

STUDY TOUR REPORT NO. 6

C.P.U.No. 825

COMMITTEE ON PUBLIC UNDERTAKINGS

(2000-2001)

(THIRTEENTH LOK SABHA)

STUDY TOUR REPORT

ON

NATIONAL HYDROELECTRIC POWER CORPORATION LIMITED

Laid in the Lok Sabha on.....

Laid in the Rajya Sabha on.....

23 FEB 2001

LOK SABHA SECRETARIAT

NEW DELHI

FEBRUARY , 2001/MAGHA, 1922(S)

CONTENTS

	<u>Page</u>
Composition of the Committee (2000-2001)	(iii)
Introduction	(v)
Study Tour Notes on National Hydro-electric Power Corporation Ltd.	1
Observations of the Committee	11

ANNEXURES

ANNEXURE I	Tour Programme of the Committee on Public Undertakings to Guwahati, Shillong, Calcutta and Darjeeling from 5 th June, 2000 to 12 th June, 2000.	17
ANNEXURE II	Composition of the Committee on Public Undertakings which visited Guwahati, Shillong, Calcutta and Darjeeling from 5 th to 12 th June, 2000.	19
ANNEXURE III	List of officials of the National Hydro-electric Power Corporation Ltd. who were present during discussion with the Committee on Public Undertakings at Darjeeling on 11.6.2000.	21

COMPOSITION OF COMMITTEE ON PUBLIC UNDERTAKINGS
(2000 -2001)

CHAIRMAN

Prof. Vijay Kumar Malhotra

MEMBERS LOK SABHA

2. Shri Prasanna Acharya
3. Shri Sudip Bandyopadhyay
4. Shri Surinder Singh Barwala
5. Shri R L Bhatia
6. Shri Shiv Raj Singh Chauhan
7. Shrimati Sangeeta Kumari Singh Deo
8. Shri C K Jaffer Sharief
- * 9. Shri Ram Tahal Chaudhary
10. Shri K E Krishnamurthy
11. Shri Vilas Muttemwar
12. Shri Dharam Raj Singh Patel
13. Shri R P Rudy
14. Shri Tarit Baran Topdar
15. Shri Devendra Prasad Yadav

MEMBERS RAJYA SABHA

16. Shri Jibon Roy
17. Smt Ambika Soni
18. Shri Suresh Kalmadi
19. Shri Ranjan Prasad Yadav
20. Shri Kalavenkata Rao
21. Shri B P Singhal
22. Shri Satishchandra Sitaram Pradhan

SECRETARIAT

- | | | |
|----|-----------------------|-----------------|
| 1. | Shri Rajagopalan Nair | Joint Secretary |
| 2. | Shri S. Bal Shekar, | Director |
| 3. | Shri Raj Kumar, | Under Secretary |

- * Elected w.e.f. 29th November, 2000 vice Maj.Gen.(Retd.) B.C.Khanduri ceased to be member of the Committee consequent upon his appointment as a Minister w.e.f. 7th November, 2000.

INTRODUCTION

In pursuance of the procedure adopted under Rule 281 of the Rules of Procedure and Conduct of Business for laying the Study Tour Reports on the Tables of both the House of Parliament, I, Chairman, Committee on Public Undertakings have been authorised by the Committee to lay the Study Tour Report on their behalf, lay the Study Tour Report of the Committee on their discussions with the officials of National Hydroelectric Power Corporation Limited.

2. The Committee held discussions with the officials at Darjeeling on 11.6.2000. A copy of the tour programme is annexed (Annexure-I).

3. The Committee considered and approved the Report at their sitting held on 9th January, 2001.

4. The Committee wish to express their thanks to National Hydroelectric Power Corporation Limited for providing facilities during the visit of the Committee and for supplying necessary material and information required in connection with the Study Tour.

