or more in respect of each party made in pursuance of contracts or arrangements entered in the register maintained under section 301 of the Companies Act, 1956.



- 12. As explained to us, the Corporation does not have regular procedure for determination of unserviceable or damaged stores/raw materials in most of the projects. However, provisions for losses are made whenever such items are determined.
- 13. The Corporation has not accepted any deposits from the public to which the provisions of section 58A of The Companies Act, 1956 and the rules framed there under apply.
- 14. According to information and explanation given to us, the Corporation is maintaining reasonable records for the sale and disposal of the realisable scrap. The Corporation has no by products.
- 15. In our opinion, the internal audit system of the Corporation is commensurate with the size of the Corporation's business, the quality and periodicity, the scope, coverage are being constantly reviewed. In respect of some projects/units internal audit has not been carried out.
- 16. We have been informed that maintenance of cost records has not been prescribed by the Central Government under section 209(i)(d) of the Companies Act, 1956.
- 17. According to the records of the Corporation, Provident Fund dues have generally been deposited in time with the appropriate authorities. We have been informed that Employees' State Insurance Act, 1948 is not applicable to the Corporation.
- 18. As per explanation given to us, no undisputed amounts payable in respect of income tax, sales tax, wealth tax, custom duty and excise duty as on 31st March, 2000 were outstanding for a period of more than six month from the date they became payable.
- 19. According to information and explanation given to us, and on examination of the books of accounts, carried out in accordance with generally accepted auditing practices, no personal expenses have been charged to revenue account other than those payable under contractual obligations or in accordance with generally accepted business practices.
- 20. The Corporation is not a sick industrial company under the provisions of section 3(1)(O) of the sick Industrial Companies (Special Provisions)
  Act, 1985.
- 21. In respect of service activities:
  - The Corporation has a reasonable system of recording receipts, issues, consumption of materials and stores and allocation of materials consumed to relative jobs.
  - ii. The Corporation has a reasonable system of allocation of man-hours consumed on the respective activities;
  - There exists a reasonable system of authorization at proper levels and adequate system of internal control on issue and allocation of stores and labour commensurate with the size of the Corporation and nature of its business.

For JAIN CHOPRA & COMPANY
Chartered Accountants

(Ashok Chopra)
Partner

Place: Delhi

Dated: 20th July, 2000

### REPLIES TO AUDITOR'S REPORT

ANNEXURE - I

Rate Variation (ERV) claimed by the Corporation in respect of Chamera-I & Uri projects from its beneficiaries. Out of the above amount a sum of Rs. 358.6 millions is on account of ERV claimed on instalments paid towards foreign debt during the year 1999-2000 in respect of Chamera-I & Uri projects. The increase in liability on account of ERV on Foreign debt having been added to the carrying cost of the Fixed Assets at the end of each year, the amount on reimbursement towards ERV on such foreign debt should have been, in our opinion, reduced from the carrying cost of the Fixed Assets. However the Corporation contends that the claim of such ERV on instalments is part of its sale proceeds. The effect on assets and profit of the Corporation could not be ascertained in absence of complete information regarding depreciation change in this regard.

The amount of ERV has been claimed as part of the tariff for the project in accordance with the tariff principles notified under the Electricity Supply Act and as per the opinion expressed by The Institute of Chartered Accountants of India in Vol. XI query No. 1.11. The treatment, in the opinion of the Management, is correct and is being followed consistently.

II. The effect of non adjustment of Rs. 51.6 millions, Rs. 156.6 millions and Rs. 52.8 millions at Baira Siul, Salal & Loktak respectively being depreciation charged during construction period in gross assets and accumulated depreciation of the projects, on determination of tariff, which is yet not notified in respect of Bairasiul, Loktak and up to 1992 in case of Salal, and its consequent effect on turnover and profit up to the year 1999-2000 has not been determined and as such no adjustment could be carried out in the accounts up to 31st March, 2000.

The stated adjustment pertains to the Baira Siul, Loktak & Salal Projects, which were commissioned in 1982,1985 and 1987 respectively. In the opinion of the Management, adjustment need not be carried out.

III. In respect of Chamera-I, a sum of Rs. 0.71 millions on account of exchange rate variation on lost assets, has been added to the carrying cost of fixed assets which, in our opinion, should have been charged to Profit & Loss Account. The effect on assets and profit of the Corporation could not be ascertained in absence of complete information regarding depreciation changes in this regard.

