## STANDING COMMITTEE ON ENERGY

(2002)

THIRTEENTH LOK SABHA

TWENTY NINTH REPORT

MINISTRY OF POWER

DEMANDS FOR GRANTS (2002-2003)

Presented to Lok Sabha on 23.4.2002

Laid in Rajya Sabha on 24.4.2002

LOK SABHA SECRETARIAT NEW DELHI April, 2002/Chaitra, 1924 (Saka)

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# COMPOSTION OF THE STANDING COMMITTEE ON ENERGY LOK SABHA (2002)

Shri Sontosh Mohan Dev- Chairman

#### **MEMBERS**

#### Lok Sabha

- 2. Shri Basudeb Acharia
- 3. Shri Prasanna Acharya
- 4. Shri Prakash Yashwant Ambedkar
- 5. Shri Vijayendra Pal Singh Badnore
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- 7. Shri B.Satyanarayana
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- 25. Shri Raghuraj Singh Shakya
- 26. Shri Manoj Sinha
- 27. Shri Chandra Pratap Singh
- 28. Shri Tilakdhari Prasad Singh
- 29. Shri B. Venkateshwarlu
- 30. Prof.. Ummareddy Venkateswarlu

- \* Nominated to the Committee w.e.f. 5<sup>th</sup> March,2002
- \*\* Nominated to the Committee w.e.f. 17<sup>th</sup> January, 2002

#### **RAJYA SABHA**

- 31. Shri Santosh Bagrodia
- 32\*. Shri Brahmakumar Bhatt
- 33. Shri Dara Singh Chauhan

34.	Shri Manohar Kant Dhyani
35**.	Shri B.S.Gnanadesikan
36.	Shri Aimaduddin Ahmad Khan (Durru)
37***.	Shri B.J.Panda
38	Shri Kripal Parmar
39.@	Shri Mahendra Prasad
40.	Shri V.V.Raghavan
41.	Shri Rumandla Ramachandraiah
42.@@	Shri Mirza Abdul Rashid
43.	Shri Kushok Thiksey
44.	Shri D.P.Yadav
45.	Vacant

#### Secretariat

1.	Shri John Joseph	Additional Secretary
2.	Shri P.K.Bhandari	Director
3.	Shri R.S.Kambo	Under Secretary
4.	Shri Arvind Sharma	Sr. Committee Assistant

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- \* Ceased to be Member of the Committee w.e.f 9<sup>th</sup> April, 2002 consequent upon his retirement from Rajya Sabha
- \*\* Ceased to be Member of the Committee w.e.f 2<sup>nd</sup> April, 2002 consequent upon his nomination to the Standing Committee on Defence.
- \*\*\* Nominated to the Committee w.e.f. 7<sup>th</sup> February,2002
- @ Ceased to be Member of the Committee w.e.f. 4<sup>th</sup> January,2002 consequent upon his nomination to the Standing Committee on External Affairs.
- @@ Nominated to the Committee w.e.f. 21st January, 2002

#### INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Twenty Ninth Report (Thirteenth Lok Sabha) on Demands for Grants (2002-2003) relating to the Ministry of Power.

- 2. The Committee took evidence of the representatives of the Ministry of Power on 18<sup>th</sup> March, 2002.
- 3. The Committee wish to thank the representatives of the Ministry of Power who appeared before the Committee and placed their considered views. They also wish to thank the Ministry for furnishing the replies on the points raised by the Committee.
- 4. The Report was considered and adopted by the Committee at their sitting held on 10<sup>th</sup> April, 2002.
- 5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in the body of the Report.

NEW DELHI; 10 April, 2002 20 Chaitra, 1924 (Saka) SONTOSH MOHAN DEV, Chairman, Standing Committee on Energy.

#### **REPORT**

#### PART - I

#### **CHAPTER-I**

#### Introductory

The Ministry of Power started functioning independently with effect from 2<sup>nd</sup> July, 1992. Earlier it was known as the Ministry of Energy comprising the Departments of Power, Coal and Non-Conventional Energy Sources.

- 1.2. Since "Electricity" stands included in the Concurrent List in the VII Schedule of the Constitution of India, both the Centre and the States have concurrent jurisdiction on the subject. While the Ministry of Power and the Central Electricity Authority (CEA) are responsible for formation of national policies for development of power and for coordination of related activities and optimum utilisation of the available resources, it is the States / Union Territories that carry out the implementation of power development programmes and supply of power to the ultimate consumers. The efforts of the State Government in this regard are supplemented by the Central Government by establishing a number of generation and transmission projects, which deal with bulk power.
- 1.3. The main items of work dealt with by the Ministry of Power are as below:
- (i) General Policy in the Electric Power Sector and issues relating to energy policy. (Details of short, medium and long-term policies in terms of formulation, acceptance, implementation and review of such policies, cutting across sectors, fuels, regions and cross country flows)
- (ii) All matters relating to hydro- electric power (except mini micro hydel projects of and below 25 MW capacity and Geo-thermal energy) and thermal power and transmission system network.
- (iii) Research, development and technical assistance relating to hydro electric and thermal power and transmission system network.
- (iv) (iv) Administration of the Indian Electricity Act, 1910 (9 of 1910) and the Electricity (Supply) Act, 1948 (54 of 1948) and Central Electricity Regulatory Commission Act, 1998.
- (v) All maters relating to Central Electricity Authority, Central Electricity Board and Central Electricity Regulatory Commission.
- (vi) (vi) Rural Electrification, Power schemes in Union territories and issues relating to Power supply in the States and Union territories.
- 1.4. In all technical matters, Ministry of Power is assisted by Central Electricity Authority, which is an attached office constituted under Electricity (Supply) Act, 1948.

The CEA is responsible for technical coordination and supervision of programme and is also entrusted with a number of statutory functions.

1.5 There are three Statutory Bodies, 7 Public Sector Undertakings, two Joint Venture Corporations and three Autonomous Bodies (Societies) under the administrative control of the Ministry of Power. These are:

#### a) a) STATUTORY BODIES:

- 1. Damodar Valley Corporation (DVC), Calcutta;
- 2. Bhakra Beas Management Board (BBMB), Chandigarh; and
- 3. Central Electricity Regulatory Commission.

#### b) b) PUBLIC SECTOR UNDERTAKINGS:

- 1. Rural Electrification Corporation (REC), New Delhi;
- 2. National Thermal Power Corporation (NTPC), New Delhi;
- 3. National Hydro Electric Power Corporation (NHPC), Faridabad;
- 4. 4. North-Eastern Electric Power Corporation (NEEPCO), Shillong;
- 5. S. Power Finance Corporation (PFC), New Delhi;
- 6. Power Grid Corporation of India Ltd. (PGCIL), New Delhi;
- 7. Power Trading Corporation of India Ltd. (PTC), New Delhi.

#### c) c) JOINT VRNTURE CORPORATIONS:

Nathpa Jhakari Power Corporation (NJPC), Shimla and Tehri Hydro Development Corporation (THDC), (UP)

#### d) d) AUTONOMOUS BODIES:

- 1. Central Power Research Institute (CPRI), Bangalore;
- 2. National Power Training Institute (NPTI), Faridabad; and
- 3. Energy Management Centre (EMC), New Delhi.

1.6 The Committee have observed that the Central Plan Outlay for the year 1998-99 at Budget Estimate stage was Rs. 9500 crore. It got revised to Rs.7652 crore and finally Rs. 7177.89 crore was actually utilized, indicating a shortfall of more than Rs. 2322 crore. Similarly, in the year 1999-2000, as against Revised Estimates of Rs. 8049.32 crore the actual utilization was Rs.7641.18 crore showing a big underutilisation of budgeted amount. The utilization of Budgeted amount further reduced during the year 2000-01, when the actual utilization was only Rs. 6553.91 crore, as against Revised Estimates of Rs. 8365.38 crore, indicating a net underutilisation of Rs. 1811.47 crore. The Central Plan Outlay for the year 2001-02 have already undergone revision, as Rs. 11525.33 crore projected at Budget Estimate stage, been reduced to Rs.11010.28 crore. Inspite of this, a higher allocation of Rs. 13483.00 crore has been envisaged for the year 2002-03. The details of the

consolidated financial requirements for the various programmes of the Ministry are shown at Appendix.

- 1.7 The Committee have also observed the dismal performance of power generation targets in 8<sup>th</sup> Plan where against the targets of 30000 MW, only 16,243 MW power generation capacity could be added. Regarding generation of power, the Committee have been informed that the Planning Commission had fixed a target of 40245.2 MW comprising 9819.7 MW hydro 29545.5 MW thermal and 880 MW nuclear projects for capacity addition during the Ninth Plan. In the Mid term review carried out in July 1999, the Planning Commission in consultation with the Ministry of Power and CEA, assessed that a capacity addition of only 28097.2 MW comprising 8399.2 MW hydro, 18818.0 MW thermal and 880.0 MW nuclear was found feasible. A review by the Planning Commission during May, 2000 noted that instead of 28097.2 MW, a capacity of 24309.4 MW comprising 7952.2 MW hydro, 15477.2 MW thermal and 880.0 MW nuclear was likely. The latest review of the Empowered Committee of Ministry of Power, conducted in November, 2001 has revealed that a more realistic achievement of capacity addition during 9<sup>th</sup> Plan would be 18917.07 MW comprising 4519.20 MW hydro, 13517.87 MW thermal and 880 MW nuclear.
- 1.8. The observations of the Committee on the basis of the scrutiny of Demands for Grants of the Ministry for the year 2001-02 **vis-a-vis** performance of various progrmames during 2002-2003 are brought out in the succeeding Chapter.

#### **CHAPTER-II**

Analysis of Detailed Demands for Grants for 2002-2003

#### Plan Outlay

2.1 The Committee have also observed that the Central Plan Outlay for the year 1998-99 at Budget Estimate stage was Rs. 9500 crore. It got revised to Rs.7652 crore and finally Rs. 7177.89 crore was actually utilized, indicating a shortfall of more than Rs. 2322 crore. Similarly, in the year 1999-2000, as against Revised Estimates of Rs. 8049.32 crore the actual utilization was Rs.7641.18 crore showing a big underutilisation of budgeted amount. The utilization of Budgeted amount further reduced during the year 2000-01, when the actual utilization was only Rs. 6553.91 crore, as against Revised Estimates of Rs. 8365.38 crore, indicating a net underutilisation of Rs. 1811.47 crore. The Central Plan Outlay for the year 2001-02 have already undergone revision, as Rs. 11525.33 crore projected at Budget Estimate

stage, been reduced to Rs.11010.28 crore. Inspite of this, a higher allocation of Rs. 13483.00 crore has been envisaged for the year 2002-03.

## 2.2 Details of Central Plan allocation of the Ministry of Power for Budget Estimates/Revised Estimates 2001-02 and BE 2002-03 are as under: -

(Rs. in crore)

	Internal and Extra Budgetary	Gross Budgetary Suj	Total Plan Outlay	
	Resources (IEBR)	External Assistance through Budget	Net Budgetary Support	
BE 2001-02	8237.53	128.71	3159.29	11525.53
RE 2001-02	7310.28	131.00	3569.00	11010.28
BE 2002-03	10183.00	0	3300.00	13483.00

# 2.3 About the external financial assistance received for power sector and utilization of such aid agency-wise during 2001-02 with reasons for slippages, if any, the Committee have been informed in a written reply as under:-

"The Indian power sector receives concessional credit (loans as well as grants) through a number of multi-lateral funding agencies. Whereas the World Bank and the Asian Development Bank (ADB) are multi-lateral donors. Bilateral assistance is received primarily from Japan (JBIC), U.K. (DFID), KfW, USAID, etc."

2.4 The foreign assistance made available to Indian Power Sector (directly as well as routed through budget, loans as well as grants) at BE/RE stages during 2001-02 and utilization thereof is as follows: -

			Rs. in crore
	BE	RE	Utilisation
Central Sector	1675.43	1812.59	1497.30*
State Sector	2392.14	1895.25	1198.18**
Total	4067.57	3707.84	2695.48
	*	up to 28.02	.2002
	**	up to31.01.	.2002

- 2.5 During 2001-02, the budget of external assistance in the Central sector was kept at Rs. 1675.43 crore at the BE stage. This was later revised upwards to Rs. 1895.25 crore at the RE stage. In some cases the budget was reduced and in some cases it was increased. Project-wise details are given below:-
- (i) The budget in respect of Powergrid System Development Project (World Bank) was reduced from Rs. 623.43 crore to Rs. 574.02 crore, since the investment clearance for telecom diversification project was not available. Further, contract under WRLDC project could not be awarded due to reluctance of Madhya Pradesh to join the scheme. The budget in respect of Power Transmission Sector Project II (ADB) was reduced from Rs. 271.34 crore to Rs. 132.77 crore due to delayed investment approval in respect of Ramagundam-III transmission system and non-availability of investment approval in respect of some generating stations (Gas-based power projects & Tala HEP). POWERGRID expects to fully utilize the revised provisions during 2001-02.

- (ii) The budget in respect of Dhauliganga HEP (JBIC) was reduced from Rs. 311.92 crore to Rs. 203.95 crore due to unforeseen geological conditions encountered by NHPC during the execution of the project. The budget of Dulhasti HEP was reduced form Rs. 95.53 crore to Rs. 86.05 crore (-9.48 crore) to match with the remaining assistance, which is coming to an end on 31.05.2002. NHPC expects to fully utilize the revised provisions.
- (iii) The budget in respect of Turial HEP (JBIC) was reduced from Rs. 86.72 crore to Rs. 50.00 crore due to delay in award of contracts. Since the award of contracts is not likely to take place in March, 2002, a shortfall of Rs. 43.00 crore is expected.
- (iv) The reduction in budget was compensated by an increase in budget in respect of Simhadri Thermal Power Project (JBIC) being executed by NTPC from Rs. 44.10 crore (BE) to Rs. 491.00 crore (RE). This was possible due to the availability of Trance-II of loan by JBIC and accelerating project activities, which led to the preponement of commissioning schedule. The budget in respect of Power System Improvement Programme (JBIC) being executed by REC was enhanced from Rs. 37.00 crore to Rs. 67.00 crore. Further, in case of Nathpa Jhakri HEP (WB) being executed by NJPC the budget was increased from Rs. 83.00 crore to Rs. 94.00 crore at the RE stage.
- 2.6 The Ministry of Power have stated that it is expected that the enhanced budgetary provisions in Central sector shall be met, except for the shortfall on account of NEEPCO for Tuirial HEP (Rs. 43.00 crore). However, all efforts are being made to reduce this shortfall by over-utilising the budget in some other projects.
- 2.7 The budget in respect of State sector was kept at Rs. 2392.14 crore at the BE stage. This was revised downwards to Rs. 1895.25 crore at RE stage. Project-wise details for the reduction in budget are given below: -
- (i) Orissa Power Sector Restructuring Project (WB): The World Bank has suspended the assistance to Orissa for Power sector restructuring project on July 9, 2001 due to merging of World Bank assistance in the general budget and not passing on the entire assistance to GRIDCO. The matter has now been resolved and the World Bank has lifted the suspension on January24, 2002. The budget was reduced from Rs. 432.00 crore to Rs. 147.00 crore at RE stage (-Rs. 285.00 crore) on this account. GRIDCO has informed that it may not be possible for them to utilize more than Rs. 100.00 crore during the current financial year.
- (ii) Rajasthan Power Sector Restructuring Project (WB): The qualifying requirements as set by the World Bank were felt as too stringent, as the bidders response was very poor. This led to relaxation in the qualifying requirements and subsequent retendering of 23 packages. Due to the delay in award of contracts, the budgetary provisions were reduced from Rs. 230.00 crore to Rs. 115.00 crore (-Rs. 115.00 crore). However, the executing agency has informed that they cannot utilize more than Rs. 100.00 crore on account of this delay.
- (iii) U.P. Power Sector Restructuring Project (WB): Due to re-tendering of some of the packages on account of poor response from bidders, the budget was reduced from Rs. 229.00 crore to Rs. 200.00 crore (-Rs. 29.00 crore). The executing agency, however, expects to meet the revised targets during 2001-02.
- (iv) Gujarat Power Sector Restructuring Project (WB): Although the budgetary provisions were not revised, due to delay in award of contracts a shortfall of about Rs. 35.00 crore is expected.

- (v) Purulia Pump Storage Project (JBIC): Some packages could not be awarded due to a Court case. The case has now been resolved. WBSEB reduced the budget on this account from Rs. 162.10 crore to Rs. 106.98 crore (Rs. 55.12 crore). WBSEB expects to utilize the revised targets during 2001-02.
- (vi) West Bengal Power Transmission Project (JBIC): Although the budgetary provisions were not revised, due to delay in supplies a shortfall in utilization is expected.
- 2.8 The Committee have been informed that although the utilization of external assistance in power sector for last three years has been maintained at 100%+ due to the reasons given above, during 2001-02. full utilization of external assistance may not be achieved. The shortfall being 5% to 10% of the RE. The shortfall is mainly due to projects in the State sector. However, all out efforts are reportedly being made by the Government to minimize the shortfall.
- 2.9 In this context, the Ministry of Power informed the Committee as under:-

"The Government regularly monitors the implementation of all on-going power projects including those receiving external assistance. The monitoring is done by the Empowered Committee, chaired by Secretary (Power). To focus on specific problem areas in implementation of externally aided on-going power projects, a Project Monitoring Cell is functional since April, 1997 in the Ministry of Power under the direct charge of a Joint Secretary. Periodic review meetings are taken to review the performance of each of the externally aided power project. Last review was taken by the Joint Secretary 20.02.2002."

2.10 The Committee are deeply concerned to find the growing tendency on the part of the Ministry of Power in projecting an astronomically high Central Plan Outlay at initial stage, downsizing it at Revised Estimate stage and finally surrendering a substantial allocation at the end of the year. For instance, the Central Plan Outlay for the year 1998-99 at Budget Estimate stage was Rs. 9500 crore. It got revised to Rs.7652 crore and finally Rs. 7177.89 crore was actually utilized, indicating a shortfall of more than Rs. 2322 crore. Similarly, in the year 1999-2000, as against Revised Estimates of Rs. 8049.32 crore, the actual utilization registered a steep under-utilisation of budgeted amount to Rs.7641.18 crore. The utilization of Budgeted amount further dipped during the year 2000-01, when the actual utilization was only Rs. 6553.91 crore, as against Revised Estimates of Rs. 8365.38 crore, indicating a net under-utilisation of Rs. 1811.47 crore. The Committee find that the Central Plan Outlay for the year 2001-02 have already undergone revision, as Rs. 11525.33 crore projected at Budget Estimate stage, has been reduced to Rs. 11010.28 crore. Now, a higher allocation of Rs. 13483.00 crore has been envisaged for the year 2002-03. With the present on-going trend in the Power Sector, the Committee apprehend shortfall in utilisation during 2001-02 and also in the year 2002-03. The Committee do not approve of surrendering of the Plan Outlays by Power Sector PSUs, year after year in such an The Committee are of the view that when Power Sector is irresponsible manner. clamouring for higher allocations, so as to improve the per capita supply of electricity, the Power Sector PSUs with their poor implementation of plans and policies, have failed to rise to the occasion. With such a state of affairs, the scarce resources remain locked in unproductive ventures, at the cost of other needy sectors of the economy. It appears to the Committee that ground realities are not taken into account while formulating and implementing the Plans. Taking into consideration, the dismal performance of the Power Sector, during all these years, the Committee recommend that Government should review the working of Power Sector as a whole, so that meaningful and relevant programmes and policies, could be formulated. At the same time, the Committee would like to be apprised of the corrective action taken by the Government, so as to ensure that the projected allocation at least during 2002-03 is expended fully.

2.11 The Committee are pained to note that even performance of externally Power Projects(assistance available directly or routed through budget, loans as well as is far from satisfactory. During the year 2001-02, as against allocation of Rs. 3707.84 crore, an amount of only Rs. 2695.48 crore was utilized - a net under – utilization of a hefty sum of Rs. 1012.36 crore. The Central Sector, registered a shortfall of Rs. 315.29 crore and the remaining Rs. 690.07 crore under State Sector. The shortfall in Central Sector was due to want of investment clearance for POWERGRID Telecom Project, contract not being entered into for Western Region Load Despatch Centre Project, nonclearance of investment approval for Ramagundam- III transmission system and some gas based power projects. Unforeseen geological surprises in Dhauliganga H.E. Project, delay in contract for Turial H.E. Project were some of the factors which resulted in the underutilization of externally aided power projects. The State Sector, witnessed the underutilization of earmarked allocation due to certain problems noticed in the World Bank/ADB aided power sector reforms, in the States of Gurjarat, UP, Orisssa and Rajasthan. appears to the Committee, that externally aided projects were formulated casually and without taking into consideration the ground realities, thereby resulting in slippage of such projects. Such on-going slippage does not augur well for an important infrastructure like Power. The Committee feel that a duty is cast on the Government's nominees on Board of Directors of various Power Sector PSUs and other Bodies to point out deficiencies in the project planning, formulation and implementation. They have failed to discharge this onerous duty. Even, various bodies and agencies, constituted to monitor and review the ongoing projects, lacked direction and vision, resulting in gross under-utilization of external aid. The reply of the Government that all efforts are being made to reduce the shortfall in some projects by over utilising the budget in some other projects such as Simhadri Thermal Power Project by NTPC - from Rs. 44.10 crore (BE) to Rs. 491.00 crore (RE). Also Power System Improvement Programme (JBIC) being executed by REC was enhanced from Rs. 37.00 crore to Rs. 67.00 crore and in case of Nathpa Jhakri HEP (WB) being executed by NJPC, the budget was increased from Rs. 83.00 crore to Rs. 94.00 crore at the RE stage, etc., only indicate the casual approach being adopted by the Government in planning for investment proposals in power projects. The Committee feel that a time has come to have a fresh look at the way externally aided projects are planned, programmed and implemented, so that the deficiencies in appraisal and approval system are identified and corrective steps The Committee desire that Government should constitute an Expert Committee to go into the details and suggest remedial measures. The Committee, would like to be apprised of the action taken by the Government in the matter.