5. They would also like to place on record their sense of appreciation for the invaluable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

New Delhi
February 12, 2001
Magha 13, 1922(s)

PROF. VIJAY KUMAR MALHOTRA
CHAIRMAN
COMMITTEE ON PUBLIC UNDERTAKINGS

"STUDY TOUR NOTES" OF THE COMMITTEE ON PUBLIC UNDERTAKINGS

DISCUSSION WITH THE REPRESENTATIVES OF NATIONAL HYDROELECTRIC POWER CORPORATION LTD. AT DARJEELING ON 11TH JUNE, 2000

At the outset, the Chairman, Committee on Public Undertakings informed the Members that the Chairman, National Hydroelectric Power Corporation Ltd., had sought exemption from being present during the Committee's discussions with the representatives of the Corporation and that he had agreed to the request.

2. In the absence of the Chairman, the Director (Technical) of NHPC represented the Corporation during the discussions with the Committee.

3. After the opening remarks of the Chairman, COPU, the Director (Technical) of NHPC was requested to introduce himself and his colleagues to the Committee and also to give a brief account on the working of the Corporation.

4. Following the introduction of the Officers, the Director (Technical), National Hydroelectric Power Corporation Ltd. informed the Committee that NHPC was a government enterprise under the administrative control of Ministry of Power endowed with the mission of harnessing the hydro, tidal, wind, geo-thermal and gas potential of the country to produce cheap pollution free and inexhaustible power. NHPC had the task of playing a significant role in the integrated and

efficient development of hydro-electric, tidal, gas, geo-thermal and wind power potential in the central sector covering all aspects such as investigation, planning, designs, construction, operation and maintenance of power projects.

5. The Corporation had seven operating power stations namely, Baria Sui, Loktak, Salai Stage- I & II, Tanakpur, Chamera Stage-I, Uri and Rangit stations which together generated 9917.51 MUs. of electricity as against the target of 8520 MUs during the year 1998-99. Electricity generation of 9250 MUs was planned for the power stations for the year 1999-2000. The Director(Technical), NHPC also informed that the ongoing projects of the Corporation included, (i) Dal Hasti H E Project (3 & 130MW) – J&K, ii) Rangit H E Project (3 & 20 MW) – Sikkim; iii) Dhauliganga H E Project (Stage-I) 4 & 70 MW) –U.P.; iv) Koel Karo H E Project (710 MW)-Bihar; iv) Kalpong H E Project (3 & 1.75 MW) –Andaman & Nicobar islands; and Kurichu H E Project (45 MW)-Bhutan. In addition, the new schemes in the pipeline included, I) Chamera H E Project stage –II (300 MW); ii) Teesta-V H E Project (510 MW); iii) Loktak Down stream H E Project (90 MW.); and iv) Parbati— H.E. Project stage II (800 MW).

6. On the profit earned by the Corporation in the last three years, the Committee were informed that the Corporation earned a net profit of Rs. 106.69 crore in 1996-97 as against the estimated profit of Rs. 91.42 crore, Rs. 289.42 crore in 1997 - 98 as against the estimated profit of Rs. 234.37 crore and Rs. 305.29 crore in 1998-99 as against the estimated profit of Rs. 221.37 crore.

7. Asked about the total Hydel power potential of the North Eastern region and the extent to which the Corporation had contributed in harnessing the potential, the Committee were informed that the total potential of the region was assessed at 31,857 MW at 60% load factor as detailed below:

S.No	State	Potential at 60% L.F.(MW)
1.	Meghalaya	1070
2.	Tripura	9
3.	Manipur	1176
4.	Assam	351
5.	Nagaland	1040
6.	Arunachal Pradesh	26756
7.	Mizoram	1455
	Total	31857

8. Of the total potential of 31857 MW, only 332.50 MW of potential (at 60 % L.F) has been exploited so far, of which the contribution of NHPC was 63 MW at 60% load factor. Further, hydro potential of 365.72 MW at 60% load factor was under development.

9. It was also informed that the Hydel potential of Sikkim was assessed at 1283 MW at 60% load factor of which, only 57.5 MW of potential (at 60% Load factor) was exploited so far. The contribution from NHPC in this respect was 36 MW at 60% load factor.

10. Questioned whether the Corporation had prepared any comprehensive Corporate Plan/long term plan for hydel power development, it was informed that a Corporate Plan was prepared in 1996 for the period upto year 2005 and that the same was under revision covering the period upto 2012.