In our opinion, treatment given is correct.

IV. In respect of Loktak project claim of Rs. 6.96 millions due from Govt. of Manipur are outstanding for a long period of time and the recovery of the same is not ascertainable. No provision in this regard has been made. Amounts are due from Govt. Departments and do not call for any provision at this stage.

V. In absence of complete details as to individual debtors and the basis of provision for doubtful debts and further in view of pending differences in reconciliation of respective accounts with beneficiaries, we are unable to comment on the adequacy or otherwise of such provision for doubtful debts retained at a sum of Rs. 758 millions by the Corporation.

In our opinion, provision created is adequate.



## REPLIES TO ANNEXURE TO AUDITORS' REPORT

- The Corporation has maintained records for majority of fixed assets showing full particulars including quantitative details except that location and identification mark of fixed assets has not been mentioned in the fixed assets register in some cases. Management has not conducted physical verification of assets in some projects. In some projects reports are under reconciliation and we are unable to comment on the discrepancies. No serious discrepancies have been reported during the year where verification and reconciliation has been completed.
- 10 In our opinion, and according to the information and explanation given to us, there are adequate internal control procedures commensurate with the size of the Corporation and the nature of its business with regards to purchase of Plant and Machinery ,equipment and other assets and for the sale of goods. However strengthening and implementation is required in areas like purchase of stores, adjustment of old unreconciled debits and credits in banks, Materials and equipment issued to contractors, follow up of debtors and contractors' advances, disposal of old plant and machinery, slow moving stores.
- 12. As explained to us, the Corporation does not have regular procedure for determination of unserviceable or damaged stores/raw materials in most of the projects. However, a provision for losses is made whenever such items are determined.

Necessary action to complete the balance Physical Verification and location will be taken in 2000-2001.

In our opinion, adequate internal control procedures exist in the Company in respect of applicable areas mentioned in the comment.

The unserviceable or damaged stores are periodically determined. There are no raw materials in the Company.

**ANNEXURE -II** 

COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 619(4) OF THE COMPANIES ACT, 1956 ON THE ACCOUNTS OF NATIONAL HYDROELECTRIC POWER CORPORATION LIMITED, FARIDABAD, FOR THE YEAR ENDED 31ST MARCH, 2000.

### COMMENTS

### MANAGEMENT REPLIES

### A) Balance Sheet

1) Current Assets, Loans & Advances

**Sundry Debtors** 

Less Provision for doubtful debts: Rs.826 million

A reference is invited to Comment No. A (2) of CAG of India on the Company Accounts for the year 1998-99 in which it was pointed out that there was less provision of Rs.953.30 million on account of doubtful debts due to refusal of State Electricity Board to pay on the ground of excess billing. This year too, the Company had not made the provision on account. of doubtful debts due to excess billing of Rs.529.40 million in addition to above.

This has resulted in overstatement of sundry debtors and profit to the extent of Rs.529.40 million.

The bills had been raised as per the Accounting Policy No. 9(a) (i) & (ii). We feel that sufficient provisions are available to meet contingencies arising out of tariff reduction, if any.

### B) Profit & Loss Account

Sales: Rs. 10757 million

2) This includes Rs.17.7 million being amount of Sale to Sikkim. This is arrived at without provision of 12% free power of Rangit Hydroelectrical Project amounting to Rs.14.2 million which should have been accounted for as per approved Detailed Project Report & revised cost approval.

This has resulted in overstatement of sundry debtors by Rs.14.2 million and profit by the same amount.

The order for allocation of power for Rangit H.E. Project including 12% free power to the home state had been issued by the Ministry of Power, Govt. of India vide letter No. 8/2/2000-DO(NHPC) dated 20<sup>th</sup> July, 2000 received on 24<sup>th</sup> July, 2000 i.e. after finalisation of accounts. EREB is in the process of issue of amended global accounts for incorporating 12% free power and accordingly revised bill shall be issued after adjusting 12% free power during the year 2000-2001 and accounted for as per Accounting Policy No. 9(a) (iii).

Sd/-

(H.S. NARAYANAN)

Principal Director of Commercial Audit And Ex-officio Member, Audit Board-III, New Delhi

Place: New Delhi Dated: 26.09.2000



### **ANNEXURE - III**

# REVIEW OF ACCOUNTS OF NATIONAL HYDROELECTRIC POWER CORPORATION LIMITED, FARIDABAD, FOR THE YEAR ENDED 31 MARCH, 2000 BY THE COMPTROLLER AND 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.