#### **B.** Power Generation

2.12 The expenditure on power generation during the year 2000-01, Budget Estimates and Revised Estimates for 2001-02 and the provision made for the year 2002-03 are as under:-

(Rs. in crore)

Actuals 2000-01			Budget Estimates 2002-01			Revised Estimates 2001-02			Budget Estimates 2002-03		
Plan	N-Plan	Total	Plan	N-Plan	Total	Plan	N-Plan	Total	Plan	N-Plan	Total
1850.02	886.97	2736.99	2269.98	971.00	324.00	2826.68	1016.72	3843.41	2572.11	1051.81	3623.92

2.13 Asked about the actuals of funds utilization (Plan) for power generation during 2001-02 against the R.E.of about Rs.2827 crore, the Ministry of Power provided the following information:-

(Rs.	Power Generation	RE 2001-02 Plan	Utilisation
in			
thous			
and)			
Sl.No.			
1.	BTPP	144740	85100
2.	BTPS	0	0
3.	Sardar Sarovar Project	25100	0
4.	NJPC	8200000	4336500
5.	THDC	1427600	454800
6.	NHPC	17697200	6210900
7.	NTPC	0	0
8.	NEEPCO	665200	0
9.	DVC	0	0
10.	PTC	0	0
11.	PFC Loan	0	0
12.	Incentives to SEBs	35000	700
13.	Incentives for reduction in	70000	0
	Secondar		
14.	Incentives for reduction in T&D	2000	0
15.	R&M of TPSs (SEBs)	0	0
	Total	28266840	11088000

- 2.14 The Committee have observed the dismal performance of power generation targets in 8<sup>th</sup> Plan where against the targets of 30000 MW, only 16,243 MW power generation capacity could be added(Annexure-I). Regarding generation of power, the Committee have been informed that the Planning Commission had fixed a target of 40245.2 MW comprising 9819.7 MW hydro 29545.5 MW thermal and 880 MW nuclear projects for capacity addition during the Ninth Plan. In the Mid term review carried out in July 1999, the Planning Commission in consultation with the Ministry of Power and CEA, assessed that a capacity addition of only 28097.2 MW comprising 8399.2 MW hydro, 18818.0 MW thermal and 880.0 MW nuclear was found feasible. A review by the Planning Commission during May, 2000 noted that instead of 28097.2 MW, a capacity of 24309.4 MW comprising 7952.2 MW hydro, 15477.2 MW thermal and 880.0 MW nuclear was likely.
- 2.15 The latest review of the Empowered Committee of Ministry of Power, conducted in November, 2001 has revealed that a more realistic achievement of capacity addition during 9<sup>th</sup> Plan would be 18917.07 MW comprising 4519.20 MW hydro, 13517.87 MW thermal and 880 MW nuclear.

2.16 The capacity addition during the first 4 years of  $9^{th}$  Plan i.e. 1997-98, 1998-99,1999-2000 & 2000-01 is given below.

## All figures in MW

	1997-98	1998-99	1999-2000	2000-01	Total
Hydro					

0.00	0.00	60.00	75.00	135.00
233.00	542.50	1311.50	1140.00	3227.00
		0.00	0.00	0.0
233.00	542.50	1371.50	1215.00	3362.00
255.00	JT2.JV	15/1.50	1213.00	5502.00
333.00	991.00	1115.40	144.00	2584.00
1443.00	1132.90	1017.60	1157.00	4750.50
1217.50	1575.00	563.00	819.66	4157.16
2005 70	2606.73	2000	2420.55	11.500.55
2993.50	3699.50	2696.00	2120.66	11509.66
0.00	0.00	440.00	440.00	880

3226.50	424.00	4507.50	3775.66	15751.66
333.00	991.60	1615.40	659.00	3599
1676.00	1675.40	2329.10	2297.00	7977.5
1217.50	1575.00	563.00	819.66	4175.16
3226.50	4242.00	4507.50	3775.66	15751.66

2.17 When pointed out that the Performance Budget of Ministry of Power for the year 2002-03 indicate that from April, 2001 to November, 2001, no capacity addition was made in the Central Sector, the Ministry of Power informed the Committee in a post evidence reply that as on 1.3.2002, 770 MW have been added in the Central Sector, Simhadri (NTPC) 500 MW and Ranagnadi (NEEPCO) 270 Mw.

- 2.18 In addition to this, another 135 MW is expected to be added by NEEPCO's Ranagnadi HEP before the end of the financial year. Neyveli Lignite Corporation is also likely to add 210 MW during the current financial year.
- 2.19 The Committee have been informed of the following Power Generation and capacity addition programme during 2001-02:-

Capacity addition target 2001-02

Central 1365 MW
State Sector 1061.4 MW
Private Sector 2338.3 MW
Total 4764.7

Achievement (April – February 2002)

 Central
 770 MW

 State Sector
 715.25 MW

 Private Sector
 816.3 MW

 Total
 2301.55

#### **Generation Targets 2001-02**

Central 201669 Mus

State Sector 284796 Mus Private Sector 52435 Mus **Total 538900** 

#### **Achievement (April February 2002)**

Central 184006 Mus

State Sector 248391 Mus
Private Sector 36079 Mus
Total 468476

- 2.20 The Committee observe that while the capacity addition target for the 9<sup>th</sup> Five Year Plan was 40245.2 MW, the likely capacity addition will be around 19000 MW. According to Ministry of Power some of the major reasons for non-achievement of the target are as follows:
  - (i) Delayed financial closures of Private Sector projects due to non-availability of escrow.
  - (ii) Paucity of funds in State public sector projects
  - (iii) Delay in land acquisition
  - (iv) Delay in investment decision
  - (v) R&R problems
  - (vi) Law and order problems
  - (vii) Contractual problems
  - (viii) Inter-State disputes in respect of hydro projects
- 2.21 The overall target for capacity addition during the 9<sup>th</sup> Plan was 40,245 MW out which 17588MW was to come from Private Sector, i.e. about 43% of the total targeted capacity addition. However, the total capacity addition now likely in the 9<sup>th</sup> Plan

is only about 18917 MW in which the contribution of Private Sector is 5139MW i.e. about 27% of the total capacity addition achieved.

- 2.22 The Committee have been informed that in the 10<sup>th</sup> Plan, a total capacity addition of around 47000 MW is proposed, out of which it is expected that the Private Sector may contribute around 10500 MW. The experience of the 8<sup>th</sup> and 9<sup>th</sup> Plan capacity addition programme indicates that the precarious financial position of SEBs do not inspire enough confidence among investors/lenders. This is despite several incentives/facilities extended by the Government to the private power producers.
- 2.23 Regarding capacity addition during  $10^{\rm th}$  Plan, Secretary, Ministry of Power informed the Committee during evidence:-

"As far as capacity addition for the 10<sup>th</sup> Plan is concerned, for the first time, the Special Secretary has been taking meetings with all the States, all the public sector units, all the Central utilities and we have today a very firm idea of how much we are going to generate in the 10<sup>th</sup> Plan. It is not a wishy-washy thing. I will give you those figures also. We are pushing the hydro-electric projects in a ranking study of 399 projects. We have identified 99 projects for early implementation and we will move ahead quickly"

- 2.24 For the 10<sup>th</sup> Five Year Plan, the Government proposes to conduct an intensive monitoring process through the Empowered Committee which is chaired by Secretary (Power). The projects to be commissioned in the Tenth Plan have been identified and advance action has been initiated so as to reduce the gestation period. Action has also been taken for grant of speedy techno- economic clearance by CEA to power projects. To ensure early clearances to project proposals, a mechanism for effective coordination with Ministry of Coal and MOEF has been put in place. Apart from monitoring, the Government proposes to provide full budgetary support for all on-going hydro projects. The thrust given on reforms is also expected to give positive results within the next two to three years which would lead to rationalization of tariffs, lowering of T&D etc. This would encourage the Private Sector to bring in further investments for capacity addition.
- 2.25 On being asked about the action Ministry of Power have taken to ensure that projects are commissioned as per schedule and in accordance with the DPRs; the ministry of Power informed the Committee that vigorous monitoring is carried out by CEA/Ministry of Power to ensure that the projects are commissioned as per schedule and in accordance with the DPRs. In case of Hydro projects, detailed investigations are also being carried out before the project is taken up for execution to minimize the geological surprises at the time of actual execution. Site visits are made and Review Meetings are held periodically. Critical areas coming in the way of commissioning of the projects are highlighted from time to time and appropriate follow up actions are taken with the concerned agency to resolve the pending issues. However, the major reason for the delay as well as non- implementation of the projects has been the financial resource crunch.
- 2.26 The Committee have been further informed that Crisis Resolution Group has been set up by the MOP under the Chairmanship of Hon'ble Minister of Power to resolve the 'Last Mile' problem of Private Sector power projects. Regular reviews are being taken up with the financial & other agencies to resolve various critical issues. In order to closely monitor the capacity addition programme, an Empowered Committee has been set up by the Ministry which conducts periodical reviews of the status of 9<sup>th</sup> Plan projects.

- 2.27 The Committee have been informed that Hydro potential in the country is 1,50,000 MW. Only 17% of this has been tapped so far. The reduced Hydel Power Generation is reportedly due to less investment, inter- State issues, problems of land acquisition, R&R and law and order problem in project areas.
- 2.28 About the steps taken to step up investment and joint ventures in Hydel Power Generation Projects and to sort out the problems like land acquisition, R&R etc. for timely completion of ongoing and future Hydel Projects, the Ministry of Power informed the Committee in a written reply as under:-

"Nathpa Jhakri Power Corporation, a joint venture of Government of India and Government of Himachal Pradesh is executing Nathpa Jhakri Hydro – electric project (1500 MW) in Himachal Pradesh. Tehri Hydro Development Corporation, Joint Venture of Government of Uttar Pradesh and Government of India is executing Tehri hydro electric Project (2000 MW) in Uttaranchal. NHPC has also entered into a Memorandum of Understanding with the Government of Madhya Pradesh to execute Indira Sagar Project (1000 MW) and Omkareshwar Project (520 MW) through a Joint Venture "Narmada Hydroelectric Development Corporation". They have also signed a Memorandum of Understanding with the Government of West Bengal to take up execution of Purulia Pumped Storage Scheme (900 MW) through a joint venture with the Government of West Bengal.

NHPC & NEEPCO have also been handed over a number of projects by the State Governments for execution under Central Sector. These projects include three stages of Siang(13400 MW) and Subansiri (6500 MW) Hydro – Electric Projects, in Arunachal Pradesh, Kameng Hydroelectric Project (600 MW) in Arunachal Pradesh, Tuivai Hydro – Electric Project (210 MW) in Mizoram, Tipaimukh HEP (1500 MW), Manipur, Lower Kopilli (150 MW) in Assam, Farakka Barrage (125 ) and Teesta Low Dam Stage-III & IV (300 MW) in West Bengal, Upper Krishna scheme (810 MW) in Karnataka, Base-I&II (55 MW) and Devade (6 MW) Hydro- electric projects in Maharashtra, Chamera III (231 MW), Parbati Stage-I,II & III (2051 MW),in Himachal Pradesh, Busar (1020MW), Sewa-II (120 MW), Pakal Dul (1000 MW), Uri-II(280 MW), Kishenganga (330 MW), Nimo Bazgo (30 MW) and Chutak (18 MW) in J&K. These projects will be executed under the three stage development of hydro- electric projects in the Central Sector after commercial viability has been established, statutory clearances have been obtained, necessary funds have been tied up and arrangements for evacuation and sale of power have been made".

- 2.29 The Working Group on Power constituted by Planning Commission to formulate the 10<sup>th</sup> Five Year Plan has estimated a feasible capacity addition of 47000MW during the 10<sup>th</sup> Plan. This is made up of 24405 MW in Central Sector, 12033 MW in the State Sector and 10501 MW in the Private Sector. The funds requirements for the above capacity addition would be of the order of Rs. 5,66,000 crore.
- 2.30 According to the Ministry of Power, although mode of financing the expenditure required for the 10<sup>th</sup> Plan for Power Sector has not yet been decided; Year –wise likely expenditure of about Rs.5,66,000 crore required during 10<sup>th</sup> Plan for power sector as per the Report of the Working Group is given below:-

# Year-wise requirements of funds during 10<sup>th</sup> Plan (2002-2007) (all figures in Rs.crore)

	Schemes	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	Total (2002-
	ochemes	2002-2003	2003-2004	2004-2003	2003-2000	2000-2007	2007)
Α	Generation	53717	55778	66112	70776	77150	323533
	schemes (excluding						
	nuclear)						
	Nuclear						28127*
	Projects						
	Sub-						351660
	Total						
В	Transm						64600*
	ission						
С	Sub-	16252	16451	17143	17869	18642	86357
	Transm						
	ission						
	&						
	Distrib						
	ution						
	Progra						
	_						
D	mme Load	449	348	52	18	10	877
-			0.10	02			
	Despate						
	h &						
	Teleco						
	mmuni						
_	cation						10000
Е	Renova						12266*
	tion						
	and						
	Modern						
	isation						
F	Manpo						93*
	wer						
	Plannin						
	g and						
	Trainin						
	g						
G							5000*
	(approx						
	. 1% of						
	A+B+C						
	)						
Н	Rural	7090	7590	8415	9340	10485	42920
	Electrif						
	ication						
	Deman						2500*
	d side						
	Manage						
	ment					Total	566273
						Say	Rs. 5,66,00

- \* Year-wise break-up not given in the working group report and the same is yet to be worked out.
- 2.31 About the steps that have been taken by Government to overcome the financial or other constraints, the Committee have been informed that with power sector reforms taking shape in various States of the country and setting up of regulatory bodies at central and state levels, financial position of SEBs /States Utilities is likely to improve. These measures alongwith many other policy initiatives taken by the Government like Private Sector Participation Policy, Hydro Power Development Policy and Mega Power Policy are expected to improve the investment scenario in the power sector. Government of India has also constituted a committee headed by former Chairman, PFC Dr. Uddesh Kohli to examine in detail the resources mobilization programme for funding the 10<sup>th</sup> Plan capacity addition programme.
- The Committee have reviewed the capacity addition programme of power during the 9<sup>th</sup> Plan. Indeed, it is no better when compared to 8<sup>th</sup> Plan's targets and achievement. For instance, during 8th Plan period as against a target of 30538 MW, the actual achievement was 16423 MW. However, during 9th Plan as against the projection of 40245 MW only 18917 MW is likely to be achieved. Here again overambitious targets were projected and schemes were planned but commensurate follow-up actions were nowhere in sight, resulting in the slippage of the targets. Committee's scrutiny, has revealed that performance of Central Sector and Private Sector during 9<sup>th</sup> Plan was miles away considering that 39.58% and 29.22% of the original targets, respectively, were achieved by them. The State Sector, however, realized 84.33% of their assigned targets. This shows that not only the Private Sector failed, the Central Sector also did not rise to the occasion. The only ray of light was seen in the State Sector which realised 84% of their target. In regard to Thermal and Hydel mix, the Committee noted that the achievement of Central Hydel Sector is likely to be in the range of 540 MW, as against a target of 3455 MW. Another 86 MW, will be the contribution of Private Sector, against a projection of 555MW. The State Sector may end up with 3891 MW, against a target of 5807 MW. Under thermal capacity addition programme, as against a target of 29950 MW, the realization may not exceed 13866 MW. The Committee therefore, have come to an irresistible conclusion that over-optimistic and unachievable targets, is a permanent phenomenon, in the Ministry which is hard to break. In spite of this Committee's cautioning from time to time to project realistic and achievable targets, the matter has gone from bad to worse. The Hydel Sector, has failed to materialize its targets, consequently leading to adverse Hydel Thermal mix. Over-dependence and a total reliance on Private Sector, have left us nowhere. It is in this context that the Committee feel that it may not be desirable for the Government to diminish their role or withdraw themselves from power sector lest Private Sector should fail us again. The Committee are of the opinion that power sector should be rejuvenated and restructured. There is a need to extend adequate Budgetary support to Hydel Sector, so that optimal 60:40 hydel-thermal ratio mix be attained the Planning Commission estimated a feasible capacity addition of 47,000 MW during the 10<sup>th</sup> Plan. Considering the 8th & 9th Plans performance, this target seems to be difficult to achieve. The Committee would like to be apprised of the follow-up corrective action taken in the aftermath of failure of 9th Plan so that 10th Plan targets do not undergo any major falls. The Committee's close scrutiny has revealed that lack of investment decision in thermal PSUs, delay in receipt of foreign assistance, submission of DPRs, are some of the reasons under Central Thermal Sector, for

projects being slipped from 9<sup>th</sup> Plan. The projects under Private Sector slipped on account of failure to achieve Financial Closure, litigation etc. Funds constraints, land acquisition/R&R problems, adverse law & order, contractual problems were some of the reasons attributed for slippage of Hydel projects. A close look at these reasons indicate that these are not new and had been witnessed even during 8<sup>th</sup> Plan period and earlier also. There are some pitfalls but they are not insurmountable. The Committee, therefore, reiterate their earlier recommendation, that only achievable and realistic targets ought to be fixed for capacity generation programme. The Committee urge that, learning from past failures, the Government should, at least now, project 10<sup>th</sup> Plan targets which are realistic.

- 2.33 The Committee are unhappy to note that although the Budget Estimates for Power Generation for the year 2001-02 were revised to Rs. 2826.68 crore from Rs. 2269.98 crore, the actual utilisation during the year was only about Rs. 1109 crore. The Committee have observed that the Plan expenditure for Badarpur Thermal Power Plant was Rs. 8.51 crore against the revised expenditure of Rs. 14.47 crore during 2001-02. No funds were released for Sardar Saroyar project against Revised Estimates of Rs. 2.51 crore. Similarly, the revised plan outlay for power generation in respect of NJPC, THDC, NEEPCO, etc. could not be utilised. Again, in the area of incentives to State Electricity Boards, the actual funds utilisation was Rs. 70 lakh only as against the plan outlay of Rs. 30 crore. The Committee take a strong note of the under-utilisation of planned expenditure by different power generating agencies and feel that the implementing and monitoring agencies should thoroughly examine the various problems and bottlenecks which are hindering the proper utilisation of funds and take corrective action immediately. The Committee should be informed of the action taken in the matter. The Empowered Committee under Secretary, Ministry of Power should play pro-active role as a facilitator.
- 2.34 The Committee find that, hydro potential in the country is 150,000 MW. Out of this only 17% of hydro power has been tapped so far. Although the Government have reportedly taken steps to reduce time and cost overrun's of hydro electric projects by adopting a 3 stage development strategy, the Committee observe the persistent poor performance and slippage of hydel power projects. The capacity addition during 2000-01 in Central Sector was only 75 MW, in State Sector this was 1140 MW. The total hydro power capacity addition during the first four years of 9<sup>th</sup> Plan was 3362 MW against 11509.66 MW of thermal power generation. Although the Government have reportedly taken steps to step up investments and setting up Joint Ventures in hydel power generation projects, the Committee feel that these are being held up due to problems like statutory clearances, fund constraints, problems regarding evacuation and sale of power, etc. The Government have stated that a number of Joint Venture projects are being taking place in NHPC and The Committee, therefore, recommend that a contingent plan be formed by the Government for timely completion of on-going and future hydel projects in the country.

2.35 Fund requirements for an estimated capacity addition of 47,000 MW during 10<sup>th</sup> Plan is of the order of Rs. 5,66,000.00 crore. Although the year-wise requirements of funds during 10<sup>th</sup> Plan have already been decided by the Government, the manner in which resources are to be mobilized is yet to be decided. The Committee desire that the mobilising of the funds finalised at the earliest and the Committee be apprised of the same. The Committee would also like to know the terms of reference of the Committee headed by former Chairman, PFC to examine in detail the resource mobilisation programme for funding the 10<sup>th</sup> Plan capacity addition programme. The Committee also desire that the report of the Committee be finalized at the earliest and they may be apprised of the same.

#### **POWER TRANSMISSION**

2.36 The Financial requirements for power transmission for the year 2002-03 as also the actuals for the year 2000-01 and the Budget estimate and Revised estimates of the year 2001-02 are as under:-

(Rs. in lakh)

Actuals 2000-2001				Budget Estimates 2001-2002		Revised Estimates 2001-2002			Budget Estimates 2002-2003		
Plan	N-Plan	Total	Plan	N-Plan	Total	Plan	N-Plan	Total	Plan	N-Plan	Total
5236.14	462.16	5698.30	4495.00	467.84	4962.84	33135.00	561.13	33696.13	4864.00	483.08	5347.08

2.37 Enquired about the reasons for huge variation from Rs. 44.95 crore(Plan) at BE stage to Rs. 331.35 crore (Plan) at RE stage during 2001-02 and for making less provision of Rs. 48.64 crore(Plan) for power transmission during 2002-03, the Committee have been informed in a written reply as under:-

"POWERGRID had executed Chandrapur HVDC Back to Back project with bilateral assistance from UK to the tune of 63 million Pounds as a grant through Government of India(GoI). The UK grant was fully drawn during March, 1994 and November, 1996. The equipment required for the project was procured form M/s. GEC Alstom-T&D power UK and the payments towards the supplies were directly made to the company by Government of UK by debiting the GoI grant account of Pounds 63 millions.

Under the prevalent procedure, for any direct payment made by Donors to the suppliers by debiting loan/grant account, the beneficiaries are required to deposit the rupee equivalent in GoI account. The UK grant has already been accounted for in relevant years in Govt. books and kept under suspense(MH 8658) to be adjusted on deposits in (MH 8443). To make the adjustment, a plan budget provision of Rs. 32640 lakh has been made by Ministry of Power in demand no. 64 in RE 2001-02 under MH 2801 – Power as revenue expenditure towards grant to POWERGRID and paid to CAA&A for account under MH-8443".

2.38 The Committee have been further informed that POWERGRID is implementing Unified Load Despatch & Communication (ULDC) Scheme in the north Eastern Region (NER) involving state-of the-art technology to operate, monitor and control the regional power grid in a unified, well coordinated and integrated manner and also for optimal utilisation of resources. This scheme alongwith similar schemes in all other regions shall be dovetailed into the National Load Despatch Centre for the operation of National Grid. Thus, it shall integrate the NER with rest of the country. The project was originally approved by Government of India(GoI) for implementation through assistance of Asian

Development Bank, Manila(Loan No. 1405-IND). However, keeping in view the criticality of the scheme and their poor paying capacity, the NER constituent states expressed their inability to pay tariff for the project and requested for its implementation with GoI grant.