11. Detailing the capacity addition planned / reached during the VIII / IX plan periods, the Committee were informed that as against an approved target of 1815 MW for the VIII plan (1992-97) consisting of Chamera-I (540 MW) in HP, Salal-II (345 MW) in J&K, Dulhasti (390 MW) in J&K, Rangit (60 MW) in Sikkim & Uri (480 MW) in J&K, NHPC was able to commission Chamera-I, Salal-II and Uri HE projects totaling to 1365 MW. The shortfall of 450 MW during the Eighth plan period was because of Dulhasti (390 MW) and Rangit (60 MW) projects, which could not be completed in the eighth plan period. Dulhasti project could not be completed in the VIII plan period as the French Consortium, which was awarded the contract to execute the project had stopped the work on the project on the plea of law and order problem in the area. Rangit project could not be completed in time due to natural calamities like flood etc., poor performance by the contractor and due to geological surprises.

12. Capacity addition of 450 MW was planned for the IX plan period against which 60 MW capacity was achieved by the Corporation till date. Additional capacities of 1570 MW, 3205 MW and 1611 MW were planned by the Corporation for the X, XI & XII plan periods.

13. On the present status of the Corporation's proposal to increase the authorised share capital from Rs.5,000 crore to Rs.10,000 crore, the Committee were informed that, initially, in July, 1989, the Ministry of Power had not agreed to

the proposal. However, the Corporation had once again re-submitted the proposal for consideration by detailing the commissioning schedule of the projects underway / planned and year-wise requirements of equity as shown below :-

YEAR WISE EQUITY REQUIREMENT OF CORPORATION FOR PRESENT AND NEW SCHEMES

RS. IN CRORES

PROJECT NAME	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	TOTAL	COMMISSION SCHEDULED
RANGIT							57.41	
DULHASTI	30.36						30.36	12/2003
DHAULIGAN GA-I	78.77	84.00	108.00	83.07			353.84	03/2005
KOEL-KARO	68.00	208.00	350.00	438.00	387.61		1427.51	03/2009
CHAMERA-II	144.00	18.99					160.99	05/2004
TEESTA - V	198.24	250.00	337.00	518.76			1300.00	03/2007
LOKTAK DOWNSTRE AM	75.08	75.00	145.00	18.92			314.00	08/2006
PARBATI-II JV WITH GOMP	60.00	181.00	250.00	300.00	615.80	82.00	1388.50 1000.00	03/2010
TOTAL	652.45	612.99	1190.00	1354.76	883.01	82.00	6032.61	
BALANCE AS ON 31.3.2000							4438.01	
ANNUAL PLAN 200-01							620.00	
TOTAL REQUIREMENTS							11091.62	

14. Asked about the reasons for lack of private sector interest in development of hydro projects, it was informed that the reasons on this count included the fact that major hydro potential was concentrated in northern and north eastern region which was characterised with complex geological terrain of young Himalayas; poor financial health of many SEBs in India, when evaluated in terms of their ability to make timely payment to the generating companies; peculiar characteristics of hydro projects involving high share of civil works cost, geological surprises, high investment cost and problem of sedimentation during operation of plants, long

gestation periods of hydel projects; and the requirement of substantial capital during construction of the projects.

15. The Rangit HE Project, work on which commenced in September, 1990 was originally scheduled to be completed in September, 1995. The completion schedule was, at first, extended to March, 1997 and the project was finally commissioned in December, 1999.

16. Asked to specify the reasons for the excessive delay in executing the project, the Committee were informed that although the construction work was started in right earnest to achieve the targeted schedule of commissioning by September, 1995, work of various components of the project like diversion dam, power house, HRT etc. was stopped from October, 1992 to December, 1993 due to NHPC's adverse financial health during 1992-93. The main reasons for time over run were natural calamities like floods (1994, 1995, 1998 and 1999), geological uncertainties (unstable hill slopes in dam and power house area and poor rock strata encountered in tunnel), fund constraints leading to contractual problems and poor performance of contractor collapse of Rishi Khola Bridge and frequent bandhs in Darjeeling, Silguri (which was the main marketing centre and gate-way of Sikkim) owing to which the commissioning could be achieved only in December, 1999.