### FINANCIAL POSITION

The table below summarises the financial position of the Company under broad headings for the last three years.

(Rs. in Crores)

				(NS. III CIUICS)
<del></del> 1.	Liabilities	1997-98	1998-99	1999-2000
a)	Paid-up capital			
,	Government (including Government funds adjustable to equity)	3393.00	3825.00	4446.20
	ii) Others	-1	12	-
b)	Reserves and surplus			
	i) Free reserves and surplus	948.50	1272.00	1690.50
	ii) Share premium account	, -	-	
	iii) Capital reserves	0.10	0.10	0.10
c)	Borrowings			
	i) from Government of India	627.40	549.00	484.50
	ii) from Financial institutions	709.00	957.90	1885.20
	iii) foreign currency loans	1833.10	1837.40	1856.00
	iy) Cash credit	142.10	329.70	365.90
	v) Others	1983.00	1587.90	991.80
	vi) Interest accrued and due	197.60	45.80	0.30
d)		443.65	562.24	723.73
u)	ii) Provision for gratuity	38.35	44.56	52.87
e)	Income received in Advance			
C)	i) Advance against deprication	130.50	245.50	386.10
	TOTAL	10446.30	11257.10	12883.20
	Assets			
f)	Gross block	6903.60	7090.40	7752.70
		598.60	811.10	1029.00
g) h)		6305.00	6279.30	6723.70
1	Capital work-in-progress including construction stores & a	advances 2405.10	2898.80	3280.10
i)	Investments	<del>-</del>	-	-
j)	to the second of the second of the second	1734.50	2078.60	2877.50
k)	11	1.70	0.40	1.90
1)	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	-	-	-
m)	TOTAL	10446.30	11257.10	12883.20
		1093.25	1470.56	2153.47
n)		7398.25	7749.86	8877.17
0)	1 ( .1 (') .1 ('') 1)	4339.80	5096.60	6134.80
p)	funidam and talking Damage	1.28	1.33	1.38
q)	Net worth per rupee of paid-up capital(in Rupees)	1.20	1.55	

### 2. SOURCES AND UTILISATION OF FUNDS

Funds amounting to Rs.1745.01 crores from internal and external sources were realised and utilised during the year as follows:

	(Rs. in crores)	
Sources of funds		
Funds generated from operation		
a) Profit for the year	401.20	
Add: Depreciation during the year	217.90	
Add: Misc. Expenditure written off	(1.50)	
Add: Increase in Self Insurance Reserve	35.80	
	653.40	
b) Increase in paid up capital	621.20	
c) Increase in borrowed funds	321.50	
d) Increase in provision for Gratuity	8.31	
e) Increase in Advance against Deprication	140.60	
TOTAL	1745.01	
Utilisation of funds		
a) Increase in Fixed assets	662.30	
b) Increase in Working Capital	682.91	
c) Increase in Capital work-in-progress including	381.30	
construction stores and advances		
d) Dividend paid	18.50	

### 3. WORKING RESULTS

**TOTAL** 

The working results of the Company in the last three years ended 31st March 2000 are given below:

		29	(Rs. in crores)
	1997-98	1998-99	1999-2000
i) Sales	992.97	1194.40	1075.70
ii) Less: Excise Duty	=	-	
iii) Net Sales	992.97	1194.40	1075.70
iv) Other or Misc Income	4.37	39.10	202.60
v) Profit before tax and prior period adjustments	231.19	260.60	398.00
vi) Prior period adjustments	68.23	44.70	3.20
vii) Profit before Tax	299.42	305.30	401.20
viii) Tax Provisions		-	=
ix) Profit after tax	299.42	305.30	401.20
x) Proposed Dividend(including Dividend Tax)	16.50	16.50	18.30