- 2.39 The delay in implementation of generation projects for various reasons in the NER along with the need to go for double circuit transmission lines so as to fully utilise the limited right of way has resulted in relatively higher transmission tariff due to underutilisation of transmission capacity. CERC has, however, allowed POWERGRID to charge a tariff of only 35 paise per unit which is much less than the tariff on commercial basis. POWERGRID has, therefore, been asking to be compensated by the Government by way of grant. An amount of Rs. 4000 lakh was proposed in BE 2001-02, as grant-in-aid for Unified Load Despatch Centre for Northern Eastern Region(ULDC-NER). The grant was however, not retained at RE stage since the approval of the competent authority to the revised funding pattern/grant is not expected in the year 2001-02.
- 2.40 Asked about a provision of Rs.40 crore as grants-in-aid to POWERGRID made in BE 2000-2003 for ULDC-NER project, the Ministry of Power informed the Committee that POWERGRID was ready for award in May, 1999 on the basis of ADB funding. However, the award of Ist package namely 'EMS/SCADA package' could be placed only in May, 2000 after receipt of assurance from Government of India on availability of grant. The Planning Commission have already agreed to extend the grant of Rs. 150 crore for ULDC-NER Project under North East Region. Therefore, such budgetary supports are an assistance to compensate POWERGRID for a project, revenue inflow which is expected to be poor due to financial health of the beneficiary states. Thus, the benefit of this budgetary support actually accrues to the states and not to POWERGRID.
- 2.41 The IEBR component of POWERGRID was reduced from Rs. 2869 crore to Rs. 2352 crore during 2001-02 at RE stage. For the year, 2002-03 the BE(IEBR) for POWERGRID is Rs. 3312 crore is to be mobilised from the following sources:

(Rs. in crores)

Sl. No.	Particulars	BE 2002-2003
1.	IR	745
2.	Bonds/other loan	1388
3.	External Commercial Borrowings	1179
	Total IEBR	3312

- 2.42 Asked about the realisation of IEBR component during 2002-2003, the Committee have been informed that the SEBs/State Utilities are being persuaded to pay the transmission charges on regular basis and also liquidate the outstandings. It is expected that with better realisation, POWERGRID shall be in a position to generate Internal Resources of approximately Rs.745 crore. Bonds and other loans will be raised from time to time in the domestic market considering the requirement of funds for the projects during the year 2002-03. POWERGRID has reportedly tied up with World Bank(WB), Asian Development Bank(ADB) and Kreditan Stalt Fur Wiederaufbau, (KFW), Germany for funding the various ongoing and new projects.
- 2.43 The Committee have been informed that the reduction in IEBR component of POWERGRID during RE 2001-02 by Rs. 517 crore in comparison to BE 2001-02, is mainly related to delay in obtaining investment approvals for new schemes. The projectwise reasons for variation are as follows:

(Rs. in crore)

Sl.	Name of the Project	BE	RE	Variation	Reasons for
No		2001-02	2001-02		variation
1.	Telecom	479	95	-384	Investment/ approval under process
2.	Gas Projects	54		-54	GoI approval kept pending due to delay in Generation Projects
3.	Sipat	48	1	-47	Investment/ approval under process
4.	Tala	44	7	-37	Investment/ approval under process
5.	Rihand-II	92	63	-29	Investment/ approval under process
	Other Projects	2152	2186	+34	
	Total	2869	2352	-517	

2.44 Regarding targets set for commissioning of transmission lines during the last three years and actual achievements the Committee have been apprised as under:-

Description	1999-2000	2000-2001	2001-2002	
Lines strung				
Target(Ckms)	1448	1077	1341	
Actual(Ckms)	1854	1470	1254*	

- \* Achievement upto Feb' 2001
- 2.45 About commissioning of National Grid, the Ministry of Power have informed the Committee that the National Grid has been planned to be implemented in a phased manner. In the first phase of National Power Grid, various regions are being interconnected in asynchronous mode i.e. through HVDC links. The following inter-regional links have already been established:
  - i) 500 MW HVDC back to back between NR & WR at Vindhyachal
  - ii) 500MW HVDC back to back between ER & SR at Gazuwaka
  - iii) 1000 MW HVDC between WR & SR at Chandrapur
- 2.46 The first phase will be accomplished with the commissioning of 500 MW HVDC back to back at Sasaram inter-connecting Eastern Region and Northern Region by the end of the year 2002, thereby, enabling the inter-regional power exchange capacity of around 5000 MW. However, the 400 kV AC lines associated with this link have already been commissioned to transfer surplus power from Eastern Region to Northern Region in radial mode, to reach the present available capacity of 4800 MW. The inter-regional transfer capacity is planned to be increased to the level of 30,000 MW by the year 2012 in the next two phases.
- 2.47 Establishment of National Power Grid requires an investment of approximately Rs. 60,000 crore during X Plan(Year 2002-07) and XI Plan(Year 2007-12). The required

investment is to be mobilised by POWERGRID through its internal resources, domestic and external borrowings and private sector participation. During the initial period of operation, certain elements of the National Grid are expected to be under-utilised in the short run and hence may not be commercially viable. In order to address this constraint, the possibility of funding these links through mobilisation of 10% developmental surcharge on transmission, as allowed by CERC besides GoI support, is being explored/considered, and a comprehensive proposal in this regard is being finalised. During the 10<sup>th</sup> Plan, an outlay of approximately Rs. 21,000 crore has been envisaged.

2.48 The Committee have been informed that there are different rate of custom duties on equipments imported for Generation and Transmission projects. Asked about the matter of differential custom duty in transmission sector as compared to generation projects and has it been taken by the POWERGRID/Ministry of Power with the Ministry of Finance, the Committee have been informed in a written reply as under:-

"On POWERGRID's request, Ministry of Power has taken up the matter with Ministry of Finance regarding, parity of import duty on equipments of power transmission project with that of Generation projects. The details of the custom duty proposals in respect of transmission sector vis-a-vis generation projects as recommended to Ministry of Finance are as under:

- Presently, power transmission projects are required to pay a higher effective customs duty of 50.8%(25% + 16% + 4%) whereas the generation projects carry an effective customs duty of 21.8%(5% + 16%) for import of equipments etc.
- Exemption is available from customs duty on import of goods for power generation project, which are funded by the World Bank, ADB and other international organisations. Similar exemption is also available for mega power projects. On the other hand, the projects which are funded through domestic resources have to pay the duty even if they are set up on the basis of International Competitive Bidding(ICB). It is, therefore, proposed that import of all goods for power generation irrespective of the source of funding may carry zero duty for a period of three years. As zero duty is proposed on imports for generation projects, the same may be made applicable to transmission projects too.

However, the same has not been included in the Budget proposals for Financial Year 2002-03".

- The Committee have observed that Plan outlay for Power Transmission projected at Rs.44.95 crore during 2001-2002 has been revised to Rs.331.95 crore. Again, during 2002-2003, the Plan outlays have been budgeted at Rs.48.84 crore The Government have informed that POWERGRID had executed Chandrapur HVDC Back to Back project with bilateral assistance from UK to the tune of 63 million Pounds as a grant through Government of India(GoI). The UK grant was fully drawn during March, 1994 and November, 1996. The equipments required for the project were procured form M/s. GEC Alstom-T&D power UK and the payments towards the supplies were directly made to the company by Government of UK by debiting the GoI grant account of Pounds 63 millions. To make the adjustment, a plan budget provision of Rs. 32640 lakh has been made by Ministry of Power in demand no. 64 in RE 2001-02 under MH 2801 - Power as revenue expenditure towards grant to POWERGRID and paid to CAA&A for account under MH-8443. The Committee are not convinced of the reasons for increasing the Budget Estimates by making adjustments at Revised Estimates stage and desire to know why such provision was not made at Budget Estimates stage itself when the fact was known to the Ministry of Power earlier also.
- 2.50 The Committee are unhappy to note the reduced revised outlays of Rs.2352 crore from budgeted outlays of Rs.2869 crore for POWERGRID during 2001-2002. The reduction of Rs.517 crore was mainly due to investment/approvals of Telecom, Gas project, Sipat, Tala, Rihand II, etc., which were reported to be under process. The Committee, therefore expect that IEBR component of Power Grid at Rs.3312 crore during 2002-2003 would be fully mobilised and utilised for projects as targeted.
- Regarding implementation of Unified Load Despatch and Communication scheme in the North-Eastern Region (NER) being implemented by ADB funding, the Committee are constrained to note the delay in implementation of generation projects for various reasons in the NER. There is a need to go for double circuit transmission lines so as to fully utilise the limited right of way though that may result in relatively higher transmission tariff due to under-utilisation of transmission capacity. CERC has, however, allowed POWERGRID to charge a tariff of only 35 paise per unit which according to POWERGRID is much less than the tariff on commercial basis. POWERGRID has, therefore, been asking to be compensated by the Government by way of grant. The Committee are further perturbed to note that although POWERGRID was ready for award of work in May, 1999 on the basis of ADB funding, the award of 1st package namely 'EMS/SCADA package' could be placed only in May, 2000 after receipt of assurance from the Government of India on availability of grant and this resulted in delay in implementation of the project. The Committee desire that POWERGRID should at least now ensure timely completion of the project as the Planning Commission have already agreed to extend the grant of Rs. 150 crore for ULDC-NER Project under North-Eastern Region.

- 2.52 About commissioning of National Grid, the Committee have observed that this is planned to be implemented in a phased manner. In the first phase of National Power Grid, various regions are being inter-connected in a synchronous mode i.e. through HVDC links. The following inter-regional links have already been established (i) 500 MW HVDC back to back between NR & WR at Vindhyachal (ii) 500 MW HVDC back to back between ER & SR at Gazuwaka and (iii) 1000 MW HVDC between WR & SR at Chandrapur. The Government have informed the Committee that the first phase will be accomplished with the commissioning of 500 MW HVDC back to back at Sasaram inter-connecting Eastern Region and Northern Region by the end of the year 2002, thereby, enabling the inter-regional power exchange capacity of around 5000 MW. However, the 400 kV AC lines associated with this link have already been commissioned to transfer surplus power from Eastern Region to Northern Region in radial mode, to reach the present available capacity of 4800 MW. The inter-regional transfer capacity is planned to be increased to the level of 30,000 MW by the year 2012 in the next two phases. The Committee are dismayed to observe that although establishment of National Power Grid requires an investment of approximately Rs. 60,000 crore during X Plan(Year 2002-07) and XI Plan(Year 2007-12) and the required investment is to be mobilised by POWERGRID through its internal resources, domestic and external borrowings and private sector participation, the outlays for 2002-2003 has been kept at Rs.3312 crore against requirements of more than Rs.4000 crore per year during 10<sup>th</sup> Plan. The Committee would therefore, like to know the reasons for low outlay during the first vear of the 10<sup>th</sup> Plan and the steps taken by the Government to ensure mobilisation and utilisation of Rs.21,000 crore targeted for 2002-2007.
- On the issue of different rates of Custom duties applicable on equipments imported for generation and transmission projects, the Committee feel that the generation and transmission utilities should prefer to procure equipments from domestic companies. However, with regard to purchase of imported equipments, the Committee have earlier also recommended that power being treated infrastructure sector, both generation and transmission projects be treated equal. The Committee are constrained to note that the Ministry of Finance has not responded to the recommendation of the Committee and power transmission projects are still required to pay a higher effective customs duty of 50.8%(25% + 16)% + 4%) whereas the generation projects carry an effective customs duty of 21.8%(5% + 16%) for import of equipments, etc. Exemption is available from customs duty on import of goods for power generation projects, which are funded by the World Bank, ADB and other international organisations. Similar exemption is also available for mega power projects. On the other hand, the projects which are funded through domestic resources have to pay the duty even if they are set up on the basis of International Competitive Bidding(ICB). The Committee, therefore, strongly urge the Government (Ministry of Finance) that not only import of all goods for power generation irrespective of the source of funding may carry zero duty for a period of three years as proposed by Ministry of Power, but the same be made applicable to transmission projects also to provide a level playing field to all the players. The Committee would await for the action taken by the Government in this regard.

#### D. POWERGRID into Telecom Sector

- 2.54 POWERGRID has obtained Infrastructure Provider –II (IP-II) license on January 29,2001 from DoT and has commenced commercial operation of its telecom business. Presently Delhi Chandigarh, Delhi- Jaipur, Jabalpur- Itarsi- Dhule and Delhi- Meerut links are under commercial operation and the company has signed capacity lease agreement with telecom operators worth Rs. 7.2 crore on these links. Further, POWERGRID has proposed to establish a core telecom network of about 14,000 kms covering 56 cities including all metros, major towns, cities etc. The estimated cost of the project is about Rs. 934 crore. The project is being funded by the World Bank as well as through internal resources of POWERGRID. The Feasibility Report of the project is in the final stage of investment approval. POWERGIRD's prioritized Delhi- Mumbai telecom link is under construction and is expected to be completed by September 2002. The balance telecom network is likely to be completed by December 2003 including that in north- Eastern Region.
- 2.55 The Committee was assured that from Telecom Business Power Grid would be able to generate revenue of Rs. 2 crore during Financial Year 2001-02 and which will increase to over Rs. 250 crore by the end of financial year 2005-06 and Rs. 550 crore by financial year 2009-10 (23<sup>rd</sup> Report; 13<sup>th</sup> Lok Sabha). Asked about the factual position of the revenue generated so far, the Committee have been informed as under:-

"In Telecom sector, POWERGRID has invested Rs.9.05 crore in 2000-01 and Rs. 65 crore in 2001-02 (upto February, 2002). POWERGRID expects the project to be cash positive by the year 2006. Payback year would be 2008 after which the funds generated through telecom business can be ploughed back to transmission sector. However, If POWERGRID is able to generate higher revenues than projected, it shall be possible to plough back the surpluses earlier than expected".

On being asked the steps taken by the Ministry of Power to ensure that Power Grid's entry into Telecom shall not materially affect the Power Sector Projects, the Ministry of Power informed the Committee that POWERGRID is implementing Unified Load Despatch & Communication (ULDC) project in a phased manner in all five regions of the country, already approved by GOI, for real time monitoring, better management of grids through state-of-the-art Supervisory Control and Data Acquisition (SCADA) & Energy Management System (EMS) technologies. These projects require dedicated wideband communications networks and POWERGRID has already laid out over 4,000 kms of optic fiber network in Northern and Southern Regions for which ULDC projects have already been commissioned, POWER Grid is also in the process of installation of optical fiber cables of about additional 2,500 km in North-Eastern, Eastern and Western Thus, POWERGRID shall own and operate about 6,500 km of optical fiber network for captive communication purposes which would be required for operation and maintenances of Grid Management. Such communication facilities have inbuilt spare capacity. Further, the spare capacity available to POWERGRID on its all India optical fiber network in the existing and planned telecommunication infrastructure to support its core electricity business, can be utilized to exploit telecom market liberalization in accordance with the National Policy- 1999 (NTP 99). Thus, realizing its inherent strength of possessing the huge transmission network infrastructure and utilization of spare capacity of ULDC projects for commercial telecom business, POWERGRID has reportedly taken the conscious decision to diversify into telecom business by establishing a Fiber Optic backbone network on its existing and planned transmission infrastructure through incremental investment without affecting the core business. Telecom being a

high growth area, it is possible to generate surplus at a faster rate by exploiting the inherent strength of POWERGRID as has been done by many transmission utilities the world over. Accordingly, as per the advice of the Consultant. POWERGRID has carved out a blue print of its plan to enter into telecom business in a phased manner.

"The Committee have been further informed that the telecom project has been funded by the World Bank and POWERGID has allocated adequate internal resources to the telecom project without affecting the implementation of ongoing planned transmission schemes. POWERGRID is conscious of its responsibilities and has diversified into telecom in a limited manner to exploit the synergy and in such way that it will support its core mission. Transmission, however shall remain the priority for POERGID. The activities of POWERGRID will continue to be regulated by the concerned regulatory authorities in both electricity and telecom areas".

- 2.58 To a query that whether POWERGID propose to diversify in to other sectors of power such as distribution and generation, including Captive Power, the Committee have been informed that POWERGID, has no plans at present to diversify into distribution and generation sectors, including Captive Power.
- 2.59 The Committee have observed that Power Grid had forayed into Telecom Business as its transmission line provide an opportunity to establish Telecom Network. As much as Rs.934.23 crore is the fund required for the Telecom Business. This fund is to be mobilised through World Bank loan amounting to Rs.747.38 crore and another Rs.186.85 crore raised through internal resources. Power Grid had already invested Rs.9.05 crore during the year 2000-2001 and Rs.65 crore during 2001-2002. The Committee find that the Annual Plan for Power Grid for the year 2001-2002 for Telecom sector was Rs.479 crore at BE stage. This was revised to first 95 crore, a reduction of Rs.384 crore, as the investment approval for Telecom could not materialise. The Committee find that the achievement of Power Grid in Telecom sector is not satisfactory taking into consideration, the excellent financial track record of PowerGrid. Against, Rs.50000 crore authorised share capital with Rs.3564.58 crore reserves and surplus and Rs.6247.09 net worth, the Committee recommend that PowerGrid should not lose sight of the mandate given to it for transmission of power and development of a national grid at the earliest. The Committee hope that the revenue generated through telecom sector would be ploughed back to transmission sector as has been assured to this Committee.

#### E. Energy Conservation

2.60 The comprehensive legislation titled "Energy Conservation Bill, 2001" to establish Bureau of Energy Efficiency (BEE), a statutory body to promote energy efficiency and its conservation in the country, as passed by both the houses of Parliament, received the assent of the President on 29<sup>th</sup> September,2001. The Act was published in the Gazette of India on 1.10.2001. The Act has come into force w.e.f. 1<sup>st</sup> March, 2002. The BEE has been established w.e.f. from the same date. The BEE is the nodal agency under the Ministry of Power to promote energy efficiency and its conservation measures in the country. Keeping in view the establishment of BEE, the budgetary support to BEE during 2002-03 has been kept at Rs. 50.00 crore.

- 2.61 The Committee have been informed that National Energy Efficiency Programme (NEEP) was envisaged in the 8<sup>th</sup> Plan with a target saving of 5000 MW (2250 MW from supply side and 2750 MW from demand side) of capacity. The achievement on supply side was 2900 MW against a target of 2250 MW. However, due to funds constraints no programme could be taken up and target of 2750 MW on the demand side remained unfulfilled. Regarding financial targets and achievement fixed by Ministry of Power (Budget allocation and utilization) for the 8<sup>th</sup> Plan in respect of conservation including DSM, no information is available with CEA. For 9<sup>th</sup> Plan as per information available with CEA, no such physical targets, for energy conservation including Demand Side Management (DSM) could be fixed.
- 2.62 The Ministry of Power have informed the Committee that the Energy Conservation Wing will hereafter deal with issues relating to formulation of policy on energy conservation and coordination with other line Ministries and organizations of the Government. The BEE, hereafter, shall function as the executing/implementing agency for the energy conservation schemes and programmes in the country. As such no budget provision has been made in the BE 2002-03 for the Energy Conservation Wing of the Ministry of Power.
- 2.63 There was a provision of Rs. 15.00 crore in the Budget Estimate for the year 2000-01 for Energy Conservation activities which was curtailed to Rs. 2.75 crore at Revised Estimate stage. The actual expenditure during the year was about Rs. 1.68 crore. A provision of Rs. 9.88 crore has been made in the Budget Estimate of 2001-02.
- 2.64 While examining Demands for Grants 2001-02 of Ministry of Power, the Ministry of Power had informed the Committee that the funds of Energy Conservation schemes were revised downward to due to the following reasons:
- i) Funds constraints as well as slow progress of on-going schemes(Rs. 336.23 lakh);
- ii) Awareness campaign was not taken up as the Energy Conservation Day/Energy Conservation Award Function could not be held during the year 2000-01 as it was decided that the function would be held only after the establishment of Bureau of Energy Efficiency(BEE) (Rs. 150 lakh);
- iii) Central Power Research Institute was asked to formulate a scheme for implementing the recommendations made by it in its audit report of 20 thermal power stations. They could not formulate the scheme(Rs. 500.00 lakh);
- iv) The scheme for promoting Energy Supply Companies(ESCO) relating to industrial and agricultural activities would be taken up only after BEE is established(Rs. 300.00 lakh).
- 2.65 The Committee observe that the Budget allocation for Energy Conservation Schemes in BE 2001-02 was Rs.960.00 lakhs. In addition, a sum of Rs.28.00 lakh was also allocated as grants-in-aids to EMC. Thus, a total sum of Rs.988.00 lakh was allocated for energy conservation activities in BE 2001-02 which has been reduced to Rs.230.00 lakh in RE 2001-02. The reasons for reduction of the plan outlay for the year 2001-02 for energy conservation activities are as under:
  - i. CPRI was asked to formulate the scheme for implementing the recommendations made by it in its Energy Audit Report of 20 thermal power

- stations. They had held discussions with various power utilities but have not been successful in evolving a scheme in the absence of model performance contract as well as model Energy Saving Company in the country (Rs. 500.00 lakh).
- ii. Awareness campaign was not taken up as it was decided that BEE after its establishment would be responsible for creating awareness among the target groups about the energy efficiency and its conservation. The BEE has been established w.e.f. 1.3.2002 –(Rs.100.00 lakh).
- iii. Funds constraints as well as slow progress of on-going schemes- (Rs. 130.00 lakh).
- 2.66 The Committee have been informed about following activities which are proposed to be undertaken by the Bureau of Energy Efficiency (BEE) during 2002-03:
  - i. Introduction of Energy Management System (Budget for the year 2002-03 is Rs. 60 Million).
  - ii. Standards and Labelling (Budget for the year 2002-03 is Rs. 20 Million)
  - iii. Market development mechanism including project development (Budget for the year 2002-03 is Rs. 30 Million)
  - iv. Capacity building in energy managers, energy auditors to act as service providers (Budget for the year 2002-03 is Rs. 30 Million)
  - v. Energy Efficient Technology Demonstration and Replication (Budget for the year 2002-03 is Rs. 30 Million)
  - vi. Designated consumer (Budget for the year 2002-03 is Rs. 50 Million).
- 2.67 The Committee observe that a budgetary provision of Rs. 50 crore has been made for establishment of BEE during 2002-03. Also, for implementation of energy conservation activities such as introduction of energy management system, standards and labelling, market development mechanism including project development capacity building in energy managers, energy auditors to act as service providers, energy efficient technology demonstration and replication, designated consumer etc., a budgetary provision of Rs. 220 million has been made during 2002-03. The Committee would like the Government to apprise the Committee of the various resources from which the funds of Rs. 220 million will be raised by the Government for energy conservation activities and steps taken to ensure that targets set could be achieved. The Committee would also like to know the targets of resultant energy to be conserved/ saved during 2002-03.
- 2.68 The Committee have noted that in pursuance of the recommendation of 8<sup>th</sup> Plan a National Energy Efficiency Programme was envisaged under which a saving of 2750 MW was projected at demand side management. The Committee are deeply concerned to find that on account of funds constraints not a single MW of electricity could be saved. The Committee are at a loss to understand as to why no targets were fixed for energy conservation including demand side management during 9<sup>th</sup> Plan. In the opinion of the Committee, saving of one MW of energy yields a recurring saving of more than Rs. 4 or 5 crore. In view of the enormous potential of Demand Side Management the Committee, recommend that the Government should pursue the implementation of energy conservation measures with a missionary zeal so that there is little need to set up more power plants in the country. The Committee further recommend that the Government should step up budgetary allocations for energy conservation measure in a big way.

- 2.69 The Committee are also unhappy to note that although a provision of Rs. 5 crore was made during each of the years 2000-01 and 2001-02, to the Central Power Research Institute (CPRI) to formulate a scheme for implementing the recommendations made by it in regard to Energy Audit Reports of 20 thermal power stations, no scheme could be formulated except holding discussions with various power utilities during 2001-02. The Committee cannot but deplore the way the Central Power Research Institute has conducted audit reports to evolve a scheme to establish a model energy saving company in the country during the last 2 years and recommend that all necessary steps should be taken so that the task be completed during 2002-03. The Committee would like to be apprised of the action taken and progress achieved in this regard.
- 2.70 Although, the Committee welcome the establishment of the Bureau of Energy Efficiency (BEE), a statutory body under Energy Conservation Act, 2001 which received President of India's assent on 29th September, 2001 and was also published in the Gazette of India on 1.10.2001, they fail to understand why the Government have not taken appropriate steps for public awareness about the Act. While examining the Demands for Grants (2001-02) of the Ministry of Power, the Committee had observed that pending constitution of the Bureau of Energy Efficiency, the Government should take the awareness campaign at full pace for educating people in the industrial and agriculture sectors. The total budgetary outlays for 2000-01 were drastically reduced from Rs.15 crore at Budget Estimate stage to actual utilization of Rs. 1.68 crore and for the year 2001-02 also, these were revised to Rs. 2.30 crore from the budgeted amount of Rs.9.88 crore pending establishment of BEE. The Committee are distressed to note the casual approach of the Government in spite of Committee's earlier recommendation. The committee would like to know the reasons why awareness campaign for energy conservation was shelved during the period, although existence of Energy Management Centre during the years 2000-01 and 2001-02.