17. On the completion cost of the project as compared to the original approved cost, it was informed that the original sanctioned cost of the project, excluding the

cost of transmission network was Rs.163.49 crores (Aug. 89 PL) and the revised sanctioned cost of the project was Rs.361.86 crores (May, 97 PL). The final completion cost of the project was Rs.490.35 crores. Thus, there was an increase of Rs.326.87 crores (200%) from original cost and Rs.128.50 crores (35.5%) from revised sanctioned cost.

18. The Committee were also been informed that work on the 710MW Koel Karo Project, which was initially sanctioned in 1991 could not be taken up owing to a variety of factors such as resistance from the local people against acquisition of land and paucity of funds.

19. For avoiding excessive delays in execution of projects, the Committee was informed that NHPC was taking concrete steps to investigate the projects extensively with modern technology & equipment. It was also stated that all out efforts were being made during finalisation of the contract to plug the contractual loopholes and also to ensure that the contractors were fully equipped with modern technology and equipment required for executing complex under-ground works.

20. On the issue of mandatory clearances required to be obtained for initiating work on hydro projects and the time involved in obtaining the clearances, the following information was furnished to the Committee:-

1.	Defence Clearance	:	1-2 years
2.	Environment & forest Clearance	:	1-1 1/2 years
3.	India Treaty Clearance	:	6 months – 1 year
4.	TEC from CEA	:	about 1 year
5.	PIS	:	6 months
6.	CCEA	:	3 months

21 Elaborating further on the reasons for delays in getting the mandatory clearance from Ministry of Environment & Forests, (MOEF), it was informed that lately, MOEF had generated an exhaustive Questionnaire for 'site clearance' for projects to be taken up for survey which involves detailed investigations for generating elaborate data on flora, fauna, human settlement etc. Further, topographic maps (1:2500 scale) of the project area showing various project components were also required to be submitted alongwith the Questionnaire, which would require 8 to 12 months to collect and compile. Also, this data could be generated only after carrying out survey and investigations for which clearance was required. It was also added that it would be in the interest of hydro power development if MOEF gives site clearance based on initial studies without asking for voluminous data which just cannot be furnished without carrying out detailed surveys and investigation for the same.

22 Asked to specify the constraints faced in execution of hydel projects, the Committee were informed that the existing policy framework regarding statutory clearances needs to be simplified to enable execution of projects in a limited time span. It was also added that instead of simplification, things were becoming more cumbersome. Another big hurdle in timely execution of the projects was stated to be land acquisition which was in the purview of the State Government concerned. Other constraints in development of hydropower projects included, resource crunch and cash flow problems; rehabilitation problems; law and order aspects; inter state aspects, and dearth of good contractors.

21. Elaborating further on the reasons for delays in getting the mandatory clearance from Ministry of Environment & Forests, (MOEF), it was informed that lately, MOEF had generated an exhaustive Questionnaire for 'site clearance' for projects to be taken up for survey which involves detailed investigations for generating elaborate data on flora, fauna, human settlement etc. Further, topographic maps (1:2500 scale) of the project area showing various project components were also required to be submitted alongwith the Questionnaire, which would require 8 to 12 months to collect and compile. Also, this data could be generated only after carrying out survey and investigations for which clearance was required. It was also added that it would be in the interest of hydro power development if MOEF gives site clearance based on initial studies without asking for voluminous data which just cannot be furnished without carrying out detailed surveys and investigation for the same.

22. Asked to specify the constraints faced in execution of hydel projects, the Committee were informed that the existing policy framework regarding statutory clearances needs to be simplified to enable execution of projects in a limited time span. It was also added that instead of simplification, things were becoming more cumbersome. Another big hurdle in timely execution of the projects was stated to be land acquisition which was in the purview of the State Government concerned. Other constraints in development of hydropower projects included, resource crunch and cash flow problems; rehabilitation problems; law and order aspects; inter-state aspects; and dearth of good contractors.