1745.01



83.00

### RATIO ANALYSIS

Some important financial ratios on the financial health and working of the Company at the end of the last three years ended 31st march 2000 are as follows:

as follows :	1997-98	1998-99	1999-2000
a) Liquidity ratio	2.50	3.42	3.97
Current Ratio	2.30	3.12	3.71
(Current assets to Current liabilities & provisions			
and interest accrued and due but excluding			
provisions for gratutity) $\{k/d(i)+c(vi)\}$		0.07	0.85
b) Debit equity ratio	1.17	0.97	0.63
Long term debit to Net worth {c(i to v but excluding			
short term loans)/p}			(I . D
c) Profitability ratios			(In Percentages)
Profit (before tax) to			4.50
(i) Capital employed	4.05	3.94	4.52
(ii) Net worth	6.90	5.99	6.54
(iii) Sales	30.15	25.56	37.30
(iv) Equity	8.82	7.98	9.02
d) Earnings per share (in Rupees)	88.25	79.82	90.23
5. INVENTORY LEVELS			
The inventory levels at the close of the last three years ended 31st March, 1999 are	e as follows:		(Rs. in crores)
	1997-98	1998-99	1999-2000

# SUNDRY DEBTORS

Stores, spares and loose tools

The sundry debtors and Sales in the last three years ended 31st March, 2000 are as follows:

The sundry debtors t	ind Sales in the last times	SUNDRY DEBTORS		SALES Percentage		
As on 31st March	Considered good	Considered doubtful	Total	(including excise duty)	Sundry Debtors to Sales	
1998	1298.16	77.34	1375.50	992.97	138.52	
1999	1669.40	82.40	1751.80	1194.40	146.67	
2000	2280.90	82.60	2363.50	1075.70	219.72	

The agewise break up of sundry debtors at the end of 1999-2000 is as under:

The age was seems ap as a seems ap		Amount
		(Rs. in Crores)
Debtors outstanding for less than 1 year		820.87
1- 2 years		303.15
2 -3 years		704.42
3 years and above		524.91
TOTAL	4	2353.35

Place: New Delhi

Dated: 26 September, 2000

Sd/-(H.S.NARAYANAN) PRINCIPAL DIRECTOR OF COMMERCIAL AUDIT AND EX-OFFICIO MEMBER, AUDIT BOARD-III NEW DELHI

42.00

39.60

**ANNEXURE - IV** 

#### A. CONSVERATION OF ENERGY

- (a) Energy measures taken and on hand.
  - NHPC Power systems is designed in optimal manner such that power losses (auxilliary consumption) are minimised.
- (b) Additional investment and proposals if any, being implemented for reduction of consumption of energy.
  - There is no proposal for direct investment by the Corporation at present.
- (c) Impact of measures at (a) and (b) above for reduction of Energy consumption and consequent impact on the cost of production of goods.
  - Optimum utilisation is made during the year under report.
- (d) Total Energy consumption and Energy consumption per unit of production as per Form -A of the Annexure thereto.

  NHPC does not cover in the category of industries mentioned in the schedule.

# B. FORM FOR DISCLOSURE OF PARTICULARS WITH RESPECT TO ABSORPTION RESEARCH AND DEVELOPMENT (R&D)

1. Specific Areas in which R&D activities have been carried out during the year 1999-2000.

For high level of performance compatible with the MOU signed between NHPC and MOP, problems especially of operating Power Projects are identified and examined and workable solutions are evolved. For this purpose R&D Division was created with experts of Civil, Electrical and Mechanical engineering. Various problems of operating Power Projects are examined by R&D Division in association with specialised departments for practicable solutions both in long run as well as in short run.

Major achievements of the R&D during year 1999-2000 are as under:

- (a) Health assessment of worn out underwater components.
- (b) Reduction in failure of tubes of equipment of cooling water system by using closed loop cooling system.
- (c) Hydro suction silt exclusion system for desilting of reservoir.
- (d) Reliable operation of Transformers through DGA, BDV and moisture content of oil.
- 2. Benefits derived as a results of the above R&D
  - (a) Health assessment of worn out underwater components of Salal and Bairasiul generating units carried out. The causes of wearing out have been studied and shop repairs started in lieu of in situ repairs. Further, to elongate the life of underwater components, various hard facing/coating techniques have been adpoted. Partial success has been achieved as per preliminary results. Final results would be available by end 2000 only.
  - (b) At Salal, Baira Siul and Tanakpur Projects, majority of equipment of cooling water system were failing due to failure of tubes due to high silt content in water during monsoon period. At Tanakpur by using closed loop system and by having water from the bore well for cooling water system the above problem has been partially overcome. At Salal and Baira Siul since adoption of close loop system is not techno-economically feasible, silt separation through cyclone separator has been tried in one unit at Salal. It was found to be successful.
  - (c) For the first time in the country 400 KV, 75 MVA Generator Step Up transformer was rehabilitated at the project site by using items, including windings of another damaged transformer at Chamera. During this process, various innovative methods, like reverse oil circulation with simultaneous dry air blowing to displace and remove carbon particles deposited in inner non accessible areas during fault, were adopted.
  - (d) Desilting of reservoir has been a major and cost intensive problem. With the adoption of hydro suction silt exclusion system, which does not require any power, this problem is reduced to some extent.
- 3. Future plan of action (2000-2001)
  - (a) Effect of plasma nitriding on under water components would be further tried.
  - (b) Effect of various types of coating/hardening of under water components.
  - (c) Effect of chemical treatment to reduce scaling of tubes of cooling water system would be adopted at Tanakpur.
  - (d) Silt separation through cyclone separators would be adopted in all the units at Salal and Baira Siul Projects.
  - (e) Standardization of maintenance schedule of transformers.
  - (f) Measurement of vibration in machines bearing at Baira Siul Project.