#### F. R&M of Power Projects

2.71 The Committee have desired to know the physical and financial targets and achievements during 9<sup>th</sup> Plan, achievements during 8<sup>th</sup> Plan and targets for 10<sup>th</sup> Plan for the R&M of the power projects. In this regard, the Ministry of Power in a written note furnished to the Committee informed as under:-

#### **Thermal Projects**

R&M / Life Extension	9 <sup>th</sup> Plan		8 <sup>th</sup> Plan	10 <sup>th</sup>
works	Targets	Achievements	Achievements	Targets
R&M works physical				
progress				
No. of Units involved	130	130	198	35
No. of R&M activities	768	404	596	To be identified
		works on		
		additional 229		
		R&M activities		
		is in progress		

Capacity involved (MW)	17935	17305	20870	6440
Financial Progress				
Total expenditure involved (Rs. in crore)	1137	652	625	750
<b>Life Extension works</b> Physical Progress				
No. of Units involved	28	works on additional 9 is in progress	4	106
Capacity involved (MW)	1910	1910	300	10413
Financial Progress Total expenditure involved (Rs. in crore)	1796	1029	237	9200
Benefits i) Additional Generation / annum	9800 MU	Actual generation to be evaluated after observing the performance for 2-3 years.	5000 MU	26500 MU
ii) Life extension by 15- 20 years	1910 MW	1315 MW	300 MW	10413 MW

#### **R&M of Hydro Projects**

Physical and financial targets and achievements during  $9^{th}$  Plan, physical and financial achievements during  $8^{th}$  Plan and physical and financial targets during  $10^{th}$  Plan are as under:-

Annual Plan	Physical				Financial	
	No. of schemes		Benefits		<b>Targets</b>	Actual
	Target	Actual	Target Actual MW			
			MW			
8 <sup>th</sup> Plan	-	13	-	428	-	127
9 <sup>th</sup> Plan	36	20	1609	1342	917	598
10 <sup>th</sup> Plan	68	-	4266	-	2860	-

2.72 The Committee are not satisfied with the pace of Renovation and Modernisation (R&M) works undertaken both for thermal and hydel sectors during the 9<sup>th</sup> Five Year Plan. For instance, under thermal sector, as against a physical target of 768 R&M activities only 404 R&M activities were attended to. Further as against a financial target of Rs. 1137.00 crore the actual achievement was of the order of Rs. 650.00 crore. Moreover for Life Extension Works as against 28 units proposed to be involved, only 19 units could be

associated with Life Extension Works. There is a huge variation between the projected expenditure and the actual achievement for Life Extension Works. Similarly, under the R&M of hydel projects as against a physical target of 36, actual achievement was only 20 and as against a financial target of Rs. 917.00 crore actual achievement was Rs. 598.00 crore. The Committee have further noted that the target fixed for 10th Plan have been downsized. For example it is proposed to involve only 35 units for R&M works in 10th Plan as against 198 and 130 achieved in 8<sup>th</sup> and 9<sup>th</sup> Plans respectively. The capacity involved for R&M works have also shown a declining trend. For instance, the capacity involved in 8th Plan was 20870 MW, which got reduced to 17305 MW in 9th Plan and further dipped to only 6440 MW in 10<sup>th</sup> Plan period. The Committee have come to an irresistible conclusion that there is a lack of interest on the part of the Government in pursuing vigorously the R&M works for both thermal and hydel projects. The Committee have been informed that the a perspective plan was drawn up by the Ministry of Power for undertaking R&M works in the 10th Plan and beyond. Unfortunately, the action taken by the Ministry of Power indicates to the contrary. The Committee, therefore, desire that the Government should undertake a fresh survey of all the on-going thermal and hydel units and identify the units requiring R&M in all the sectors i.e. Central, State and Private Sectors. The Committee further recommend that the Government should undertake R&M of the potential units at a war-footing. The Committee would like to be apprised of the action taken by the Government in the matter. The Committee should also be informed about the improvement in generation due to R&M works undertaken during 9th Plan.

## G. Accelerated Power Development and Reforms Programme (APDRP) & Power Sector Reforms

- 2.73 In order to accelerate the pace of power development, the Government of India launched an "Accelerated Power Development Programme (APDP)" during 2000-01. Broadly speaking, strengthening/ improvement / Upgradation of distribution system including sub-transmission, energy accounting and metering and renovation of both thermal and hydro projects have to be covered under the programme. As far as distribution is concerned the primary objective of the scheme is to reduce T&D losses, improve customer service and drive power distribution sector reforms to render the distribution business financially more viable. The fund under APDP have to be released as additional Central Plan assistance to the State Governments by the Ministry of Finance, Government of India under advice from the Ministry of Power.
- 2.74 Under the scheme, it has been proposed that the distribution circles in the Utilities shall be treated as profit centre which may ultimately lead to their privatization. It was proposed that all the circles in the country would be taken up under the programme in a phased manner. In the first phase 63 distribution circles have been identified throughout the country and have been taken up for strengthening of Sub-transmission and distribution network. The programme is presently planned to continue till the year 2012. An amount of Rs. 1000 crore was provided by the Government for the financial year 2000-01 and Rs. 1500 crore during the year 2001-02 for implementing short term measure like metering, LT capacitors, augmentation of Sub-stations, reconductoring, replacement of distribution transformers, computerization etc, besides R&M / Life extension/uprating of generation stations.
- 2.75 The budget (2002-03) has provided for a central assistance of Rs. 3500 crore for the programme, for Accelerated Power Development Programme now recasted as Accelerated Power Development and Reforms Programme (APDRP). This is for

systematic improvement in power circles. The BE and RE for this programme was Rs. 1500 crore and 450 crore in the year 2001-02.

- 2.76 The revamped programme is different from the earlier one because it incorporated a component of "transition financing" along with the pure investment undertaken in the last 2 years. To restore the viability of a state electricity board, if it took a certain length of time to cancel the gap in the cost of power supply and revenue inflow, the difference can be met through the programme, subject to reform conditions. According to Ministry of Power, the scope of the programme will be enlarged to cover all the 454 circles in the country. The Ministry of Power appointed Advisor cum Consultant(AcC) for each of the circles which are funded under APDP for capacity building and preparation of DPR. NTPC & POWERGRID have been identified as the Nodal agencies for setting priorities. CPRI, MECON, WAPCOS, NPC and ERDA are the other organizations who are acting as AcCs under the guidance of the Nodal Agencies. The Terms of reference for the Consultants has been finalised and the AcCs are already in position at the different circles.
- 2.77 The Committee are apprised that the work of installing feeder meters has been taken up in the 63 circles and is in different stages of completion. Haryana, Andhra Pradesh, TamilNadu,Kerala & Madhya Pradesh have completed this activity, energy accounting has been taken up and areas of losses are being segregated. The benefits would be visible once the scheme is fully implemented.
- 2.78 Asked about the guidelines that have been evolved for identification and determination of 63 distribution centers and by what time all the Centers in the country are likely to be covered, the Government have informed that during the year 2000-01, the Ministry of Power had asked all the State Electricity Boards/ Distribution Companies to identify three representative distribution circles in the State. No specific criteria was prescribed. The Ministry of Power proposes to cover all the distribution circles in the country during the 10<sup>th</sup> Five- Year Plan.
- 2.79 About the reasons that the Finance Ministry slashed the fiscal assistance to Rs. 450 crore, as against Rs. 1500 crore budgeted during 2001-02 in spite of firmed-up plans for disbursement to State Government on the advice of Ministry of Power under APDP scheme, the Committee have been apprised that the Ministry of Finance has suo motto reduced outlays under Accelerated Power Development Programme (APDP) for the year 2001-02 from BE at RS. 1500 crore to Rs.450 crore in the Revised Estimate. No reason has been cited. The Ministry of Power has taken up the matter with Ministry of Finance to restore the original outlay provided in the Budget 2001-02.
- 2.80 As regard to the funds requirement for the APDP scheme, the Committee have been informed that CEA and the Expert Committee have estimated that Upgradation of sub-transmission & distribution network in a circle will approximately cost between Rs. 100 crore to Rs. 150 crore depending on the size of the circle and state of the existing network. There are over 415 circles in the country and given that APDP supports 50% of the project cost in a non- special category states and 100% of the project cost in a special category States, the estimated cost to cover all the circles including for providing information technology solutions and R&D works in the distribution, would be of the order of around Rs. 50,000 crore with APDP component around Rs. 25,000 crore. Since all the circles are to be covered during the 10<sup>th</sup> Plan, the annual requirement of fund would be of the order of Rs. 10,000 crore.

- 2.81 The Committee have desired to know the impact of the reduced Financial assistance during 2001-02 on the reforms in different States. In this context, the Government have informed that APDP was sanctioned in the year 2000-01 and funds were released only towards at the end of the year. The distribution circle projects have been given proper shape after detailed discussion with experts and also based on the report of the Expert Committee. The States have formulated short-term projects, which have been recommended for sanction after vetting by the Advisor–cum-Consultants (AcCs). The quantum of fund sanctioned during 2001-02 is considered adequate.
- 2.82 During the year 2002-03, the Government have provided Rs. 3500 crore out of which requirement of fund for investment in Upgradation of sub-transmission & distribution network would be of the order of Rs. 2000 crore to Rs. 2500 crore and the balance would be used for R&M projects (project costing up to Rs. 100 crore) and for providing incentive to the SEBs for reducing cash loss net of tariff increase and additional power purchase and sold. During the year, the States are being asked to identify three new circles and prepare a short-term projects reports covering mandatory activities and activities on such of those feeders which boast of selling energy to customers through meters. The project report are expected for the additional circles by May 2002 and the same would be sanctioned by July 2002 after getting them vetted by AcCs. It is expected that the entire amount would be utilized during the year 2002-03.

## **Power Sector Reforms**

- 2.83 So far 19 States namely (Orissa, Karnataka, Andhra Pradesh, Madhya Pradesh, Rajasthan, Punjab, Kerala, West Bengal, Uttar Pradesh, Gujarat, Haryana, Delhi, Maharashtra, Assam, Uttaranchal, Himachal Pradesh, Chhattisgarh, Tamil Nadu, Arunachal Pradesh) have notified constitution of SERCs. In twelve States, SERCs have passed tariff orders. On the request of some of the North Eastern States, the Electricity Regulatory Commissions (Amendment) Act, 2001 has been enacted on 29<sup>th</sup> August, 2001 enabling two or more States/ Union Territories to form a Joint Electricity Regulatory Commission (JERC). An allocation of Rs. 50 lakh was made during 2001-02 towards assistance to North-Eastern States for setting up of JERC. Since the enabling Amendment Act was passed only in August, 2001, the fund of Rs. 50 lakh could not be utilized in the absence of any concrete proposal from any of the North-Eastern States.
- 2.84 Several States(viz. Orissa, Haryana, Andhra Pradesh, Uttar Pradesh, Karnataka, Rajasthan, Madhya Pradesh and Delhi) have initiated reforms by enacting their own State Electricity Reform laws which provide, inter-alia, for unbundling/corporatisation of SEBs, setting up of SERCs etc. The SEBs of Orissa, Haryana, Andhra Pradesh, Karnataka, Uttar Pradesh and Rajasthan have been unbundled/corporatised. The unbundling of Delhi Vidyut Board(DVB) is under active consideration of the Delhi Government.
- 2.85 The Committee have been informed that Orissa has been the pioneer in initiating power sector reforms. Besides unbundling/corporatising the SEB, distribution has also been privatised in the State. Since initiation of reforms/restructuring and privatisation in Orissa, improvements have been reported in terms of reduction of T&D losses, increase in collection efficiency, metering etc. The distribution companies have reported reduction of T&D losses, reduction of financial losses from Rs. 286 crore to Rs. 191 crore during the same period. Metering has increased from 30% at the time of take over to about 80% by the end of 2001-02. However, the overall health of the sector has not recovered fully. The Government of Orissa appointed a High Power Committee to

review the ongoing power sector reforms in the State. The Committee submitted its report to the Government of Orissa in November, 2001 indicating steps that would contribute towards the solution of the problem and difficulties being experienced during transition.

- 2.86 Other States which have unbundled their SEBs in the recent past are engaged in the process of transition management. Besides unbundling of Boards, the following steps have been taken to improve financial health of SEBs:-
- (a) Revision of tariff
- (b) Recovery of receivables
- (c) Improving billing and collection
- (d) Reduction of technical/commercial losses
- (e) Measures against theft of power
- 2.87 The impact of reforms undertaken in States are as below:
- i) Haryana has reported improvements on various fronts including metering supply of electricity, reduction of commercial losses of the power utilities by 67% compared to FY 2000, increase in revenue assessment by 12.3% and realisation by 21%, improvement of collection efficiency to 94.43% from 87.65% in the previous year.
- ii) As a result of an improvement drive launched by the Government of Andhra Pradesh, there has been marked improvement in terms of billing and collection billing has improved by 2% while collection by 35% during the previous year. The measures are expected to reduce cash losses in FY 2002 to Rs. 1.5 billion.
- iii) The restructured entities in the State of Rajasthan have already replaced about 2.5 lakh defective meters and have plans to replace an additional 5.5 lakh meters by March, 2002. Disconnection and regularisation drives have also been launched to curb theft and corruption, which have in turn shown positive results in terms of bill collection and recoveries. Collections have been about 97% till August, 2001, higher than the 95% recorded for the same period last year.
- iv) As regards Gujarat, Meters have been installed at all the 11 kv feeders, and except for agricultural consumers all consumers have been metered. GEB has initiated a tatkal scheme under which agricultural connection is provided immediately on metered basis for which tariff is charged at 70 paise per unit as against the normal tariff of 50 paise per unit. Already around 29,000 consumers have taken advantage of this scheme and the State Government hopes, the figure will go up to 60,000 by July, 2002.
- 2.88 For reducing T&D losses, feeders having high losses have been identified and constant monitoring is being undertaken for reducing losses on these feeders. Disconnection drive has been undertaken on a large scale. Intensive monitoring is being carried out at all levels for monitoring revenue, disconnections, reconnections, T&D

losses, detection of thefts. As a result of these 4efforts, revenue collection has improved. The percentage of collection in the current financial year has reached to the level of almost 100%. The average revenue collection has reached the level of Rs. 15-20 crore per month.

- 2.89 Moreover, the Government of India has been encouraging States to undertake reforms so as to improve the financial health of the power sector. A Conference of Chief Ministers/Power Ministers was organised in March, 2001 which recognised that the real problem of management and challenge of reforms lies in the distribution sector. It was resolved inter-alia to undertake full metering of all consumers, energy audit at all 11 kv feeders, develop an effective Management Information System(MIS), launch an effective programme for identifying and eliminating theft, achieve commercial viability in distribution in 2-3 years through measures like creation of profit centres, handling over of local distribution to panchayats/local bodies/franchisees/users associations, privatisation of distribution etc.
- 2.90 The Committee observe that the objectives of Accelerated Power **Development Programme** which was launched 2000-01 strengthen/improve/upgrade the distribution system including sub-transmission, energy accounting, metering and R&M of thermal/hydro projects could not be achieved in spite of budgetary provision of Rs. 1000 crore during 2000-01 and Rs. 1500 crore during 2001-02. The Committee are perturbed to note that although the Government on the one side is making all out efforts to carry out the reforms in power sector, on the other side, funds to the tune of Rs. 450 crore were released by Ministry of Finance during 2001-02, in spite of firmed-up plans of Rs. 1500 crore for disbursement to State Governments on the advice of the Ministry of Power under APDP. The Committee would like to know the reasons for failure on the part of Ministry of Finance to disburse the funds during 2001-02 and recommend that the matter be taken up by Ministry of Power with the Cabinet Committee on Economic Affairs and the Committee be apprised of the outcome.
- The Committee further observe that against the fund requirements of the order of Rs. 50,000 crore with APDP component of around Rs. 25,000 crore in the 10<sup>th</sup> Plan to cover over 454 distribution circles in the country, a provision of Rs. 3500 crore has been made for the year 2002-03. Moreover, the proposed funds include investment of Rs. 2000-2500 crore in upgradation of sub-transmission and distribution network and the balance for R&M projects and for providing incentives to SEBs for reducing cash loss net of tariff increase and additional power purchased and sold. The Committee are unhappy to note the low investment proposal of about Rs. 2000-2500 crore during 2002-03 for upgradation of subtransmission and distribution network against the requirements of Rs. 5000 crore per year during 10<sup>th</sup> Plan. The Committee would like to know the planned investment proposal under recast APDRP during the 10<sup>th</sup> Plan period. Committee would also like to know the position of matching investments by SEBs/State Governments during the past 2 years and the steps taken to overcome constraints, if any, in implementation of Accelerated Power Development Reform Programme.
- 2.92 The Committee feel that there is a need to check T&D losses and theft of electricity. It would help in saving quire a big amount of electricity and consequent need for additional funds.

2.93 The Committee are not convinced with the action plan of the Government to cover all distributing circles(above 454 circles) in the country during the 10<sup>th</sup> Plan. In view of only 63 representative distribution circles identified so far and the Government have asked each State to identify 3 new distribution circles the Committee feel that the targeted completion of all distribution circles during the 10<sup>th</sup> Plan may go haywire due to the low outlays as well as lower identification of circles for the year 2002-03. Further, during 2001-02 the funds could not be released by the Ministry of Finance despite firmed up plans of Ministry of Power with different SEBs/States. The Committee are not in favour of 'Inspector Raj' whereby sanctions are to be issued by the Advisor-cum-Consultant appointed for carrying out APDRP schemes in different circles, and expect the Government to ensure that all the distribution circles be covered in the 10<sup>th</sup> Plan as targeted. Advisor-cum-Consultants who have been appointed to recommend sanction of projects should not unnecessarily delay the implementation/execution of programmes.

# H. Rural Electrification Programme

- 2.94 The Committee observe that by 31<sup>st</sup> March, 2001, nearly 5.08 lakh villages out of total 5.87 lakh villages (1991 census), in the country were electrified accounting for about 86.5% village electrification level. The electrification of villages have provided the needed base for energisation of 127.7 lakh pumpsets thereby exploiting 65% of the total estimated pumpset potential of 195.94 lakh (Revised) and also leading to setting up large number of agro based / rural industries and lighting of rural households.
- 2.95 The Kutir Jyoti Programme aims at electrification of rural households falling Below Poverty Line (BPL) level including Dalit and Adivasi families. The programme aims at extending the benefit of single point light connections to such poor households in rural areas. A grant provision of Rs. 70 crore for release of 7.0 lakh single point light connections was made in the financial year 2001-02 under Kutir Jyoti Programme. This target was based on a unit cost of Rs. 1,000 per connection with meter and Rs. 800 per connection without meter. The physical and financial progress during 2001-02 for the programme is at Annexure II.
- 2.96 The Government have introduced a new interest subsidy scheme called Accelerated Rural Electrification Programme. Under this programme, interest subsidy will be given to SEBs for Rural Electrification. An outlay of Rs. 163.87 crore has been provided for this scheme for the year 2002-03 under major head 2801. However, interest subsidy to REC which at B.E. stage was planned at Rs. 10 crore was removed completely at RE stage. The allocation of funds for Kutir Jyoti Scheme have been increased to Rs. 90 crore during 2002-03.
- 2.97 About the funds earmarked for state plan at Rs. 410 crore at BE stage which were subsequently reduced to NIL at RE stage during 2001-02, the Government have stated that an allocation of Rs. 410 crore as loan to REC was initially provided for the financial year 2001-02. However, with the inclusion of 'Rural Electrification' under Pradhan Mantri Gramodaya Yojana(PMGY), no target could be envisaged under REC schemes. Further, REC has acquired the capability to raise money from the market and, therefore, did not need to take loan from Government. It was, therefore, decided that the provision for loan be surrendered. An amount of Rs. 50 crore was provided in the budget for 2001-02 to Rural Electrification Corporation as equity. The amount was utilised by REC

to finance rural electrification schemes. There is an allocation of Rs. 600 crore in the budget for 2002-03 for rural electrification which includes provision for REC and loans to States for rural electrification under MNP. Moreover, the Budgetry support to REC which was at Rs. 37 crore at BE and RE stage has been discontinued during 2002-03.

2.98 About the reasons for discontinuation of interest subsidy to REC, the Committee have been informed in a written note that the Government has approved a scheme for extending interest subsidy to REC for Tribal villages and Dalit Bastis during 1999-2000 and 2000-01. Since it was proposed to include village electrification under PMGY, whereby assistance would be available to Special Category States on 90% grant and 10% on loan basis and for other States on 30% grant and 70% on loan basis, the Group of Ministers recommended that it should not be necessary to continue the scheme of interest subsidy for tribal villages after 2000-01. Accordingly, interest subsidy has been discontinued.

2.99 Sanction & disbursement made by the REC during the last 3 years(1998-2001) are given as under:

					(	(Rs. in lakhs)
Programme	1998-99		1999-200	00	2000-200	1
	Sanc.	Disb.	Sanc.	Disb.	Sanc.	Disb.
Intensive	66419	63689	83718	60138	65918	43810
Electrification						
Pumpset	27941	24642	45822	32698	34180	31162
Energisation						
System	165226	66132	206987	87192	317626	122841
Improvement						
Others	8287	60869	131305	120368	213085	208000
Total	287873 2	15332 4	67820 300	396 630	809 40581	13

- 2.100 The Committee have been informed that Rural Electrification Programme are executed by the State Electricity Boards, Power Utilities and/ or Power Developments of the State Governments. The main sources of funding Rural Electrification Programme are as under:
  - (i) Rural Electrification Corporation
  - (ii) Plan allocations to the States
  - (iii) Funds support from Government as loan and grant
  - (iv) Institutional financing through Financial Institutions and Commercial Banks NABARD etc.
  - (v) Financial support from international financing agencies like OECF, JBIC and other.
- 2.101 Under Kutir Jyoti Programme, the targets set for different States are far below the achievement upto September, 2001. The Government has set up a Committee to review the existing guidelines of Kutir Jyoti Programme.
  - 2.102 In this connection, about the reasons for lower success of the programme in different States, the Government informed that it is the responsibility of the State Govts./SEBs to achieve the targets under Kutir Jyoti Programme. The States/SEBs have

been advised to utilize the grants under the scheme to accelerate the works with a view to achieving the overall objective of village electrification by 2007 and households by 2012. The Group of Ministers(GoM) on "Rural Electrification" in their meeting held on 8.2.2001 had reviewed the Kutir Jyoti Programme and recommended that the expenditure per household for rural households below poverty line should be enhanced. In the light of the discussions of GoM, the Ministry of Finance have since revised the cost of Electrification for rural households below poverty line under Kutir Jyoti Programme from the Rs. 1000 to Rs. 1800 in special category States and Rs. 1500 in other States. With the upward revision of the cost, it is expected that the utilisation of funds would be more effective.