23. On the measures required to be taken to improve the power scenario in the North Eastern region and Sikkim, it was informed that the measures required include, faster exploitation of available hydro power resources as North Eastern Region has vast uninterrupted hydro potential and Eastern Region has both hydro thermal mix 12.88; strengthening of transmission and distribution network within

State; strengthening of inter-state and inter-region transmission system; promoting small and mini hydel projects; increasing the budgetary support for hydro development; basin wise development of hydro potential; renovation, modernisation and updating of existing hydro projects, faster clearance of hydro schemes; and Government support for land acquisition, resettlement and rehabilitation, catchment area treatment.

Questioned about the outstanding amounts due to the Corporation, the Committee were informed that as on 1st May 2000, a total amount of Rs. 33,7813.32 lakh was due from various State Electricity Boards / Corporations.

On the reasons for non-recovery of dues the Committee were informed that this was owing to the poor financial position of electricity Boards; absence of any mechanism to ensure immediate penal action against the defaulting beneficiaries; and NHPC being a low priority 'receiver' of Electricity Boards.

Specifying the steps being taken to recover the outstanding dues, it was informed that the dues upto 31st December, 1996 were being recovered through the Central Plan Assistance allocated to the States. Further, it was also informed

that the defaulting beneficiaries were being motivated to liquidate their outstandings through negotiated settlement by issue of Bonds securitization / Cash and open letters of credit.

OBSERVATIONS OF THE COMMITTEE

HYDEL POWER POTENTIAL OF NORTH EASTERN REGION

1. The Committee note that as against the estimated hydel power potential of 31, 857 MW of the North Eastern region (at 60% load factor) only about 332.50 MW (at 60% load factor) has been exploited so far. The contribution of NHPC on this count has been about 63 MW at 60% load factor from Loktak H E Project in Manipur. Given the immense power potential of the North Eastern Region, the Committee feel that proper exploitation of this potential can go a long way in meeting the power shortages / requirements of the country and help in fostering industrial and economic growth. The Committee expect the NHPC to play a more positive role in building hydel power projects in the region. The Committee also expect the Ministry of Power to render every possible assistance to the Corporation in overcoming the large and varied problems currently being faced in the execution of hydel power projects, prominent of which have been dealt with in the subsequent paragraphs.

(Action NHPC / Ministry of Power)

AUTHORISED SHARE CAPITAL OF NHPC

2. The Committee have been informed that NHPC has re-submitted the proposal for raising the Corporation's authorised share capital to Rs. 10,000 crore from the present level of Rs. 5,000 crore. The proposal was initially not agreed to by the Ministry of Power. The Corporation has furnished a detailed account of the year-wise equity requirement in respect of hydel projects currently under implementation as well as those planned to be taken up. Given the need for promoting hydel power generation to reach an ideal hydro-thermal mix in the power sector which is presently lacking the limitations on the part of NHPC to raise the resources required for executing hydel projects; and the fact that hydel power development is a capital intensive area with low returns in the initial stages, the Committee expect the Government to give a favourable consideration to the Corporation's proposal for raising the share capital to the required level and take a positive decision in the matter within two months from the date of presentation of this Report.

(Action: Ministry of Power)

PRIVATE PARTICIPATION IN HYDEL POWER DEVELOPMENT

3. The private sector has reportedly not evinced interest in taking part in hydel power development due to factors such as geological problems associated with the potential project sites, uncertainty of payments from Electricity Boards and the high investment cost needed. While much headway has been made in the past one decade in concretising measures for promoting private participation in thermal power generation, not much progress seems to have been made in the development of hydel power sector, particularly in regard to promoting private participation. The Committee are of the considered view that the country can ill afford to leave the vast and environmentally benign hydro power potential untapped. The Committee, therefore, recommend that concrete measures need to be taken for overcoming the problems faced in the implementation; hydel projects and in infusing private capital in the development of the sector. The Committee recommend that the government should immediately prepare a comprehensive scheme with suitable incentives in this regard and announce it within six months from the date of presentation of this Report.