- (g) Model studies of Loktak project for the machine efficiency and uprating if techno-economically feasible.
- (h) Exploring possibility of development of geothermal power projects.
- (i) New more effective system of hydro suction to reduce the silt in reservoir of Salal Project.
- (j) Hydraulic model studies and in situ hydro dynamic studies at tail pool of Baira Siul Project.

### 4. Expenditure on R&D

- (a) Expenditure on various R&D studies was being met by the respective projects from their respective O&M outlay and no separate accounts were being maintained. Hence, expenditure on R&D is not quantified up to 1999-2000.
- (b) A budget provision of Rs. 2.25 crores has been kept for R&D activities for the year 2000-2001.

### Technological Absorption, Adoption and Innovation

- 1. Efforts made towards technology absorption, adoption and innovation are as stated in para 2 of "Research and Development".
- 2. Benefit derived as a results of the above efforts, especially on cost saving is as under:

# S.No. Technology adoption/innovation (a) For the first time in the country 400 KV, 75 MVA imported GSU transformer was rehabilitated at Chamera site by using winding of another damaged transformer and that too in a short span of 2 months.

(b) Hydro suction silt exclusion system at Salal and Tanakpur Projects for desilting the reservoir.

### Cost-Saving

Over Rs. 4.5 crores as the cash offered by M/s Pauwals, Canada for new transformer besides delivery/down time of over 12 months.

Tanakpur Project in the last 6 years spent about Rs. 4.0 crores on desilting of canal. With the use of hydro-suction arrangement, which is not costing more than 10% of the above cost, the problem could be solved to a great extent.

### Technology imported during last five years

Being a premier organisation for hydro power development, NHPC is providing cheap and clean power to nation. NHPC has been making all out efforts to study and adopt imported technology also. As a result, silt exclusion system, widely used by China in Hydroelectric Power Station, is being adopted at Salal and Tanakpur Projects.

### C. FOREIGN EXCHANGE EARNING AND OUTGO

LOIL	Month Exchange Emilian of the	
OUTO	GO	Rs. in Million
1.	Value of imported Plant & Machinery	50
2.	Know-how	42
3.	Misc.(Outgo)	892
4.	Interest	1121
5.	Value of spare parts & components consumed in	
	Operating units	
	- Imported	44
	- Indigenious	85
INCO	ME	
6.	Interest Income	3
7.	Others	10

ANNEXURE - V

INFORMATION REQUIRED UNDER SECTION 217 (2A) OF THE COMPANIES ACT, 1956 READ WITH COMPANIES (PARTICULARS OF EMPLOYEES) RULES, 1975.

# (A) PARTICULARS OF EMPLOYEES THROUGHOUT THE FINANCIAL YEAR ENDED 31.3.2000 WHO WERE IN RECEIPT OF REMUNERATION NOT LESS THAN Rs.6,00,000/- P.A.