- 2.103 Asked about the details of Central Schemes/projects, under ministry of Finance, MNES, Ministry of Power, CEA, REC, Welfare Ministry, Planning Commission, Ministry of Urban & Rural Development and State Plans, for Rural Electrification and the justification of having so many bodies for rural electrification, the Committee have been informed that there is a budget provision of Additional Central Assistance of Rs. 600 crore for REC and loans to States for rural electrification under MNP for 2002-03. In addition to this, funds to the extent of Rs. 2800 crore have been made available under Pradhan Mantri Gramodaya Yojana. Rural Electrification is one of the components of PMGY and funds to the extent of 10% would be available for rural electrification. The States have also the flexibility to utilise funds for rural electrification from the remaining 35% of funds.
- 2.104 The Finance Minister has announced in the budget speech for 2002-03 a new interest subsidy scheme called Accelerated Rural Electrification programme(AREP), under which an outlay of Rs. 163.87 crore has been provided for the year 2002-03. It is expected that with this flow of funds, the task of 100% village electrification by 2007 and electrification of households by 2012 would be achieved.
- 2.105 Asked about the basis of allocation of money, Secretary, Ministry of Power apprised the Committee as under:-

"There are 5,87,000 villages, out of which 5,07,000 villages have been electrified and 80,000 villages are left. These 80,000 villages are concentrated in 9 States, entire North-East, entire East, U.P. and little bit of Madya Pradesh. Rural Electrification Corporation is responsible for giving money to them. What happened, is earlier when the money was given this was not being repaid. REC being commercial body, it must get back money. We have had discussion with all the States. We have also told them to recycle the loan; if they cannot pay, they can re-use it. That also they are not able to do. This is why in PMGY we said that the money will not any more go from the REC but it will go straight from the Budget from the Finance Ministry. For the special category States 90 per cent goes as grant and 10 per cent as loan. For non-special category 30 per cent goes as grant and 70 per cent as loan. It is against projects. Projects have to come to us. Then we say that these projects are cleared and they can spend the money. The money required for 100 per cent Rural Electrification is Rs.10,000 crore.

2.106 The Committee observed that Rs.750 crore were earmarked from RIDF for rural electrification. NABARD sanctioned an amount of Rs. 226 crore for rural electrification. The schemes aggregating to Rs. 80 crore are under sanction. Asked about the details for which Rs. 226 crore were disbursed and the schemes under scrutinisation, the Committee have been informed in a note as under:-

"The details of the schemes for which Rs. 226.81 crore were disbursed under RIDF-VII to various States in respect of the power sector are as under:

(Rs. in lakhs)

- (a) Haryana
  - i) System Improvement

296.68 693.43

ii) System Improvementiii) System Improvement

1210.48

- (b) Arunachal Pradesh
  - i) Generation

3360.18

- (c) Karnataka
  - i) System Improvement

3512.22

ii) System Improvement

6474.36

- (d) Tamil Nadu
  - i) System Improvement 3441.83
- (e) Madhya Pradesh
  - i) Small Hydel Project 3771.27
- 2.107 As regards details of the schemes under scrutiny, the Ministry of Finance(Banking Division) have informed that the Government of Uttranchal and Orissa have submitted projects worth Rs. 80.723 crore to NABARD. NABARD are optimistic that the targets of Rs. 750 crore under RIDF-VII shall be achieved.
- 2.108 The Ministry of Power have also informed the Committee that REC has launched a scheme under which electrification of Dalit Bastis has to be undertaken by providing credit support to SEBs/Power Utilities/State Governments Enquired about the details of allocation and disbursement made for the purpose, the Government in a written note furnished to the Committee informed as under:

"The loan period and the interest rates structure for the new scheme launched by REC for electrification of Dalit Bastis is a under:

Category of Scheme	Period of Loan(Year)	Moratorium (Year)	Interest Rate (% age per annum)
P:DB	10	2	10% (with default escrow) 10.5 % (without default escrow)

The Corporation has not yet received any proposal under this new Scheme from the State Power Utilities. The State Governments/State Electricity Boards have been

advised to formulate schemes for electrification of Dalit Bastis under this scheme of REC."

## **Definition of village electrification**

- 2.109 Until October 1997, the definition of village electrification followed by the Planning Commission and the Ministry of Power was as follows" "a village should be classified as electrified if electricity is being used within its revenue area for any purpose whatsoever". On the basis of this definition, a village was treated as electrified if even a single connection was given for any purpose such as irrigation pump, street light or lights in a shop., One consequence of this was that in a large number of villages, electricity was provided for irrigation pumps located in the fields and the whole village declared as classified even if the lines did not come into the inhabited part of the village. In October, 1997, the Ministry of Power notified a new definition of village electrification as follows: A village will be deemed to be electrified if electricity is used in the inhabited locality within the revenue boundary of the village for any purpose whatsoever". While this definition is an improvement over the old definition, it still did not specify a minimum coverage of the households.
- 2.110When the question of electrifying a large number of villages through non-conventional energy sources came up. Ministry of Non-Conventional Energy Sources had to resolve the issue of definition of village electrification first. This was because of the very nature of electricity generation and supply based on renewable energy sources particularly solar energy. The Most common method of decentralized rural electrification the world over is through the installation of individual solar home systems which would provide power for lighting and other requirements such as fan and TV. It was not considered desirable to install such systems only in one or two households in a village and declare the entire village as electrified. The Ministry of Non-Conventional Energy Sources therefore came up with the following definition for villages to be electrified by non-conventional energy sources: "A village is deemed as electrified if at least 60% of the households are provided with lighting". This definition implied that when a village is electrified, a clear majority of the households would have the benefits of electricity, thus reversing the national situation in electrified rural areas.
- 2.111 The Committee have also been informed that only 13 of the 28 States have so far revised the statistics pertaining to rural electrification based on the 1997 definition. It is possible that after revision of the statistics all over the country, the number of unelectrified villages may go up. The number of remote villages may also change based on more accurate surveys.

### **Action Plan for electrification for remote villages**

2.112 Towards the end of 2000-2001, the Ministry of Non-Conventional Energy Sources was asked to take up the responsibility for the electrification of the remote villages in the country using non-conventional energy sources. The Planning Commission made an allocation of Rs.20 crore for this purpose in the Annual Plan of Ministry of Non-Conventional Energy Sources for 2001-2002. Prior to this, the Ministry did not have a separate allocation for village electrification, although a number of villages and hamlets were electrified under the Ministry's programmes relating to solar energy, biomass and small hydro power. Further, the Ministry had not enforced the definition relating to 60% household coverage earlier.

## List of unelectrified remote villages

- 2.113 During the last one years, the Ministry of Non-Conventional Energy Sources reportedly held consultations with State renewable energy agencies, manufacturers and NGOs and prepared an action plan for the electrification of 18,000 remote villages. Two important requirements for implementing such a plan were the identification of remote villages and putting in place appropriate financial arrangements. The Ministry of Power had undertaken to compile the list of all unelectrified villages including remote villages. The task was projected to be completed by the end of March, 2001 but is reportedly taking more time, particularly on account of revisions required due to the change in the definition of unelectrified village. The updated and State-wise figures of unelectrified villages, including remote villages is still not available. The Ministry of Power is continuing its efforts to compile the list.
- 2.114 On the financial side, the Committee have been informed that, considering the backward nature of the remote areas and the poverty conditions prevailing in major States such as U.P., Bihar, Orissa and Assam, the villages electrification programme in these areas will required to be supported through special financial te5rms. The Ministry accordingly proposed that 90% of the cost should be met by grant from the Central Government and the balance 10% to be met by the State Government or by the beneficiaries by way of loan to the users. This proposal was included in the overall action plan for 100% village electrification being prepared by the Ministry of Power for Government approval. Due to unforeseen delays in mobilizing additional financial resources for the programme, the Ministry of Power has not yet sought approval of the government for the overall programme.
- 2.115 The Ministry of Non-Conventional Energy Sources, however reported to have not waited for the above issues of list of unelectrified remote villages and funding pattern issues to be fully resolved to start the implementation of the programme. The Ministry took the following approach:
  - (i) All State renewable energy agencies were asked to prepare and send proposals for the electrification of remote villages in their respective States to Ministry of Non-Conventional Energy Sources for funding, even if the complete list of such villages was not available.
  - (ii) As a pilot activity, a survey to determine the unelectrified remote villages was supported in three States (Rajasthan, Chattisgarh and Orissa).
  - (iii) The Ministry decided to sanction financial assistance to projects using the norms of its existing schemes relating to biomass, solar energy and small hydro power.
- 2.116 The implementation arrangements taken up by Ministry of Non-Conventional Energy Sources in this regard are:-
  - (i) Electrification of villages through State renewable energy agencies / electricity boards / power departments / corporate entities set up by the Central or State Governments.

- (ii) Implementation of projects by non-Government organization, panchayati raj institutions, cooperative societies and similar non-profit bodies.
- (iii) Giving a concession or licence for electrification of a village or a cluster of villages to a corporate body or entrepreneur who will bring a part of the investment and operate the project on a commercial basis.

In all cases, arrangements will be required to be made for long-term maintenance and servicing as well as collection of monthly charges and other dues from users.

## **Coordination with the Ministry of Power**

- 2.117 The Committee observe that the Ministry of Power is responsible for the overall rural electrification in the country. The Ministry provides grants and other support to the Rural Electrification Corporation which in turn finances rural electrification projects in various States. The Central Electricity Authority under the Ministry of Power complies the statistics pertaining to village electrification and energisation of pumps sets on a monthly basis from States and Union Territories. The Ministry of Power has prepared a plan for achieving 100% village electrification in a time bound manner. As Ministry of Non-Conventional Energy Sources is implementing a part of the electrification programme, it is natural for it to interact closely with the Ministry of Power. As brought above, the Ministry has been interacting with the Ministry of Power on issues such as definition of electrified village, identification on unelectrified villages and financing arrangements. Though there was some delay in resolving certain matters by the Ministry of Power, Ministry of Non-Conventional Energy Sources has not allowed this to stall its programme. The Ministry has gone ahead with the implementation within its mandate even while maintaining full coordination with the Ministry of Power.
  - 2.118 The Committee observe that funds from different programmes are mobilized and made available to the States and agencies undertaking rural electrification through conventional as well as non-conventional energy sources. The allocation made by the Planning Commission for the year 2002-2003 is said to be adequate to meet the share of Ministry of Non-Conventional Energy Sources of the cost of the programme for the present. The Ministry is making efforts through State agencies to mobilize additional resources, including MPLAD funds. The Ministry of has also clarified to State Governments that funds under the PMGY can also be utilized for electrification through non-conventional energy sources.
  - 2.119 The Committee have been informed that at present 5 villages are electrified in State of Uttar Pradesh on the recommendations made by the local MLA whereas no such provision has been made by the Member of Parliament whereas grant to State Government for rural electrification are made by the Central Government / Rural Electrification Corporation.
- 2.120 The Committee are constrained to note that although funds for rural electrification are being made available to SEBs/ implementing agencies through

Ministries like Finance, Non-Conventional Energy schemes under various Sources, Tribal Affairs & Rural Development, etc. the targets set for rural electrification have never been achieved during the last 3 years. The Committee take a strong note of the fact that despite their repeated recommendations for disbursement of funds for rural electrification schemes, the funds released during 1999-2000 and 2000-2001 for intensive electrification were amounted to only Rs. 601.38 crore and Rs. 438.10 crore against the sanctioned funds of Rs. 837.72 crore and 659.18 crore respectively. Similarly, the fund disbursements energisation and system improvement were also much below the sanctioned funds during 1999-2000 and 2000-2001. The Committee also observe that under Kutir Jyoti Programme, the targets set for different States are far below the achievement upto September, 2001 except for the state of Tamil Nadu. The Ministry of Power have informed the Committee that rural electrification programme are executed by State Electricity Boards, power utilities and power department of the State In the absence of any explanations the Committee failed to Government. understand why the sanctioned funds could not be disbursed during a particular The Committee would like to know the status of implementation of all RE schemes, including Kutir Jyoti Programme, during 2001-02. The Committee would, therefore, like the Government/REC to take necessary steps so that the schemes planned in any particular year for which funds have been earmarked should be implemented and funds disbursed thereon. The Committee would like to know the action taken by the Government in this regard.

- 2.121 The Committee are perturbed note the multiplicity of fund disbursing authorities for rural electrification programmes. As at present the funds are sanctioned and disbursed by different Ministries/organsiations, the Committee are of the opinion that there is a need to set up a common planning, and monitoring authority to ensure paper and optimal utilisation of funds.
- 2.122 The Committee further observe that the Group of Ministers have revised the cost of electrification for rural household, BPL under Kutir Jyoti Programme from Rs. 1000 crore to Rs. 1800 crore in special category States and Rs. 1500 crore in other States. Although, the Government have expected more effective utilization of funds by this upward revision, the Committee are not convinced that this upward revision will really improve upon electrification programmes under Kutir Jyoti The Committee would also like to know the utilisation and Programme. achievements of 10% of funds available for rural electrification under PMGY since its inception. The Committee note that a new intent subsidy scheme called AREP has been launched with an outlay of Rs. 163.87 crore during 2002-03 to achieve 100% village electrification by 2007 and electrification of households by 2012. However, in view of the SEBs/State Government reluctance to utilise funds for RE programme in view of their bring un-remunerative, the earmarked Committee would like to know the steps taken by the Government to ensure completion of village and household electrification by 2007 and 2012 as planned. The Committee would also like to know the target of Rs. 750 crore earmarked from RIDF for rural electrification.

- 2.123 The Committee are dismayed to note that proposal has been received under a new REC scheme for electrification of Dalit Bastis by providing credit support to SEBs/Power Utilities/State Governments. The Committee would like to know the outcome of the State Governments/State Electricity Boards who have been advised to formulate schemes for electrification of Dalit Bastis under this scheme of REC.
- 2.124 The Committee have noted that 3 models have been proposed for electrification of villages under the Rural Electrification Programme. This includes (a) electrification of villages through renewable energy agencies/Electricity **Departments/corporate** Union **Boards/Power** entities set up by the Government/State Governments; (b) implementation of project by non-Government organizations, panchyati raj institutions, cooperative societies and similar nonprofit bodies and (c) giving concession or licence for electrification of village or cluster of villages to a corporate body or entrepreneur who will bring a part of investment and operate the project on commercial basis. The Committee have further noted in all the cases arrangement is required to be made for long-term maintenance and servicing as well as collection of monthly charges and other dues form the users. The Committee desire that for the promotion of intensive rural electrification, corporate houses should be given some incentives in the form of exemption in taxation, etc.
- 2.125 The Committee have noted that till as late as October, 1997 the definition of a village electrification as followed by the Government was 'a village should be classified as electrified if electricity is being used within its revenue area for any purpose whatsoever'. In October, 1997 the definition was changed as follow 'a village will be deemed to be electrified if the electricity is used in the inhabited locality within the revenue boundary of the village for any purpose whatsoever'. The Committee further note that the definition of village electrification as adopted by the Ministry of Non-Conventional Energy Source provide that a village is deemed to be electrified if at least 60% of the household are provided with lighting. The Committee are of the view that although the definition pronounced in 1997 by the Ministry of Power is an improvement over the old definition, but it still did not specify a minimum coverage of the households. The Committee have further noted that only 13 of the 28 States have so far revised the statistics pertaining to rural electrification based on October, 1997 definition. Presumably, after the revision of the statistics all over the country, the number of non-electrified villages, which at present stands 80,000 may go up. Similarly, the number of remote villages may also change based on more accurate survey. The Committee recommend that a uniform definition be practised and adopted by all the arms of the Government, including the Ministry of Power. At the same time, the Committee desire that the Ministry of Power should impress upon the States to update their statistics based on the October, 1997 definition. The Committee may be apprised of the action taken by the Government in this regard. The Committee would also like to be apprised of the number of villages electrified taking into consideration the definition practised and adopted by Ministry of Non-Conventional Energy Sources.

- 2.126 The Committee have noted that the Prime Minister had announced a special package for socio-economic development of the North-Eastern States during January, 2000. In pursuance of the PM's special package, electrification of 500 tribal villages was to be undertaken. Out of 500 villages the electrification of 165 villages was to be undertaken in phase-I and remaining 335 villages in phase-II. CEA was entrusted with formulation of village electrification schemes. Committee are concerned to note inordinate delay in the formulation and approval of village electrification scheme by CEA. As a result of such delays as against 165 tribal villages to be electrified by March, 2002 only 45 villages could be electrified. The Committee do not approve of the casual approach of the Ministry of Power and the Planning Commission in undertaking schemes of such a vital importance for North-Eastern region. The Committee have been informed that the scheme of electrification of tribal villages has new been merged with Pradhan Mantri Gram Udyog Yojana and the funds would be released from this body. The Committee would like to emphasise that the Government should undertake the electrification of the remaining villages on a war-footing and complete the task in a time-bound manner. The Committee would like to be apprised of the action taken by the Government in this regard.
- 2.127 The Committee note that in terms of Action Plan initiated for electrification of remote villages, it was proposed to fund 90% of the cost for electrification by way of grant by the Union Government and balance 10% as contribution by the beneficiary State Governments by way of loan to the users. This proposal was formulated taking into consideration the backwardness of remote areas and conditions of poverty prevailing in major States such as Uttar Pradesh, Bihar, Orissa and Assam. The Committee are at loss to understand the inordinate delay in obtaining the approval by the Ministry of Power from the Union Government. The Committee do not approve of the action of the Government in this regard. The Committee desire that the Ministry of Power should seek the approval of the Union Government without any further delay so that rural electrification programmes could be undertaken in the remote areas.
- 2.128 The Committee are concerned to note that the task of identification of 80,000 villages assigned to the Ministry of Power has not been fulfilled by Central Electricity Authority. The Committee wonder as to how the Government will undertake the rural electrification work, in the absence of such a list. The Committee desire that the Ministry of Power should identify such unelectrified village and furnish a list so that the various agencies entrusted with rural electrification can commence their work without any loss of time.
- 2.129 The Committee find that the with the passage of time, some electrified villages, specially in Bihar have been de-electrified. The Committee would like to be apprised of the reasons for such de-electrification, the loss, incurred thereon and follow-up action taken to electrify the de-electrified villages, State-wise.

2.130 The Committee find that in some of the States, notably U.P. an MLA is entitled to sponsor some villages for electrification every year. In the opinion of the Committee, public representative should be allowed, to sponsor social and economic schemes, including village electrification. The Committee, therefore, recommend that a Member of Parliament should also be allowed to propose certain number of villages for electrification. The Committee also desire that 90% of the project cost should be borne by Central Government in the form of grant and the remaining 10% met by the State Governments or sourced from MPLADs or other similar funds. The Committee are of the view that such a mechanism will improve the intensity and coverage of village electrification to a large extent and may ensure 100% village electrification by 2007.

## I. Technical Examination and Coordination by CEA

2.131 The Central Electricity Authority is a statutory body which inter-alia is responsible for techno-economic appraisal of the power development schemes of the State/Central sector and private sector. Every scheme of an Electricity Board or Generating Company estimated to involve a capital expenditure exceeding such sum, as may be fixed by the Central Government from time to time, by notification in the official Gazette is required to be submitted to the Central Electricity Authority for its concurrence as per provisions of Sector 29(1) of Electricity (Supply) Act, 1948. All hydro- electric schemes utilising water of inter-state rivers shall be submitted to the Authority for its concurrence. In the case of licensees, as captive power plants, the projects with an installed capacity exceeding 25 MW are required to be submitted by the State Electricity Boards to CEA for its consultation as required under Section 44 of the Electricity (Supply) Act, 1948.

2.132 The Plan and non-plan budgetry allocation for CEA under Major Heads 2801 and 4801 during 2001-02 and 2002-03 are as under:-

(Rs. in crores)

								(110.	. 111 61 61 65
Major Head	Budge	et 2001-0	)2	Revi	sed 20	01-02	Budg	get 200	2-03
	Plan	N-Plan	Total	Plan	N-Plan	Total	Plan	N-Plan	Total
2801	13.04	34.92	47.96	9.01	35.53	44.54	40.24	35.15	75.39
4801	7.41		7.41	2.60		2.60			75.39
Total	20.45	34.92	55.37	11.61	35.53	47.14	40.24	35.15	75.39

2.133 About the effective steps Ministry of Power have taken to ensure that projects are cleared expeditiously both by CEA & Ministry of Environment and Forests the Government in a note informed the Committee as under:-

In order to expedite the Techno-Economic Clearance(TEC) by Central Electricity Authority(CEA), revised procedure has been devised by CEA to accord TEC to the proposals within a period of 90 days after the receipt of completed Detailed Project Report(DPR). In this regard, it is to point out that there are a number of essential inputs/clearances required to be tied-up for accord of TEC by CEA to power projects.

2.134 Often it is found that the DPR submitted by the Project Authorities lack details required for proper examination and finalisation of the project features. DPRs lack proper surveys and investigation studies, hydrological data/studies, design details, proper power potential studies, proper evaluation of quantities of civil works, detailed cost estimates etc. The time taken for accord of Techno-Economic Clearance to power projects depends upon the completion of the DPR and tying-up of all the essential

inputs/clearances required for Techno-Economic Clearance by the project developers. The actual time taken for TEC may vary from project to project depending upon the quality of DPR and status of tying-up all essential clearances such as water availability, CWC clearance for water availability from inter-state angle, fuel availability and its transportation, NOC of State Pollution Control Board, NOC from Airports Authority of India for chimney height, MoE&F clearance from environmental/forest angle, rehabilitation/resettlement plan, if required, Defence clearance, if required, compliance of Section 29(2) of E(S) Act, 1948, Tentative Financial Package, Competent Government's recommendations on DPR and cost etc.(in case of private sector projects) and response received from project developers. CEA impresses upon the project authorities, SEBs and State Governments from time to time to improve the quality of DPRs and prepare the same from the guidelines circulated by CEA and get all the essential inputs/clearances tied-up at the earliest in order to enable CEA to accord TEC at the earliest.

- 2.135 During the course of examination when deficiencies involving data/investigation etc. are found, back references are made to the project authorities for obtaining complete information and compliance normally takes time. In case the DPRs of projects are prepared as per the guidelines and various queries/clarifications raised are replied promptly by the project authorities, a scheme is accorded TEC promptly by CEA. In this regard, it is to mention that as on date 40 numbers aggregating to 20926 MW CEA cleared projects in State/Central Sector are awaiting investment decision. Similarly, in private sector 36 numbers aggregating to about 21473 MW CEA cleared projects are yet to achieve financial closure and start construction.
- 2.136 Although the Ministry of Power have informed the Committee that CEA, as on date, has accorded TEC to 58 Nos. Power Generation projects(aggregating to 29614.5 MW) in private sector which includes 6 Nos. Hydro projects(aggregating to 1586 MW) and 52 Nos. Thermal projects(28028.5 MW) the Committee observe that the even the projects received in CEA during 1992, 1993 such as Bagpa HE Projectroject St-II......etc. have yet to achieve financial closure.
- 2.137 On being asked whether Authority like CEA which use control over Technoeconomic appraisal of power projects exist, in countries other than India, the Government informed the Committee that at the time of independence of India, there was a need for provision of coordinated development of Electricity. Like in other matters, the legislation similar to already prevalent in UK was inherited on the broad lines from UK which was more relevant to their Electricity(Supply) Act, 1926, in force. On similar lines, but suiting to the Indian environment, the Electricity(Supply) Bill, 1948 was introduced in the Central legislature as a specific legislation to facilitate the establishment of regional coordination in the development of electricity transcending the geographical limits of local bodies. The function of appraisal of various schemes pertaining to power sector is conferred from Section 29(1) of the Electricity(Supply) Act, 1948 under which every scheme estimated to involve a capital expenditure exceeding such sums, as may be fixed by Central Government from time to time by notification in official Gazette, shall, as soon as may be, after it is prepared, be submitted to the Central Electricity Authority for its concurrence.
- 2.138 The Ministry of Power have further stated that since CEA as an impartial body which has no commercial interest as an organisation of the Central Government, it has been appraising various projects and has been able to reduce the costs after discussions in the techno-economic appraisal body with the private players. The techno-economic appraisal body of CEA comprises of specialists from different specialities like thermal,

hydro transmission, distribution, economic and commerce, planning, power system and grid operation etc. As a result of comprehensive discussions CEA in its techno-economic appraisal meetings, has been able to do justice with the estimated cost projected by private players. It has been found in practice that in most of the cases the inflated costs have been dampened to the level of justified costs.