(Action : Ministry of Power)

DELAYS AND COST OVERRUN IN EXECUTION OF PROJECTS

4. A worrisome aspect noted by the Committee is the inability of the Corporation to execute the projects as per the time schedules planned which has a cascading effect on the project costs. With specific reference to Rangit H E Project, the Committee observed that the project, which was originally scheduled to be completed in September, 1995 could finally be commissioned only in December, 1999. While there has been a delay of more than five years in commissioning the project, the total cost of the project went up to Rs. 430.35 crore as compared to the originally envisaged amount of Rs.128.30 crore. Although factors such as natural calamities which are stated to have contributed to the delay in the execution of the project are understandable, the sheer magnitude of the delay caused in completing the project and the increase in the project cost speak volumes of the serious lacunae somewhere in planning the projects. The Committee have been assured that comprehensive steps involving extensive investigations by usage of modern technological methods are presently being taken to avoid such delays. The Committee hope that no effort will be spared to ensure that the projects are implemented as per the planned time and cost schedules and the government would also review their planning process to identify the areas where delays could be avoided and accordingly revise their planning strategy.

(Action : NHPC)

CLEARANCES FOR EXECUTION OF PROJECTS

5. The Committee have been informed that a substantial amount of time is involved in obtaining the mandatory clearances – particularly the environment and forest clearance – for initiating work on hydel projects. From the information gathered, the Committee are left with the impression that the Ministries / Agencies and the Corporation often work at cross-purposes in the matter of obtaining / granting clearances which only results in delaying the project work. Considering the fact that the hydel project sites are well identified, the Committee expect, the Corporation as well as the scientific agencies and the Ministry of Environment & Forests to work in co-ordination with one another to ensure that the data required for the clearances is generated well ahead of the initiation of the work on the projects as planned. The Committee also desire that the Ministry of Environment & Forests should critically review their current exhaustive questionnaire with a view to simplify it further.
(Action NHPC / Ministry of Environment & Forests)

DUES OUTSTANDING FROM STATES

6. The Committee note that an amount of Rs. 33, 7813.88 lakhs is due to NHPC from various States Electricity Boards/Corporations. The Committee were informed that earlier the outstanding dues were, being recovered through the Central Plan Assistance but the practice was discontinued after 31st December, 1996. The Committee feel that this is an undesirable and dangerous situation which would threaten the very existence of this important Corporation engaged in an essential activity and they, therefore, urge upon the Government to revive immediately the earlier practice of appropriation from the Central plan assistance funds of the States. The Committee further recommend that this practice of recovering the dues through the Central Plan Assistance should not be stopped till all the arrears of payment are completely liquidated.

(Action: Ministry of Power)

COMMITTEE ON PUBLIC UNDERTAKINGS

TOUR PROGRAMME OF COMMITTEE ON PUBLIC UNDERTAKINGS TO
GUWAHATI, SHILLONG, CALCUTTA AND DARJEELING FROM
5TH June, 2000 to 12TH June, 2000

(MEMBERS ASSEMBLED AT GUWAHATI)

<u>Date & Day</u>	<u>Time</u>	<u>Visit & Discussion</u>	<u>(BODHUBOJ)</u>
05.06.2000 (Monday)	1730 hrs.	Discussion with the officers of Indian Oil Corporation	
	1900 hrs.	Discussion with the officers of Industrial Development Bank of India	
<u>(Night halt at Guwahati)</u>			
06.06.2000 (Tuesday)	0900 hrs.	Discussion with the officers of Power Grid Corporation	
	1430 hrs	Departure for Shillong by road	
	1800 hrs	Arrival Shillong	
<u>(Night halt at Shillong)</u>			
07.06.2000 (Wednesday)	0900 hrs.	Discussion with the officers of NEEPCO	
<u>(Night halt at Shillong)</u>			
08.06.2000 (Thursday)	0730 hrs.	Departure for Guwahati by road	
	1030 hrs.	Arrival Guwahati	
		Departure for Calcutta by IC-230	
	1400 hrs	Arrival Calcutta	
	1800 hrs	Discussion with the officers of Garden Reach Shipbuilders and Engineers Ltd.	
<u>(Night halt at Calcutta)</u>			

09.06.2000 0900 hrs. Departure for Bagdogra by IC-721
(Friday)
1400 hrs. Arrival Bagdogra
1430 hrs Departure for Darjeeling by Road
(Approx. 75 Km.)
1800 hrs. Arrival Darjeeling

(Night halt at Darjeeling)

10.06.2000 1600 hrs. Discussion with the officers of Andrew Yule
(Saturday) & Co. Ltd.