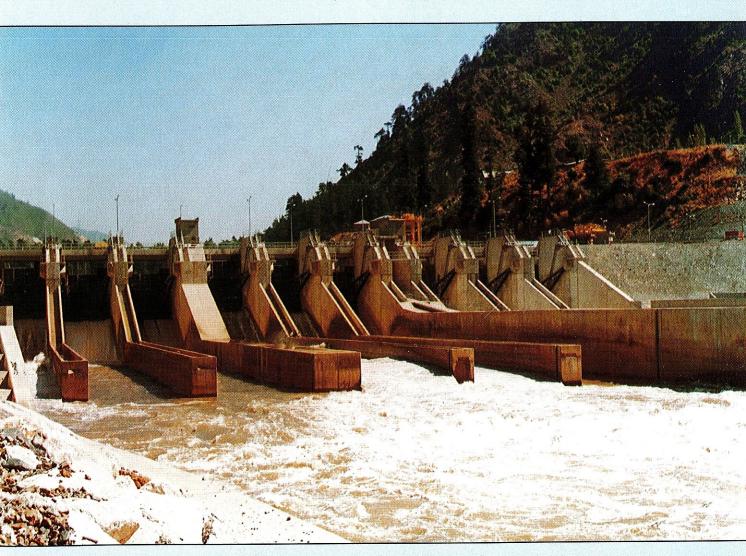
SI. No.	Name & Designation	Remuneration (Rupees)	Nature of Employment	Qualification and Experience	Date of commencement of Employment in NHPC	Age (Years)	Last employment held
1.	B. Keshri Chief Engineer(C)	6,03,271	Regular	M(Tech.) (32 years)	30.6.84	57	Deptt. of Science & Techno (Govt. of Bihar)
2.	Anil Kumar Senior Manager(E)	6,20,817	Regular	B.E.(Elect.) (15 Years)	14.2.85	40	Direct
3.	A.I. Bunet Director (Personnel)	9,78,480	Govt. Appointment	B.A (Hons.), LLB, PG Dip. in IR&Welfare 32years	31.3.93	58	GM (P&A), Pardeep Phosphates Ltd.
4.	Yogendra Prasad Chairman & Managing Director	9,45,605	Govt. Appointment	B.Sc. Engg. (Elect.) 32 years	10.5.78	55	Assistant Engineer, Bihar State Electricity Board
5.	N. Visvanathan Director(Technical)	8,59,792	Govt. Appointment	M.E. (Civil) 37 years	17.9.79	60	Asstt. Chief Engineer Triveni Structural Ltd.
6.	R. Natarajan Director(Finance)	8,54,832	Govt. Appointment	B.Sc. ACA, ICWA(Inter.), CS(Inter) 31 years	7.7.95	57	Director (Finance) NJPC
7	R.K. Saxena Sr. Manager (Law)	6,62,196	Regular	B.A., L.L.B, 32 years	19.11.79	56	Law Asstt. UPSEB
3	Vinay Chokkar Sr.Manager( C )	6,38,845	Regular	B.E. (Civil) 18 years	26.2.82	41	Direct
	Prashant Kaul, Sr.Manager(E)	6,04,368	Regular	B.E. (Elect.), MIE 16 years	12.11.84	40	United Electric Co. (Delhi Pvt. Ltd)

# PARTICULARS OF EMPLOYEES EMPLOYED FOR PART OF THE FINANCIAL YEAR ENDED 31.3.2000 WHO WERE IN RECEIPT OF REMUNERATION NOT LESS THAN Rs. 50,000/- P.M.

Sl. No.	Name & Designation	Remuneration (Rupees)	Nature of Employment	Qualification and Experience	Date of commencement of Employment in NHPC	Age (Years)	Last employment held
	A.K. Jain E.D. (F&A)	9,51,418	Regular	B.Com, ACA 30 years	28.11.78	55	Dy. Accounts
•	H.S. Dhillon Chief Engineer	5,97,726	Regular	AMIE (38 Years)	23.5.81	60	Manager, IFFCO HPSEB

### Notes:

- The above employees are not related to any of the Directors of the Corporation within the meaning of section 6 of the Companies Act. 1.
- The terms and conditions of appointment are as determined by Government/Rules and regulations of the Corporation in force from time, as the
- Designation indicated in the list denote the nature of duties performed by the employee. 3.
- The 'Remuneration' includes cost of hiring corporation-leased accommodation, wherever applicable, employer's contribution of PF etc.
  - The Gratuity amount has not been taken into account as the same has been provided on estimated basis.



480 MW Uri Project (J&K) - Barrage



# National Hydroelectric Power Corporation Ltd.

(A Government of India Enterprise)
NHPC Office Complex, Sector 33,
Faridabad-121 003 (Haryana)
Website: http://www.nhpcindia.com