2.139 The Committee also note that compared to advanced countries where the power sector has been privatised, in India the power generation, transmission and distribution is still owned and operated by Government utilities. Even in 1991, when the power sector was opened to private sector, the process was initiated in generation only and the transmission and distribution still rested with state utilities. It is seen that only 15 Nos. of CEA cleared private sector projects aggregating to about 4428MW have been commissioned over a period of 10 years beginning from 1991. Private Sector participation in power development so far has not been encouraging. Consequently the Central and State utilities are likely to be assigned major role in capacity addition during 10<sup>th</sup> and 11<sup>th</sup> Plans.

2.140 The Committee have noted that the Central Electricity Authority (CEA) have suitably revised their procedure for according techno-economic clearance to thermal and hydel projects, whereby, time of appraisal has been reduced to 90 days after the receipt of a completed Detailed Project Report (DPR). The Committee have noted that major public sector organizations such as National Thermal Power Corporation (NTPC) and National Hydel Power Corporation (NHPC) have expressed their reservations and concern for the inordinate delay in according approval to power projects. In the opinion of these organisations, even the recast procedure may not yield the desired result. The Committee desire that CEA should further recast their appraisal system taking into consideration the views of NHPC and NTPC. The Committee are not in agreement with the contention of CEA that projects are now apprised by CEA within 90 days of receipt of DPR. For instance, Transmission System associated with Ramagundam Stage-II Proeict was cleared after 10 months of the of receipt of modified project report. The Barh Super Thermal Power Project in Bihar of NTPC was cleared after 15 months. Similarly, projects like Maneri Bhali Stage -II, Pragati CCPP (DVB) Power Projects were cleared after one and a half years and Ramgarh TPS II Power Project was cleared after more than 2 years of the receipt of completed DPR. The Committee feel that CEA have abdicated their responsibility enshrined under Section 3 of the Electricity Supply Act, 1948 which inter-alia cast a duty on CEA to promote and assist in the timely completion of power schemes sanctioned under the provisions of this Act. Under Section 31,CEA has been empowered to modify the scheme, in such manner, so as to ensure that the scheme conforms to national power policy. In the opinion of the Committee, the role of CEA should be facilitator and guide the prospective promoter. Secondly, the activities of CEA is hampering the development of power projects. It has been brought to the notice of the Committee that while appraising a project, CEA raise objections in piecemeal and not in one go, thereby delaying the clearance of the project, inordinately. The Committee feel that there is a need to have a fresh look at the role to be played by CEA in the changed economic scenario. The Committee desire that on submission of a DPR to CEA, by any public or private body, CEA should examine it and objections if any should be raised in one go. Thereafter, on meeting those objections, clearance should be given within three months.

# J. Survey & Investigation

- 2.141 The pre-requisite for planned development in the electricity sector is the realistic forecasting of power demands. This is also a necessary input to take timely investment decisions for the power sector. Electricity requirement for drawing up power programmes are being assessed by carrying out periodic demand forecast by Power Survey Directorate of Load Forecasting Division of Central Electricity Authority.
- 2.142 The financial requirement of Survey and Investigation Programme of the Ministry of Power for 2002-2003 as also the actuals of 2000-2001, Budget Estimates and Revised Estimates of 2001-2002 are given below:-

(Rs. in Lakh)

Ac	ctuals 20 2001	000-		lget Esti 2001-20			sed Esti 2001-200		Bud	lget Estim 2002-03	ates
Pla	N-	Tota	Pla	N-	Total	Plan	N-	Total	Plan	N-Plan	Total
n	Plan	1	n	Plan			Plan				
0.0	95.4	95.4	0.0	100.1	100.1	28.5	105.5	134.0	1757.0	105.83	1862.8
0	4	4	0	0	0	0	5	5	0		3

- 2.143 Asked about the projects targeted to be completed under Survey & Investigation by utilization of a sum of Rs.17.57 crore during 2002-2003, the Committee have been informed in a written note that out of a total budget allocation of Rs.17.57 crore for the year 2002-2003 for Survey and Investigation (S&I) an amount of Rs.16.9 crore is for the combined schemes "Review of Hydro Electric Potential and Detailed Ranking Study of Balance HE projects". The Survey and Investigation (S&I) of HE projects is being carried out by concerned State authorities, CPSU, and other organizations like CWC and Brahamaputra Board, etc, necessary assistance / guidance on S&I and preparation of project report of the projects is being rendered by CEA. The assessment of hydroelectric potentials of the rivers basin and review of specific projects in the context of over all development of potential are done by CEA. A scheme for study of Review of HE potentials and Detailed Ranking Studies to be carried out for which allocation of Rs.16.9 crore has been made by CEA.
- 2.144 According to the Ministry of Power, the results of Review of HE potentials would provide the most realistic Parameters of Major and medium HE projects and Pumped Storage schemes in all the six river basins of the country. The review of HE potential would include Basin wise reports of HE potentials including Pumped Storage Schemes (PSS) in the country in the association with SEBs / Power Departments. The study would result in updating of the HE potentials of all existing, ongoing and proposed Major / Medium HE schemes, PSS. The studies would also consider benefits of emerging technological advancements in the field of S&I , civil constructions, electrical / mechanical equipment and erecting methodology. The review studies would be carried out by making use of updated hydrological, topographical and water utilization data, and by the interaction with the State authorities and other organizations like NWDA and Brahmaputra Board. The result of studies would provide realistic estimate of the potential based on available data and serve as guide for development of HE projects by the authorities / CPSUs and other organizations.

- 2.145 The Committee have been further informed that the detailed ranking studies are proposed to be carried by CEA in association with other organizations like CWC, GSI, MoEF, SOI and NRSA. The studies will cover preliminary cost estimates, assessment from Environment and Forest aspects and tentative tariff etc. The services of consultants is also proposed to be availed in formulation of tentative estimates, initial environmental ranking and digitization of layout maps, etc., The detailed ranking studies are to be carried out for about a balance 400 HE potential sites with likely installed capacity of about one lakh MW which are yet to be developed and are located in all six river systems of the country. The results of the studies would provide inter-se priority among the schemes depending on their attractiveness. The studies would facilitate State authorities / CPSUs to take up S&I / DPR formulation of these schemes in a phased manner. The proposals for review of HE potentials and ranking studies as submitted to Ministry of Power were discussed in the Planning Commission for allocation of funds for the 10<sup>th</sup> Five Year Plan and annual Plan 2002-2003. An allocation of Rs.16.9 crore has been made for the year 2002-2003, for the combined schemes.
- 2.146 Asked about the mechanism exist to verify the data generated by S&I teams, the Ministry of Power informed the Committee that a well established scientific mechanism exists in RPSOs which is adopted to collect data region-wise, State-wise, Utility/organization-wise, consumption/category-wise and in respect of consumers having load of 1 MW and above through a logically devised proforma. The data received is examined in RPSOs and steps are taken to eliminate any shortcomings and anomalies. The other important checks being performed by the RPSOs are listed below: -
  - To conduct field survey on power demand growth to update the data base on a continuing basis.
  - To conduct sample surveys of Urban, Semi-Urban and Rural areas with a view to ascertain the variation in levels of specific consumption in the Residential (Domestic) and Commercial sectors. To conduct intensive survey of core sector industries to study the effect of adoption of technological changes, methods of energy conservation and modernization, etc., on the norms of electricity consumption.
  - To conduct sample survey to ascertain the actual level of consumption, working hours and average capacity of pumpsets in the States where extensive agricultural activity is taking place.
  - To identify and test collateral parameters for economic models for demand forecasting.
- 2.147 The updated final data on periodic basis is supplied by RPSOs to CEA Headquarters where the same is once again scrutinized for its correctness and trends and given shape of usable input to bring out Power Survey Reports using the partial end use method which is a combination of Trend & End use method. The All-India results obtained from this method is cross-checked for by Econometrics method also. It is observed that the variation between the 16<sup>th</sup> EPS projections and the unrestricted requirement worked out by CEA separately in connection with the preparation of LGB Reports are marginal (-) 3% to (+).4% for first 3 years of the forecast i.e. 1999-2000, 2000-2001 and 2001-2002.

- 2.148 Presently, S&I and preparation of detailed project report of hydro projects are required to be carried out by various utilities as per "Guidelines for preparation of DPRs of irrigation and multipurpose projects" issued by Ministry of Irrigation in 1980. DPRs for hydro projects prepared by various concerned utilities and submitted to CEA for techno-economic approval, besides getting examined in CEA, are also examined by a CWC from hydrological, design, safety and cost estimates of civil structures aspects. DPRs are also got examined by Central Soil and Material Research Station (CSMRS) from constructions materials aspects. All the DPRs are now being examined by Geological Survey of India (GSI) from geological aspects.
- 2.149 The transmission projects traverse length and breadth of the country. Preliminary survey is initially carried out to identify the route alignment. The survey also tried to identify length of line traversing through forest area and efforts are made to minimize the traverse through forest area while arriving at the final alignment. Based on preliminary survey, cost estimate is done, and scheme is formulated for obtaining investment approval. After the investment approval, details of S&I are done at the time of starting the project implementation. Detailed S&I are comprehensive and deviation are minimal. However, some time the transmission scheme go hay-wire on account of need of matching the transmission with the generation projects, particularly of Hydro schemes where the generation projects get delayed inordinately due to various reasons.
- 2.150 Many of the proposals for thermal power projects being received in CEA generally lack in proper site investigations and tie-up of basic inputs like land, water, fuel, fuel transportation, environment & forest clearance, civil aviation clearance, interstate aspects on water availability, etc. The sites are being identified without detailed techno-economic studies. This results in delay in appraisal of the proposals by CEA.
- 2.151 A site selection Committee has been set-up by CEA in September, 2001 under the Chairmanship of Member (T) and consisting of members from different Ministries / Department / SEBS / CPSU, etc., for selection of sites for large coastal / pit-head and other thermal power stations for meeting the power requirement in the country upto the year 2012 and beyond. In a meeting held in Ministry of Power on 19.09.2001 regarding preparation of shelf of power projects, it was felt that a one time Committee will not suffice and what is required is a Committee which can constantly identify the locations keeping the ground conditions in view. It was accordingly decided that a Standing Committee with representatives from various agencies with statutory functions will identify the locations and its recommendations should be treated as first stage clearance. It was also decided that CEA should bring out a report identifying locations of sites every six months. Accordingly CEA has formulated the proposal for Standing Committee as a plan scheme.
- 2.152 The outcome will be in the form of shelf of properly investigated, feasible and optimal sites for thermal power projects, which will in turn facilitate formulation of effective five year plants to meet the power requirement in the country. This will also help State Governments in offering well investigated and optimal sites to private developers / State and Central Power Generating Companies with the result that there will be faster appraisal of the projects by appraising agencies like CEA, Financial Institutions as well as faster implementation.

- 2.153 The Committee note that the Government have increased Non-Plan budget from Rs.100.10 lakh to Rs.105.55 lakh during 2001-2002. Plan expenditure has been raised to Rs.28.50 lakh from NIL during the year 2001-2002. During 2002-2003, the plan expenditure has been increased to Rs. 17.57 crore. Although the Committee have been informed that the Survey and Investigation (S&I) of Hydro-Electric projects in the country have failed to come up with the desired results in spite of the assessment of hydroelectric potentials of the river basins and review of specific projects in the context of over all development of potential are done by CEA. It is only now that a scheme for the review of HE potentials and Detailed Ranking studies with an allocation of Rs. 16.9 crore has been proposed to be carried out by CEA during 2002-03. The Committee are constrained to note that detailed ranking studies for about a 400 Hydro-Electric potential with likely installed capacity of 1 lakh MW are yet to be carried out. The Committee would therefore recommend the Government to complete the detailed ranking studies of remaining HE projects in association with organisations like, Central Water Commission, Geological Survey of India, Ministry of Environment & Forests, Survey of India, National Remote Sensing Agency, etc. in a time bound manner and the Committee be apprised of the action plan of the Government in this regard.
- 2.154 Regarding mechanism to verify the data generated by S&I team, the Committee note that RPSOs collect data region-wise, State-wise, Utility organization-wise, consumption/category-wise respect of consumers having load of 1 MW and above. Although, the Government have stated that enough safeguards such as conducting field survey on power demand growth, intensive survey on methods of energy conservation and modernisation, etc., are in place sample surveys to ascertain actual level of consumption economic models for demand forecasting are performed by RPSOs followed by scrutiny by CEA Headquarters, the Committee feel the Survey and Investigation system by RPSOs need to be conducted more scientifically so that generation and transmission targets do not go hay-wire.
- 2.155 Further, in regard to the preparation of detailed project reports of hydro projects and S&I of Hydro projects the Committee are distressed to note that presently, S&I and preparation of detailed project report of hydro projects are required to be carried out by various utilities as per "Guidelines for preparation of DPRs of irrigation and multipurpose projects" issued by Ministry of Irrigation in 1980. The Committee are further perturbed to note the involvement of various agencies/organisations at different stages for approval of DPRs which at present are submitted to CEA for techno-economic approval, to CWC for hydrological, design, safety and cost estimates of civil structures aspects. DPRs are also got examined by Central Soil and Material Research Station (CSMRS) from constructions materials aspects. All the DPRs are now being examined by Geological Survey of India (GSI) from geological aspects. The Committee urge the Government to setup a Standing Committee for Hydel Project also similar to that created in CEA in September, 2001 for creating a shelf of properly investigated, feasible and optimal sites for thermal power projects, which will in turn facilitate formulation of effective five year plans to meet the power requirement in the country. The Committee would also like to know as to how frequently the present body Committee have held meetings since its formulation and the projects that have been examined/cleared by it for the 10<sup>th</sup> & 11<sup>th</sup> Plan periods.

# **K.** National Thermal Power Corporation (NTPC)

2.156 The Committee have observed that IEBR component for the year 2001-02 for NTPC could not be achieved. In this regard, the Government have stated that the Internal Resources and Extra Budgetary Support (IEBR) of Rs. 3006 crore for 2001-02 at BE stage was based on the Capital Expenditure outlay. It was envisaged that the outlay of Rs. 3006 crore would be funded with IEBR only. No Budgetary support from Government was envisaged for the year 2001-02. The outlay at RE stage was revised to Rs. 2880 crore, based on the anticipated capital expenditure both on the projects taken up and to be taken up. The IEBR also thus got revised to Rs. 2880 crore at RE stage. There was also not envisaged any budgetary support from Government of India in RE 2001-02. The downward revision both in outlay of capital expenditure and the IEBR to finance it is thus as per the progress of the connected activities of the On-going and the New Projects and not due to any other reasons. NTPC had necessary capability to raise debt for the The BE 2001-02 outlay of Rs. 3006 crore included a provision for its forthcoming new project viz. Sipat-I of Rs. 434. 16 crore towards initial advance for Main Plant Package and other infrastructure activities. Since accordance of Mega status to the project was available on 02-01-2002, the provision has been revised downwards to Rs. 45.96 crore in RE 2001-02. The above revision is partly compensated due to updation of outlay of on-going projects commensurate with the physical progress. The approved outlay of IX Plan was Rs. 15655 crore as against which the actual expenditure of Rs. 12893 crore is anticipated including the RE 2001-02 of Rs. 2880 crore.

2.157 Asked About the Government's optimism to achieve the targets of Rs. 3338.37 crore of IEBR during 2002-03 against the RE of Rs. 2880 crore during 2001-02, the Committee in a note furnished by the Government have been informed as under:-

"NTPC has planned a capacity addition of 9160 MW in X plan and 10810 MW in XI Plan period. All the projects are proposed to be financed in the Debt Equity ratio of 70: 30. The Debt raising is possible with Equity component coming either from internally generated resources or by way of Equity share capital from Government of India by way of Net Budgetary Support. The implementation of projects planned for commissioning in the X & XI Plan have to commence progressively from the year 2002-03, being the 1<sup>st</sup> year of the X Plan. During 2002-03, NTPC envisages to commence the implementation of four new projects viz. Koldam Hydro Project (800 MW), Sipat-I (980 MW), Barh (1980 MW) and Kahalgaon II (1320 MW). Thus, outlay proposed by NTPC for 2002-03 is commensurate with the project implementation schedule and physical progress anticipated to be achieved.

# 2.158 The proposed IEBR of NTPC for 2002-03 is as under:-

(Rs. in crore)

Particulars	Amount
Internal Resources	913.37
Debt(Domestic & Foreign)	2425.00

The profitability projections (based on CERC's revised tariff norms) indicate the availability of Internal Resources to the tune of Rs. 913.37 crore in BE 2002-03. A sum of Rs. 167.63 crore also has been sought by way of Equity share capital contribution from Government of India for the New Projects to be taken up, the work on which would begin in 2002-03. As regards the debt component of Rs.

2425.00 crore is concerned, NTPC has tied up loans of over Rs. 6000 crore from domestic Banks and FIs out of which drawl of Rs. 1630 crore shall be made. Further Rs. 270 crore shall be available from tied up loan of JBIC Tranche II and III, (Tranche-III has already been committed by JBIC). Balance amount of Rs. 525 crore which is not yet committed is proposed to be raised by way of External Commercial borrowings".

2.159 Asked to furnish the details of NTPC projects scheduled for commissioning during 8<sup>th</sup> & 9<sup>th</sup> plans which slipped into subsequent plans and the reasons for time and cost overruns of such projects the Government have informed, the Committee as under:-

"The capacity addition target for VIII Plan was fixed at 5002 MW as against which NTPC added 5462 MW including a capacity of 460 MW by taking over TTPS station from GRIDCO. The approved outlay of VIII Plan was Rs. 9982 core as against which an utilization of Rs. 10139 crore was achieved.

2.160 During 9<sup>th</sup> plan NTPC against target of capacity addition of 5300 MW, capacity addition of only 2700 MW been achieved. The capacity addition of NTPC during IX Plan was further raised to 3140 MW including 440 MW of Tanda TPS taken over from UPSEB. The shortfall of 2600 MW was on account of second stage expansion by 650 MW each of NTPC's gas based combined cycle power projects at Anta, Auraiya, Kawas & Gandhar; as per details given below:

## Sl.No. Project / Location

# Nominal Capacity(MW)

1.	Anta CCPP Stage-II, Rajasthan	650
2.	Auraiya CCPP Stage-II Uttar Pradesh	650
3.	Kawas CCPP Stage-II Gujarat	650
4.	Jhanor-Gandhar CCPP Stage-II, Gujarat	650

Expansion of NTPC's above Gas/ Naphtha based combined cycle power projects was envisaged based on Naphtha till Natural Gas / regassified Liquified Natural Gas Clearance was obtained accordingly. Due to increase in international prices of Naphtha /LNG resulting in increased estimated cost of power, NTPC (in October / November2000) had sought reconfirmation from beneficiaries for availing power from its gas based expansion projects listed above based on expected cost of generation and major beneficiaries had expressed their unwillingness to purchase power due to high cost of generation with LNG/Naphtha. These projects were accordingly rescheduled to XI Plan period and alternative / fall – back projects were identified for benefits during X Plan.

2.162 In view of the changing scenario in the LNG market and available time, the Committee have been informed that NTPC is now taking necessary action for sourcing of Liquefied Natural Gas (LNG) for expansion of its Combined Cycle Projects at Anta, Auraia, Kawas, Gandhar as well as at Kayamkulam (Kerala) through International Competitive Bidding (ICB) procedures as it is felt that ICB route will entail the cheapest gas. As a first step expression of interests have been invited from prospective suppliers of LNG and /or regassified LNG and /or Natural Gas as well as for regassification of LNG and transportation of regassified LNG. These projects would be taken up only after confirmation of LNG availability at reasonable/ firm prices in matching time frame / reasonable terms and confirmation from the concerned beneficiary States / UTs to take

power and sign Power Purchase Agreements backed up by adequate payment security mechanism.

2.163 Asked about the National Thermal Power Corporation (NTPC)'s ambitious plans for a capacity addition of 20,000 MW as the Centre has assured to give budgetary support of Rs. 23,000 crore by 2012 to compensate its annual lose of nearly Rs. 2,000 crore an account ABT, the Committee have been informed in a note as under:-

"Central Electricity Regulatory Commission (CERC) has issued orders relating to principles of tariff in December 2000, which are applicable from 1.4.2001. The elements of tariff which got affected by CERC orders are mainly Depreciation, O&M expense and Incentive / disincentive etc. These in turn have an adverse effect on the revenue generation and IR availability of NTPC. The shortfall in IR is expected to be of the order of over Rs. 21500 crore, during the period upto 2012, which is essentially on account of lower fixed cost recovery under the CERC norms vis-à-vis the Government notified tariff, leading to lower cash profits. The recovery of the fixed charges under the CERC norms shall be lower as under:

Particulars	Amount (Rs. in crore)
Depreciation	14,000
O&M Charges	5,000
Incentive / Disincentive	2,500
Total	21,500

In view of the above, the IR available to NTPC is sufficient only to meet the equity requirement of it's ongoing projects viz. Simhadri (1000 MW), Talcher-II (2000 MW), Rihand-II (1000 MW) and one new project viz. Koldam Hydro Project (800 MW).

NTPC has accordingly sought Net Budgetary Support to partly finance their new projects. Their request is under examination".