(Night halt at Darjeeling)

11.6.2000 0900 hrs. Discussion with the officers of National
(Sunday) Hydroelectric Power Corporation

(Night halt at Darjeeling)

12.6.2000 0800 hrs Departure for Bagdogra by road
(Monday)
1130 hrs Arrival Bagdogra
Departure for Calcutta by IC-722
1410 hrs Arrival Calcutta
1600 hrs Discussion with the officers of IBP Co. Ltd

ANNEXURE II

COMPOSITION OF THE COMMITTEE ON PUBLIC UNDERTAKINGS
WHICH VISITED GUWAHATI, SHILLONG, CALCUTTA AND
DARJEELING FROM 5TH JUNE, 2000 TO 12TH JUNE, 2000

S.NO	NAME	DATE JOINING	OF	DATE LEAVING	OF
1.	Prof. Vijay Kumar Malhotra, Chairman	5.6.2000 Guwahati		13.6.2000 Calcutta	
2.	Shri Prasanna Acharya	5.6.2000 Guwahati		12.6.2000 Calcutta	
3.	Shri Sudip Bandyopadhyay	6.6.2000 Guwahati 12.6.2000 Calcutta		8.6.2000 Calcutta 12.6.2000 Calcutta	
4.	Shri Surinder Singh Barwala	5.6.2000 Guwahati		13.6.2000 Calcutta	
5.	Shri R L Bhatia	5.6.2000 Guwahati		8.6.2000 Calcutta	
6.	Shri Shivraj Singh Chauhan	5.6.2000 Guwahati		13.6.2000 Calcutta	
7.	Maj. Gen. (Retd) BC Khanduri	5.6.2000 Guwahati		9.6.2000 Calcutta	
8.	Shri K E Krishnamurthy	8.6.2000 Calcutta		12.6.2000 Calcutta	
9.	Shri Dharam Raj Singh Patel	5.6.2000 Guwahati		12.6.2000 Calcutta	
10	Shri R P Rudy	5.6.2000 Guwahati 9.6.2000 Darjeeling		7.6.2000 Shillong 11.6.2000 Darjeeling	
11.	Shri Tarit Baran Topdar	5.6.2000 Guwahati 12.6.2000 Calcutta		8.6.2000 Calcutta 13.6.2000 Calcutta	
12.	Shri Devendra Prasad Yadav	8.6.2000 Calcutta		13.6.2000 Calcutta	
13.	Shri Jibon Roy	5.6.2000 Guwahati 9.6.2000 Darjeeling		7.6.2000 Guwahati 11.6.2000 Darjeeling	
14.	Smt. Ambika soni	6.6.2000 Guwahati		8.6.2000 Calcutta	
15.	Shri Ranjan Prasad Yadav	5.6.2000 Guwahati		12.6.2000 Calcutta	

16.	Shri K Kalavenkata Rao	8.6.2000 Calcutta	12.6.2000 Calcutta
17.	Shri B P Singhal	8.6.2000 Calcutta	13.6.2000 Calcutta
18.	Shri Satish Chandra Sitanam Pradhan	8.6.2000 Calcutta	11.6.2000 Darjeeling

SECRETARIAT

1. Shri S Bal Shekar, Director
2. Shri Raj Kumar, Under Secretary

- 21 -

ANNEXURE - III

LIST OF OFFICIALS OF NATIONAL HYDRO-ELECTRIC POWER CORPORATION LTD. WHO WERE PRESENT DURING DISCUSSION WITH THE COMMITTEE ON PUBLIC UNDERTAKINGS AT DARJEELING ON 11.6.2000.

- | | | |
|----|-------------------------|----------------------|
| 1. | SHRI N. VISHVANATHAN | DIRECTOR (TECHNICAL) |
| 2. | SHRI A. K. GANGOPADHYAY | E.D. (PROJECTS) |
| 3. | SHRI SUBHASH KAPOOR | GM (F&A) |
| 4. | SHRI S. C. SHARMA | GM (RIKK) |