2.164 About the present position regarding Governments budgetary support to NTPC of Rs. 23,000 crore during next 10 years to compensate its annual loss of nearly 2,000 crore on account of ABT since the budgetary support for the year 2002-03 is only Rs. 167.63 crore that to only to support equity base, the Ministry of Power have informed the Committee that NTPC has sought Net Budgetary Support in the form of equity from Government of India to the tune of Rs. 26095 crore during the 10 years ending 2012. The capacity addition during X Plan period is proposed at 9160 MW. The new projects have to be taken up progressively starting from 2002-03 onwards in addition to the on-going projects of 4500 MW. The NBS of Rs. 167.63 crore is proposed for meeting the equity requirement for Sipat-I, Barh and Kahalgaon-II which are scheduled to commence in 2002-03. Ministry of Power has made an allocation of Rs. 167.63 crore in BE 2002-03 as under:-

Project	Amount (Rs in crore)
Sipat I	46.83
Barh	71.00
Kahalgaon-II	50.00
Total	167.63

- 2.165 In connection with the CERC orders, the Hon'ble Delhi High Court has give an interim order on March 7, 2001 for implementation of CERC orders in letter and spirit. Delhi High Court allowed NTPC to continue to charge tariff on pre-existing norms. However, the Supreme Court vide its order dt. 10.10.2001 on the SLP filed by PSEB and other SEBs has set aside the interim order dated 7.3.2001 of the Delhi High Court. GRIDCO, Power Grid and NTPC filed transfer petitions in Supreme Court requesting the transfer of all appeals pending pending before the Highs Courts of Delhi, Tamil Nadu, Andhra Pradesh, etc., to Supreme Court or to the Delhi High Court. Matter was heard on 14.12.2001 and Supreme Court has ordered for transfer of all appeals pending in these High Courts to the Division Bench of the Delhi High Court.
- 2.166 A Group has been constituted by the Government of India to formulate a concept paper on tariff policy. The Group has been enlarged to include the representatives of the State Governments. The Group is yet to submit its recommendation.
- 2.167 The Committee have been informed that ONGC is currently involved in exploration of Coal Bed Methane (CBM) in the Eastern Region of the country. In view of likely availability of CMB in the state of West Bengal, NTPC is looking into the possibility to set up CBM based power project there, in joint venture with ONGC and Government of West Bengal (or a nominee agency of Government of West Bengal) as this relates to use of new fuel available in the State. A draft Memorandum of Understanding(MOU) has been prepared by NTPC for this purpose. The draft MOU has been sent to Government of West Bengal and ONGC for their views and further discussion on the matter.
- 2.168 NTPC has also entered into a Memorandum of Understanding (MOU) with the Ministry of Railways on 18/02/2002 with an intention to promote a joint venture company (JVC) with the aim of establishing and operating power projects to supply reliable power to Railways, to meet electric traction and non-traction power requirement of Railways on the basis of feasibility studies to be carried out. Total power requirement of Railways for traction and non-traction purposes is currently 2000 MW(Approx.).
- 2.169 The Committee have observed that the performance of NTPC in regard to capacity addition programme during the 9<sup>th</sup> Plan period is far from satisfactory. For instance, as against the target of 5300 MW the actual capacity addition may not exceed 2700 MW whereas the anticipated expenditure was Rs. 12893 crore against the approved outlay of Rs.15,655 crore during the Plan period. The shortfall of 2600 MW is on account of second stage expansion by 650 MW each of NTPC Gas Based Combined Cycle power projects at Anta, Auriya, Kawas and Gandhar. The Committee have noted that these projects could not be commissioned during the 9<sup>th</sup> Plan period on account of abnormal increase in price of oil, resulting in corresponding increase in LNG prices, thereby increasing the total cost of generation. The State Governments who were proposed to be allocated power from these power stations declined to take the power from these projects. As the position stands, the projects would be taken up only after confirmation of availability of LNG/naptha at a reasonable and firm price and accessibility of cost of generation by beneficiary States. In this connection, the Committee would like to point out that whereas the world over the use of naptha is being discarded for a variety of reasons, the Ministry of Power have sought to use this obsolete technology for reaping the benefit. It may also be noted that the economic cost of generation from naptha based power project is high as unit cost is more than Rs. 5. consideration the world view, the Committee desire that NTPC should explore the

possibilities of running these power plants on coal. It will also be in the fitness of things that NTPC undertake cost reduction exercises by making use of the state-of-art supercritical technology. The other technology options available with NTPC for cost reduction exercise include the use of Circulating Fluidised Bed(CFB) and pressurised CFB systems. The Committee would like the NTPC and the Government to ponder over this concern of the Committee and apprise them of the outcome.

- 2.170 Regarding impact of CERC order relating to principles of tariff under ABT, the Committee observe that the elements of tariff which got affected by CERC orders are mainly Depreciation, O&M expense and Incentive/disincentive, etc. These in turn have an adverse effect on the revenue generation and IR availability of NTPC. The shortfall in IR is expected to be of the order of over Rs. 21500 crore, during the period upto 2012, which is essentially on account of lower fixed cost recovery under the CERC norms vis-à-vis the Government notified tariff, leading to lower cash profits. The Committee have been informed that although a capacity addition programme of 9160 MW and 10810 MW has been planned by NTPC during 9th and 10th Plan respectively, the shortfall in Internal Resources which is expected to be of the order of over Rs. 21,500 crore upto 2012 on account of ABT(about Rs. 2000 crore per year) are to be supported through budget. However, the Committee observe that only Rs. 167.63 crore have been provided as budgetary support to NTPC during 2002-03. The Committee, therefore, desire to know the steps taken by the Government/NTPC to meet the shortfalls of about Rs. 2000 crore per year for investment in power projects to generate about 20,000 MW of power during the next 10 years.
- 2.171 The Committee have been informed that a Group has been constituted by the Government of India to formulate a concept paper on tariff policy. The Group has been enlarged to include the representatives of the State Governments to formulate tariff policy. The Group is yet to submit its recommendation. The Committee would like to know the role of CERC/SERC vis-à-vis the Group formulated by the Government to formulate tariff policy. The Committee also desire to know the time by which the Group is likely to submit its report and the details thereon.
- 2.172 The Committee are pleased to note that the NTPC proposes to set up a Joint Venture with ONGC and Government of West Bengal for exploring the possibilities to set up Coal Bed Methane(CBM) based power projects. The Committee welcome this action on the part of the NTPC. The Committee are also pleased to note that the NTPC also proposes to set up a Joint Venture Company with the Railways with an aim to establish an operating power project to supply reliable power to railways for meeting their traction and non-traction power requirements. The Committee hope and trust that these ventures of NTPC fructify and thereby improve the bottomlines.

### L. POWER FINACNE CORPORATION

- 2.173 Power Finance Corporation Limited (PFC), set-up in July, 1986, as a Development Financial Institution dedicated to the Power Sector, has been playing an increasingly important role in mobilizing financial resources from within and outside the country and in providing various kinds of financial assistance to the power projects. Besides, PFC as DFI, also focuses on the institutional development of its borrowers- Stat Power Utilities, in particular.
- 2.174 Asked about the different rates charged by the Power Finance Corporation for different power schemes and how these are comparable to the interest rates charged by other financial institutions. The Committee have been informed in a written reply, as under:-

### i. AAA Rated Companies:

Effective rate for projects covered under Section 10(23G) of	11.5% p.a.
Income Tax Act, 1961 including rebate for timely payment- For	
all Schemes	

### ii. Central Sector/ State Sector

Effective rate for projects covered under Section 10(23G) of	
Income Tax Act, 1961 including rebate for timely payment	
-Thermal General Schemes	12.5% p.a.
-Other Schemes	12.5% p.a. 11.5% p.a.

### iii. Private Sector

Effective rate for projects covered under Section 10(23G) of Income Tax Act, 1961 including rebate for timely payment- For all Schemes	
Thermal General Schemes -Other Schemes	14% p.a. 13% p.a.

### Note:

- i. Rebate for timely payments- 0.5%
- ii. Projects not covered u/s 10(23G) of I.T. Act –1% Additional

The rates of PFC are comparable to the interest rates charged by other Financial Institutions".

2.175 Regarding review or withdraw of subsidy given to PFC for power related projects, since lending by PFC is almost on commercial terms, the Committee have been informed that Accelerated Generation & Supply Programme (AG&SP) is operated by Government of India through Power Finance Corporation (PFC). Under this scheme interest subsidy @ 4% is provided to State Electricity Board (SEBs), State Generating Corporations (SGCs), State Power Departments (SPDs) and State /Central Power Utilities on disbursement made by Power Finance Corporation (PFC) for Renovation & Modernisation (R&M), Life Extension, expeditious completion of generation projects, missing transmission links and System Improvements Schemes of state utilities which were languishing for want of funds. A small sum of money is also provided as grant for

studies to be carried out by State Electricity Boards. In addition, 1% additional subsidy is also given for projects in the North-East. The incentive provided to Utilities in the form or reduced interest burden on capital investments needed by State Electricity Boards/ utilities has given boost to the completion of priority projects, which is evident from the following table:-

Sl.No.	Type of Schemes	Original estimates of	Benefits achieved	
		9 <sup>th</sup> Plan Benefits	as on 28.2.2002	
1.	Generation capacity addition	3000 MW	5224 MW	
2.	Additional Generation due to	6000 MU P.A.	9500 MW P.A.	
	R&M & LE			
3.	Transmission Capacity	635 MU p.a.	845 P.A.	
	enhancement			

2.176 The scheme is proposed to be restricted to generation projects and only states, which show satisfactory progress with respect to, agreed reform milestones would be eligible for interest subsidy in the  $10^{th}$  Plan.

2.177 The Committee have observed that the rate of interest charged by Power Finance Corporation(PFC) for different power schemes ranges between 11.5 and 14 per cent. In the opinion of the Committee the interest so charged is near commercial rate of borrowings. The Committee are of the view that PFC was set up with the primary aim of financing all power projects on a softer term lending. This indicates that the PFC have failed to fulfill their mandate taking into consideration the commercial rate of borrowing charged by PFC from power utilities. The Committee, therefore, desire that the subsidies given under Accelerated Generation and Supply of Power Programme (AGSP) being implemented by PFC whereunder 4 % subsidy is granted to SEB, defeats the very purpose of the subsidy, especially when the schemes are subjected to commercial rate of borrowing. The Committee would recommend that the Government should re-examine the rates of interest being charged by PFC on term lending to power utilities. This is all the more necessary in view of the fact that lending rates are falling in all other sections of the economy.

### M. National Hydro-Electric Power Corporation Limited (NHPC)

2.178 National Hydro-Electric Power Corporation Limited (NHPC) was incorporated in 1975 under Companies Act, 1956. the mission of NHPC is to harness the vast hydro, tidal, wind and geo-thermal potential of the country to produce cheap/pollution free and inexhaustible power. NHPC plays a significant role in the integrated and efficient development of hydro-electric, tidal, wind and geo-thermal power in the Central sector covering all aspects such as investigation, planning, design, construction, operation & maintenance of hydro-electric, tidal, wind and geo-thermal power projects. NHPC is a Schedule 'A' Enterprise of the Government of India with authorized Share Capital of Rs. 7000 crore. With an investment base of over Rs.13,000 crore, NHPC is among TOP TEN companies in the country in terms of investment. The paid up capital of the Corporation as on 31.3.2001 is Rs. 4614.50 crore excluding Rs. 573.85 crore being the share money deposits and amount adjustable to equity. The Government has also invested Rs. 439.74 crore (net loan after repayment i.e. Gross Loan Rs. 980.32 crore and repayment of loan Rs. 540.58 crore) as loan to NHPC.

- 2.179 Total investment proposed in National Hydro-Electric Power Corporation Limited (NHPC) during 2002-03 are Rs. 2467.70 crore against BE of Rs. 1574.89 crore and RE of Rs. 2012.77 crore during 2001-02. The budgetary support to NHPC which was Rs. 943.25 crore for the year 2001-02 at BE stage, got revised to Rs. 1511.46 crore during the year. Now a provision of Rs. 1341.81 crore has been kept for the year 2002-03. The IEBR component for the year 2001-02 was curtailed from Rs. 631.64 crore at BE stage to Rs. 601.31 crore at RE stage. For the year 2002-03 the IEBR component has been budgeted at Rs. 1125.89 crore.
- 2.180 The Committee have been informed that the IEBR component as budgeted for 2001-02 was revised from Rs. 601.31 crore to Rs. 631.64 crore in view of reduction in direct foreign loan for Dulhasti and Dhauliganga projects. The IEBR component was reduced to be in consistent with actual requirements of funds at these projects during the year 2001-02. However, IEBR requirement at Chamera-II project has been enhanced due to faster progress of work than scheduled and accordingly the component of Bonds/loans has been increased for Chamera-II Project. The requirement of IEBR in RE has been projected after a careful review of the projects.
- 2.181 Regarding approved outlay for the year 2001-02, the Committee have been informed that form Rs. 1909.79 crore this has now been revised to Rs. 2371.03 crore. Thus, there is a net increase of Rs. 461.24 crore in the revised outlay. Out of this total increase of Rs. 461.24 crore, Rs. 393.00 crore is attributed to increase in outlay for India Sagar (1000 MW) and Omkareshwar Project (520 MW) being executed by NHDC, a joint venture of NHPC and the Government of Madhya Pradesh and a provision of Rs. 22.15 crore was made for Purulia Pumped Storage Scheme (900 MW) to be executed by a Joint Venture of NHPC and the Government of West Bengal. Balance Rs. 46.09 crore is attributed to NHPC Projects.

2.182 The break-up and variation in Plan Outlay for 2001-02 is given below:

Sl.		BE (Rs. in crore)	RE (Rs. in crore)
No.			
1.	Completed Projects	7.08	196.27
2.	Ongoing Projects	1297.71	1328.09
3.	New Schemes	330.00	246.36
4.	Survey & Investigation	150.00	67.46
5.	Mini Hydro Schemes & other New	25.00	17.70
	Schemes Joint Venture Projects		
6.	NHDC	100.00	493.00
7.	Purulia PSS	00.00	22.15

- 2.183 According to the Government, the reasons that budgetary support to NHPC was enhanced by Rs. 491.57 crore during 2001-02 are mainly attributed to the following reasons:-
- (i) an increase of Rs. 393.00 crore was made for Indira Sagar (1000 MW) and Omkareshwar Project (520 MW) being executed by NHDC, a joint venture of NHPC and the Government of Madhya Pradesh. The Indira Sagar Project is in advanced stage of construction with commissioning of all the units scheduled for May, 2005, and the requirement of funds during 2001-02 was estimated as Rs. 601.77 crore. In BE, a provision of Rs. 100.00 crore was made for NHDC projects and balance amount was to be raised by NHDC through loans.

- (ii) A provision of Rs. 22.15 crore was made for Purulia Pumped Storage Scheme (900 MW) which was not envisaged at the time of BE as the MoU for executing this project through a joint venture of NHPC and the Government of West Bengal was not signed till then.
- (iii) There is an increase of Rs. 70.68 crore equity requirement of Dulhasti as per revised cost estimate in order to maintain debt equity ratio 50:50 as approved for this project.
- (iv) Balance Rs. 5.74 crore is attributed to other projects of NHPC.
- 2.184 About the steps that have been taken by the Government/NHPC to finalise joint ventures and mobilise resources for such projects, the Committee have been informed that the policy on hydro-power development of the Government of India envisages Joint Ventures between the PSUs/SEBs and the domestic and foreign private enterprises. It is provided that while the selection of a joint venture partner would be in accordance with the policy of the Government, there would be an option for PSUs to either select the joint venture partner together with their financial and equipment package or to select a joint venture partner wherein EPC contract is decided by both the partners after they have formed Joint Venture Company. NHPC had made an attempt to form Joint Venture for some of hydro-power projects assigned to NHPC and the proposals from interested parties domestic as well as international were invited through press advertisement. 10 firms had submitted their proposals. This did not fructify. NHPC intends to implement the Indira Sagar/Omkareshwar HEPs and Purulia Pumped Storage projects in joint venture with the Government of Madhya Pradesh and West Bengal respectively.
- 2.185 Regarding status of Purulia pumped storage scheme, the Committee observe that the State of West Bengal and Eastern Region are having predominantly a thermal power generation system with an insignificant hydro capacity. The peak demand is suppressed and not fully met due to shortage of peaking power demand is suppressed and not fully met due to shortage of peaking whereas there is surplus energy available during off peak period. In the present scenario the hydro thermal mix in West Bengal is 3:97 and that of Eastern Region is 12:88 against the desired level. As a result the system operation is highly inefficient and unstable and also injurious to the electrical equipment installed in the system.
- 2.186 Purulia Pumped Storage Project is the first Pumped Storage Scheme in the region and is essentially aimed at correcting to some extent the big imbalance between the thermal and hydro power with a view to improve the system stability, reliability and avert damages to the generating equipment. It is currently under implementation by WBSEB with funding assistance from JBIC Japan. MOU was signed between Govt. of West Bengal and NHPC with MOP's consent to incorporate a Joint Venture Company (JVC) to execute and complete Purulia Pumped Storage Scheme and to develop other Pumped Storage Schemes in the State of West Bengal with equity contribution of 67% by NHPC and 33% by Govt. of West Bengal.
- 2.187 Purulia Pumped Storage Scheme was accorded Techno-Economic Clearance (TEC) by CEA in July 1992 and sanctioned by Planning Commission in Feb. 1994 for execution under State Sector.
- 2.188 Pre-PIB meeting was held on 7.2.2002 under the chairmanship of Joint Secretary & Financial Advisor, MOP. The pre-PIB recommended the proposal to form joint venture

company "National Pumped Storage Development Corporation Ltd." for the execution of Purulia Storage Project in West Bengal for consideration of PIB subject to:

- (i) TEC from CEA of updated costs of the project already cleared by them.
- (ii) Routing of the JBIC loan through Government of West Bengal, who in turn would on-lend to the JVC; without any charges and
- (iii) Signing of an agreement before posing the proposal to PIB for supply of power to JV indicating its price on long term basis and the cost estimates reflecting the agreed input price; based on the input price, WBSEB (or any other buyer) should be committed to buy the power at the predetermined price.
- 2.189 Revised Cost Estimate is under preparation for getting techno-economic clearance from CEA. For supply of power to JVC indicating the prices on long term basis, a draft tripartite agreement to be signed between NHPC, Government of West Bengal and West Bengal Power Development Corporation Ltd. (WBPDCL) has been submitted to Government of West Bengal for their concurrence. Regarding WBSEB commitment to buy the power at predetermined price, a draft tripartite agreement to be signed between NHPC, Government of West Bengal and WBSEB has also been submitted to Government to West Bengal for their concurrence.
- 2.190 The Committee further note that mote of the land required for the project has been acquired. Most of the road works to start major construction activities have been completed. Building works are in progress. Major contract packages have been awarded. The project is scheduled for commissioning in 2006-2007.
- 2.190 Asked about the details of NHPC project under Survey & Investigation(S&I) the Committee have been informed that with a view to reduce time and cost over-run in hydro-electric projects, the Government has reportedly introduced a three-stage process for development of new hydro-electric projects in the Central Sector. The three stages are:-

State-I Survey & Investigation and preparation of pre-feasibility Report.

Stage-II Detailed instigation, preparation of DPR, obtaining statutory clearances and pre-construction activity including land acquisition.

Stage-III Execution of the project after investment decision through PIB/CCEA.

The details of NHPC projects under Survey & Investigation are given below:-

Sl	Name of the Project	State	Capacity in
No.			MW
1.	Kishanganga	J&K	330
2.	Parbati-III*	HP	520
3.	Parbati-I	HP	750
4.	Chamera-III*	HP	231
5.	Farakka Barrage	WB	125
6.	Siang (Lower)	Ar. Pradesh/	1700
		Assam	

7.	Siang (Middle)	-do-	700
8.	Siang (Upper)	-do-	11000
9.	Subansiri (Middle)	-do-	2000
10.	Subansiri (Upper)	-do-	2500
11.	Uri-II*	J&K	280
12.	Pakal Dul	-do-	1000
13.	Bursar	-do-	1020
14.	Bav I & II	Maharashtra	55
15.	Nimmo Bazgo	J&K	30
16.	Chutak	J&K	18

- \* At these projects DPR, pre-construction and infrastructure development has either been taken up or is to be taken up shortly after approval of cost estimate (s) for the said purpose.
- 2.192 The Ministry of Power further informed the Committee that Budgetary support to the tune of Rs. 54.88 crore has been released by the Ministry of Power, the Government of India to take up Stage-II activities comprising development of essential infrastructure and additional investigations for preparation of Detailed Project Report in respect of projects mentioned below:-

Sl.	Name of the Project	State	Capacity (in	Amount (Rs. in
No.			MW)	crore)
1	Pakal Dul	J&K	1000	3.39
2.	Uri-II	J&K	280	4.98
3.	Sewa-II	J&K	120	21.07
4.	Subansiri (Lower)	Ar. Pradesh/	2000	25.44
		Assam		
			Total	54.88

- 2.193 NHPC has reportedly offered 12 new projects with a combined capacity of 23071 MW for international and joint ventures collaboration with an estimated cost of Rs. 1,15,350 crore. The projects identified include the 1,000 MW Siang Upper Project, 700 MW Siang Middle Project, 2,000 MW Siang Lower Project and the 6,500 MW Subhansiri project in Arunachal Pradesh, 231 MW Chamera stage-III project in Himachal Pradesh and the 280 MW Uri stage-II, 1000 MW Pakal Dual and 102 MW Bursar and 120 MW Sewa project-II in J&K.
- 2.194 The Committee observe that for adding 16810 MW of generating capacity in the next 10 years, NHPC has planned massive investment of Rs. 97,000 crore. During 10<sup>th</sup> Plan only to add 5310 MW hydel power the company had to invest about Rs. 40,000 crore. NHPC has prepared a tentative capacity addition plan of 5310 MW for 10<sup>th</sup> Five Year Plan(2002-07) and 10341 MW for 11<sup>th</sup> Five Year Plan(2007-12). The details of these projects are given in Annexure. These Plans include on-going schemes of 1480 MW and projects of 2420 MW proposed under Joint Venture with the State Governments. Although, the Government of India is yet to finalise the outlays of 10<sup>th</sup> Five Year Plan. NHPC has projected a tentative outlay of Rs. 37,780 crore and Rs. 54,947 crore for 10<sup>th</sup> and 11<sup>th</sup> Plan respectively.
- 2.195 Taking note of the fact that only a meager budgetary support have been provided to NHPC during 2002-03 and lower IEBR component, the Committee desired to know as to how the NHPC proposes to meet its investment target of Rs. 40, 000 crore during 10<sup>th</sup>

Plan. In a written reply furnished to the Committee, the Government have informed as under:-

"NHPC has projected fund requirement of Rs. 40, 615 crore for 10<sup>th</sup> Five Year Plan. The details of the projected fund requirement is as under:-

Equity - Rs. 24,209 crore IEBR - Rs. 16,406 crore

IEBR comprises Rs. 829.00 crore through Direct Foreign Loan(DFL) and Rs. 15,577 crore through Bonds/Loans. The budgetary support to be extended to NHPC is yet to be finalised. NHPC does not anticipate any problem in raising IEBR to the above extent and the same would be tied up with various financial institutions in due course of time".

2.196 The details of hydel projects under execution in NHPC is given below:-

Project	Installed	Commission	Estimated	Exp. Made	Reasons of time overrun
Troject	Capacity	Schedule	Cost (as	till 2.2002	Reasons of time overrun
	in MW	Schedule	sanctioned		
	III IVI VV			(Rs. in	
			Rs. in	crore)	
D 11 (1017)	200	10/02	crore)	212121	
Dulhasti (J&K)	390	12/03	3559.77	3134.31	Geological surprises and
			(11/96 PL)		poor rock conditions, rock
					burst at RD 2863 m in
					Head Race Tunnel (HRT)
					upstream, frequent
					breakdowns of Tunnel
					Boring Machinel, poor
					law and frequent order
					situation, poor condition
					of Batote-Kishtwar-Dul
					Road, adverse weather
					conditions & transporter's
					strike and power failure,
					etc.
Dhauliganga-I	280	3/05	1578.31	586.92	Works are progressing on
(Uttaranchal)			(8/98PL)		schedule.
Teesta-V	510	2/07	2198.04	327.35	Works are progressing on
(Sikkim)			(4/99 PL)		schedule.
Loktak D/s	90	6/06	578.62	16.77	The start of work has
(Manipur)			(4/99PL)		been delayed due to non-
( · · · · · · )			( ,		availability of security
					forces to counter adverse
					law & order situation
					prevailing in Manipur.
Chamera-II	300	5/04	1684.02	980.07	Works are progressing on
(H.P.)	2 30	2,01	(8/98 PL)	, 55.07	schedule.

2.197 Enquired about the Loktak Downstream HE Project, the Committee have been informed that work on the project is at standstill due to non-provision of security forces by Government of Manipur. The total security coverage required for the project was assessed as 4 battalions and accordingly it was decided to induct the first battalion on 1.10.2000, at no extra cost to the project/NHPC. This has not materialised as Government of Manipur has declined to create the accommodation for the CRPF battalion and is requesting NHPC for creating the same. NHPC has intimated its inability due to adverse impact on project viability. The issue of land acquisition is pending with

Government of Manipur, though the second Committee, appointed by Government of Manipur, has succeeded in bringing down the cost of land acquisition to Rs. 22.11 crore. The DPR provision is only Rs. 5.69 crore. This, alongwith enhanced cost of roads, as worked out by BRO and cost of security is affecting the viability of the project.

2.198 The Committee have been further informed that the Ministry of Power is reviewing the project, in consultation with Government of Manipur, as at this stage, the project seems to be commercially non-viable.

## Status of Koel Karo Project(710 MW) Jharkhand

- 2.199 Koel Karo HE Project(710MW) in Bihar(now in the State of Jharkhand) was originally approved in June, 1981 at an estimated cost of Rs. 444.67 crore at March, 1980 price level. However, no major work could be started reportedly due to resistance from the local people to the acquisition of land. In August, 1984 a writ petition was filed in the Supreme Court of India demanding inter-alia the scheme for rehabilitation of the displaced persons. On submission of the R&R package, the stay was vacated on 6.2.1989, and the court directed that the rehabilitation plan must be implemented and the compensation must be paid. Government of India, approved the revised cost estimate for the project amounting to Rs.1,338.81 crore in November, 1991. The project, however, could not take off on account of financial constraints and R&R issues.
- 2.200 The Committee have been informed that a meeting of the Central Empowered Committee(CEC) constituted by the Government for reviewing Central Sector projects making slow progress, held on 26.2.1997, it was decided that no further expenditure be incurred on the Koel Karo Project without the approval of CCEA. The Project now falls in the State of Jharkhand and the Government of Jharkhand has written to Ministry of Environment & Forests(MoEF) in June, 2001, stressing that it would be essential to conduct fresh survey of PAPs to identify the actual beneficiaries for implementing the R&R plan.
- 2.201 According to Ministry of Power, the anticipated completion cost of the Koel Karo Project is now Rs. 3,223.68 crore. The tentative tariff at the completion cost would be around Rs.7.99 per unit. The cost of the project can only be firmed up after the actual beneficiaries have been identified and R&R plan approved based on the fresh survey. Orissa, West Bengal and Sikkim have declined to purchase power from the Koel Karo HE Project. The Power Purchase Agreement(PPA) earlier executed with Bihar will need modification, as the project is located in Jharkhand which is yet to sign PPA for the purchase of power.
- 2.202 The Committee are constrained to note the huge variations in Plan Outlay of NHPC for 2001-02 for completed projects. Against the budget estimates of Rs. 7.08 crore for completed projects, the revised estimates have been Rs. 196.27 crore during 2001-02. The Committee are, further perturbed to note that against a budgeted outlay of Rs. 150 crore for Survey & Investigation, the revised estimates were Rs. 67.46 crore only, although a huge hydel generation capacity remains untapped. The Committee take a strong note of the casual approach in planning of funds at budget stage and desire to know the reasons for this huge variations in Plan Outlays. The Committee feel that unless responsibility is fixed, realistic outlay and targets cannot be achieved. The Committee, therefore, expect that the Government after failing to achieve budgeted outlay for different schemes by CPSUs, will at least now act and take necessary steps to improve the plan formulation.

2.203 Regarding implementation of projects by NHPC, the Committee observe that Dulhasti 300 MW, Dhualiganga 280 MW, Teesta V 500 MW, Loktak D/S 900 MW and Chamera-II 300 MW are different projects implemented by NHPC and are targeted to be completed during 10<sup>th</sup> Plan. The Committee are constrained to note that although an amount of Rs. 3134.31 crore has been expended on Dulhasti(J&K) project till February, 2002 and the project is targeted to be completed by December, 2003, the work on the project is being held up reportedly due to geological surprises, poor law and order problem, transporters' strike, power failure, etc. Further, Loktak Downstream project has also been held up after incurring an expenditure of Rs. 16.77 crore upto February, 2002 due to non-availability of security forces. The Committee desire that all ongoing projects of NHPC should be reviewed by NHPC by taking into account all relevant factors to ensure that the present schedule is adhered to and would like to be apprised of the action taken in this regard.

2.204 Regarding Joint-Venture projects by NHPC, the Committee are happy to note that NHPC has reportedly offered 12 new projects with a combined capacity of 23071 MW for with an estimated cost of Rs. 1,15,350 crore international and joint ventures collaboration. The projects identified include the 1,000 MW Siang Upper Project, 700 MW Siang Middle Project, 2,000 MW Siang Lower Project and the 6,500 MW Subhansiri project in Arunachal Pradesh, 231 MW Chamera stage-III project in Himachal Pradesh and the 280 MW Uri stage-II, 1000 MW Pakal Dual, 102 MW Bursar and 120 MW Sewa project-II in J&K. However, the Committee observe that the NHPC attempt to form Joint Venture did not fructify as only 10 firms had submitted proposals(both domestic and international)to have Joint Venture hydel projects. The Committee desire to know the reasons for this and recommend that NHPC should consider the possibility of forming Joint Ventures with the respective State Governments to tap the hydel potential in the State and implement projects like Indira Sagar/Omkareswar HEPs and Purulia Pumped Storage projects in Joint Venture with the Governments of Madhya Pradesh and West Bengal respectively. Taking note of the fact that hydro thermal mix in West Bengal in 3:97. The Committee take a strong note of the inordinate delay in implementation of Purulia Pumped Storage Project in West Bengal which was cleared by CEA in July, 1992. Since, the project is now one of joint venture of NHPC, the Committee recommend the Ministry of Power to take all necessary step with the Government of West Bengal to commission the project in 2006-07 as targeted to meet peaking power demand in the State. The Committee desire Ministry of Environments & Forest should acquire approval for 11.08 of hectares of forest land, so that the project is cleared.

2.205 The Committee observe that Koel Karo HE Project(710MW) in Bihar(now in the State of Jharkhand) was originally approved in June, 1981 at an estimated cost of Rs. 444.67 crore at March, 1980 price level. However, no major work could be started reportedly due to resistance from the local people to the acquisition of land. In August, 1984 a writ petition was filed in the Supreme Court of India demanding inter-alia the scheme for rehabilitation of the displaced persons. On submission of the R&R package, the stay was vacated on 6.2.1989, and the court directed that the rehabilitation plan must be implemented and the compensation must be paid. The Government of India, approved the revised cost estimate for the project amounting to Rs.1,338.81 crore in November, 1991. The project, however, could not take off on account of financial constraints and R&R issues. The Committee note that according to the Ministry of Power, the anticipated completion cost of the Koel

Karo Project is now Rs. 3,223.68 crore. The tentative tariff at the completion cost would be around Rs.7.99 per unit. Further, the cost of the project can only be firmed up after the actual beneficiaries have been identified and R&R plan approved based on the fresh survey. Orissa, West Bengal and Sikkim have declined to purchase power from the Koel Karo HE Project. The Power Purchase Agreement(PPA) earlier executed with Bihar will need modification, as the project is located in Jharkhand which is yet to sign PPA for the purchase of power.

2.206 The Committee are unhappy to note that the project is further delayed as the PPA for the Project which now falls in the State of Jharkhand is again to be signed by Government of Jharkhand. The Government of Jharkhand has also written to Ministry of Environment & Forests(MoEF) in June, 2001, stressing that it would be essential to conduct fresh survey of PAPs to identify the actual beneficiaries for implementing the R&R plan. The Committee are perturbed to note that although they had repeatedly asked to sort out all problems relating to Power Purchase Agreements, no steps have been taken by NHPC/Government to finalise the same. The Committee, therefore, recommend that all efforts should be made by NHPC to sort out the problems relating to signing of PPAs and conduct a fresh survey of PAPs to identify the actual beneficiaries for implementing the R&R plan alongwith speed execution of the project.

## N. North Eastern Electric Power Corporation Limited (NEEPCO)

2.207 The North Eastern Electric Power Corporation (NEEPCO) was registered as a company under the Companies act, 1956 on 2<sup>nd</sup> April, 1976 with the objective to plan, promote, investigate, survey, design, construct, generate, operate and maintain power stations in the N.E. Region. The Corporation has achieved a total installed capacity of 700 MW (under operation) comprising 150 MW from Kopili HE project, 100 MW Kopili HE Project 1<sup>st</sup> stage extension, 75 MW from Doyang HE Project, Nagaland, 291 MW from Assam Gas Based Combined Cycle Project and 84 MW form Agartala Gas Turbine Power Project.

2.208 The performance of the generating stations with respect to the targets vis-à-vis the achievement during 2000-01 and 2001-02 are given below:

	Name of the	Installed					2001	-2002
	Project	Capacity (MW)	Target	Actual	Target	Actual upto Nov,2001		
i)	Kopili HE project, Assam	250	900	825.2528	900	507.00		
ii)	Assam Gas Based Combined Cycle Power Project, Assam	291	1348	1233.4354	1400	747.00		
iii)	Agartala Gas Turbine Power Project, Tripura	84	360	428.7521	450	370.00		
iv)	Doyang HE Project, Nagaland	75	100	72.5633	150	121.00		
	Total	700	2706	2560.0036	2900	1745.00		

The generation during the 2000-01 was 2560.0036 MW against MU target of 2706 MU.

The Corporation is presently executing the following projects in the North Eastern region

- 1. Ranganadi HE Project (405 MW), Arunachal Pradesh
- 2. Tuirial HE Project (60 MW), Mizoram
- 3. Kopili HE PRoject IInd Stage (25 MW), Assam.

# New Projects proposed to be taken up by NEEPCO during IXth Plan are under:

- 1. Tuivai HE Projecet (210 MW), Mizoram.
- 2. Kameng HE Project (600 MW) Arunachal Pradesh
- 3. Tripura GAs Based Power Project (500 MW), Tripura

## Projects proposed to be taken up by the Corporation during Xth Plan are:

- 1. Tipaimukh HE Project (1500 MW), Manipur.
- 2. Lower Kopil HE Project (150 MW), Assam
- 3. Ranganadi HE Project Stage –II (180MW), Arunachal Pradesh
- 4. Dikrong HE Project (100 MW), Arunchal Pradesh
- 2.209 The approved plan outlay of NEEPCO at BE 2001-02 stage was Rs.211.72 crore (IEBR-Rs. 86.72 crore and NBS Rs. 125.00 crore ). At the RE 2001-02 stage the outlay was reduced to Rs. 106.28 crore (IEBR Rs. 50.00 crore and NBS Rs. 56.28 crore )
- 2.210 The Ministry of Power have informed the Committee that at the BE 2001-02 stage, the IEBR component of Rs. 86.72 crore was provided for Tuirial hdyro Electric Project (60 MW), Mizoram under Japan Bank for International Cooperation (JBIC) funding. At the RE 2001-02 stage this was reduced to Rs. 50 crore keeping in view the progress of work and the a ward of contracts for different packages. As per the original plan, all the 5 packages of the Tuirial Hydro Electric Project were to be awarded during 2001-02. However, only the contract for Lot-1 (diversion tunnel) has been awarded in September, 2001. The work for Lot –II (Dam and spillway) and Lot-III (water conductor system and power house civil works) were re- scheduled for award and are yet to be awarded. This has led to reduction in IEBR at RE stage for the the year 2001-02.

- 2.210 Considering that the new projects would initially be funded through equity / NBS by Government of India, the IEBR during 2001-02 has been considered only for Tuirial H.E. Project. The NBS of Rs. 125 crore provided in the BE 2001-02 was reduced to Rs. 56.28 crore in the RE 2001-02 was reportedly because new schemes like Tuivai. Timpaimukh and Lower Kopili could not take-off for want of financial closure/ signing of MoU with the concerned States.
- 2.211 The total plan outlay for NEEPCO during 2002-03 is proposed to be Rs. 375.76 crore of which NBS is Rs.200.48 crore and IEBR is estimated as Rs.175.28 crore. Scheme wise details are given at Annexure III.
- 2.212 Asked about the reasons for increase in the Plan Outlay for the year 2002-03, the Ministry of Power informed the Committee of the following factors:
  - i. "all the remaining 4 packages of the Tuirial Hydro Electric Project would be awarded in the year 2002-03.
  - ii. Increase in activity of Kameng H.E. Project (600 MW)
  - iii. Taking -up of new projects like Tripura GBCCP (500 MW) Tuivai H.E. Project (210 MW), Tipaimukh H.E. Project (1500 MW), Ranganadi H.E. Project Stage -II (130 MW) and Lower Kopili H.E. Project (!50 MW)
  - iv. The Committee have been informed that Rs. 20 crore were earmarked for Tipaimukh Hdyro Electrici Project during 2001-02, at BE stage. Asked about the utilization thereof and reasons for not earmarking any budgetary provision for the year 2002-03,, the Ministry of Power informed the committee in a written reply that in the budget estimate 2001-02 the outlay against Tiapimukh Hdyro Electric Project was kept at Rs. 20 crore. However, in the revised estimate 2001-02 the outlay was reassessed and "NIL" provision was made against Tiapimukh Hydro Electric Project. was primarily due the fact that MoU with the Government of This Manipur for execution of the project by NEEPCO could not be signed for non-finalisation of the security aspects. The project cost has also gone – up substantially on account of inclusion of the costs relating to security, diversion of national highway and flood control component. Security is posing a major issue. All the aforesaid issues are required to be resolved before signing of the MoU with the state Government.

#### 2.213 It further states,

"In anticipation of resolving the issues pertaining to security, diversion of national highway and flood control and consequent signing of MoU with the Government of Manipur, an amount of rs. 15 crore has been provided in the BE 2002-03".

2.214 The Committee observe that plan outlay of NEEPCO was reduced at Revised Estimate stage to Rs. 106.28 crore from the budgeted outlay of Rs. 211.72 crore during 2001-02. Both the IEBR component and net budgetary support were reduced to Rs. 86.72 crore to Rs. 50.00 crore and Rs. 125.00 crore to Rs. 56.28 crore at revised estimate stage. The Committee are constrained to note that the IEBR component for Turial Hydro-Electric Project which was to be funded by JBIC was reduced to Rs. 50.00 crore pending award of contracts for different packages. The Committee find that the schemes like Tuivai, Tipaimukh and Kopili also could not take off for want of financial closure/signing of MoU with the concerned States and reduction of net budgetary support to NEEPCO to Rs. 56.28 crore. The budgetary provision of Rs. 20.00 crore earmarked for Tipaimukh hydro-electric project during 2001-02 could not be utilized due to security problems faced by the Government of Manipur. Taking note of the consistently dismal tampering of the targets of planned outlays, the Committee are not convinced that the proposed increase of outlay of Rs. 375.76 crore for the year 2002-03 by NEEPCO could actually be materialised. The Committee, therefore, desire that the Government should take all necessary steps to utilise the plan outlays for the year 2002-03 and expect that work at Turial, Kameng HE Project and other new projects being implemented by NEEPCO should be completed as targeted during 2002-03. The Committee have noted that NEEPCO is allocating plan-outlays for various hydel projects at Budget Estimates stage. However, the expenditure on such hydel projects is not being incurred, at all. The Committee do not approve such policy, on the part of any power PSU. Committee, therefore, recommend that budgetary allocation should be made, only for these projects, on which some pre-construction work is to be undertaken or where a project has been accorded clearance.

2.215 The Committee find that CEA is yet to accord clearance to Tripura Gas Based Power Proejct (500 MW). The Committee desire that CEA should expeditiously clear the project, after ascertaining its Techno-Economic Viability. The Committee also desire that other clearances such as PIB/FIPB, etc. should also be accorded to it expeditiously.

2.216 The Committee have noted that on account of security constraints, work on Loktak Downstream Hydel Project has been held up causing cost and time overruns. Similarly, clearance of Tipaimukh Power Project (1500 MW) has also been held up on account of security considerations. In the opinion of the Committee, expenditure incurred on security should not be treated as a component of project cost, otherwise the project would become economically unviable. It should be the duty of local administration to provide adequate security to men and machinery engaged in the execution and maintenance of any hydel power project. The Committee, therefore, recommend that expenditure incurred on security should be borne by the Central Government/Department of North-Eastern Region. The Committee hope and trust that the Government will take adequate steps to provide necessary security cover for the execution of Loktak Downstream Hydel Project. At the same time, the Committee recommend that security related issues may be thrashed out and Tipaimukh project also be accorded clearance accordingly. The Committee also recommend that security related expenditure as a matter of policy should be borne by State/Central Government and not loaded on a project cost.

# O. Damodar Valley Corporation (DVC)

- 2.217 Against targeted thermal and gas turbine generation of 7550 MU and Hydel generation of 283 MU, Damodar Valley Corporation (DVC) achieved thermal and gas turbine generation of 7907 MU and hydel generation of 281 MU during 2000-01. In the year 2001-02, it is projected in the RE that DVC will generate thermal and gas power to the tune of 8845 MU and hydel power of 350 MU respectively. Projection for Annual Plan 2002-03 is that there will be a generation of 9315 MU of which 8965 MU will be from thermal and gas and 350 MU from Hydel.
- 2.218 The total plan outlay (IEBR compnent) of DVC was revised to Rs. 279.42 crore during 2001-02 from budgeted outlay of Rs. 284 crore. The plan outlay of the DVC for the year 2002-03 has been targeted at Rs. 840.06 crore. DVC did not get any budgetary support during 2001-02 and 2002-03.
- 2.219 To a querry that how the DVC propose to achieve the targets of IEBR component of Rs. 840.66 crore fixed for the year 2002-03 although it could not achieve the target of Rs. 284 crore during 2001-02. The Ministry of Power informed the Committee in a written reply as under:-
- (i) In order to achieve the targets, a number of measures have been initiated to expedite action, monitoring the progress of works, monthly, review of works and expenditure against budgetary provision and strengthening administration at all levels.
- (ii) Seven projects have been considered for identification as Maga Power Projects for which contracts will be given under time-bound turnkey basis through ICB. Transmission contracts are also to be given on turnkey basis.
- (iii) Contracts and supplies are closely monitored for expediting their completion/adherence to delivery schedule. System engineers are personally visiting the work places of the main suppliers.
- (iv) Progress of expenditure is being monitored on monthly basis. Regular meeting are taken by the Chairman, DVC.
- (v) System restructing study has been initiated by ASCI, Hyderabad in order to improve performance.
- (vi) Simplification of procedures has been undertaken to avoid delays and delegate powers and decentalise authority in the interest of speedy clearances.
- (vii) Matters pending with various agencies, like Ministries of Government of India and State Governments are being pursued regularly.
- (viii) Pofessional Organisations like UPL, NHPC, NTPC, MECON are being associated for consultancy work on O&M.
- (ix) Adequate measures have been taken to improve local law and order problem by close liaison with district authorities.

2.220 Regarding performance during financial year 2001-02 of different Power plants of DVC, the Committee have been informed in a written reply, as under:-

Plant	Generation (MU)	PLF (%)
BTPS'B'	1994.440	39.50
CTPS	1429.829	23.78
MTPS	2374.144	47.12
DTPS	1014.193	36.26

- 2.221 The Committee have been informed that different power plant of DVC have generated low power pending shut down became R&R study and future R&M, Labour trouble, capital overhauling, technical breakdown etc.
- 2.222 Regarding variances between budgeted and actual expenditure on various projects of DVC, the Committee have been apprised of the following:-

# Name of the Project: Transmission and Distribution Schemes

Rs. in crore

BE 2000-01	RE 2000-01	Actual 2000-01	RE Actual Variance
87.00	60.00	32.02	27.08

## Reasons for Variance between RE and Actual 2000-01:

The under utilization of allocated fund to the tune of Rs. 27.98 crore is due to (i) ROW problem faced in different transmission line works (ii) Excessive rain during last monsoon, which extended up to October, 2000 hampering site-work (iii) Non-booking of committed expenditure incurred for various reasons (iv) Work pending due to non-receipt of forest clearance, non-availability of land from Government agencies and inordinate delay in getting clearances from Railways & Coal authorities.

## Name of the Project: Pollution Control

Rs. in crore

BE 2000-01	RE 2000-01	Actual 2000-01	RE Actual Variance
10.00	3.27	0.97	2.30

#### Reasons for Variance between RE and Actual 2000-01:

M/s. ALSTOM had given a completion schedule for all the three units of BTPS – 'B' by February, 2001 but were lagging behind their commitments made on 5.2.2001 in respect of supply as well as erection of materials. Work has been inordinately delayed due to reasons mentioned below:

- (i) All the commissioning activities of unit # 3 have been completed by M/s. ALSTOM but it could not be put into operation due to inadequate water pressure in Ash Water Header Line. Moreover, the flooring work in ESP area of unit # 3 could not be completed. Re-tendering has been done and first calls cancelled.
- (ii) Pre-commissioning activities of additional ESP for unit #2 was more or less completed by M/s. ALSTOM and hooking up of the same was kept in waiting pending the shut down of the unit. Work of additional ESP of unit #1 was under progress.

# Name of the Project: Maithon Thermal Power Project (Right Bank) (4x250 MW)

Rs. in crore

BE 2000-01	RE 2000-01	Actual 2000-01	RE Actual Variance
50.00	2.00	0.06	1.94

#### Reasons for Variance between RE and Actual 2000-01:

Small expenditure could be incurred on this project due to slow progress in finalizing the handing over of land by the Government of Bihar.

## Name of the Project R& M Scheme

			(Rs. in crore)
BE	RE	Actual	RE-Actual
2000-01	2000-01	2000-01	Variance
125.00	14.50	5.16	9.34

Reasons for Variance between RE and Actual 2000-01

# i. <u>Installation of new ESPs and connected ash evacuation system etc at BTPS 'A'</u>

Rs. 300.00 lakhs were kept in RE 2000-01 for the above activity. Only technical LOA was placed on M/s BHEL on 27.9.2000. Decision for placing Amendment order with commercial terms took longer time. Hence, no expenditure could be made on this account till march 2001.

# ii. Complete R&M/LE work of BTPS 'A' U-3 and CTPS U-2

Rs. 50.00 lakhs each had been kept in RE 2000-01 for consultancy services against Complete R&M/LE work of BTPS'A' U-3 and CTPS –U-2. It was decided that to refer R&M /LE work of old units at CTPS & BTPS'A' and setting up of additional units of 210 MW at BTPS 'A' and 210/250 MW at CTPS to CEA for their study and advice. In reply, CEA have advised vide letter dt. 24.1.2001 for total Refurbishment of BTPS 'A" (U-1, 2&3). Accordingly, technical specifications for CTPS U-1, 2&3 and BTPS'A' U-I, 2&3 was prepared for consultancy service. Hence, amounts allocated against the above activities remained unspent.

Rs. 140.00 lakhs provided in RE 2000-01 against excitation system of CTPS U-4 out of which Rs.95.28 lacs have been released in March 2000-01 Rs. 110.00 lakhs were provided against Turbovisory Instruments of CTPS – U-5, which could not be spent till March 2001, through major supplies of materials had already been completed by the contractors.

## Name of the Project Rehabilitation of DTPS U#1 &2

			(Rs. in crore)
BE	RE	Actual	RE-Actual
2000-01	2000-01	2000-01	Variance
5.00	0.01	0.00	0.01

Reasons for Variance between RE 2000-01 and Actual 2000-01

Variance is negligible. Land & Infrastructure adequacy study for installation of one unit (1\* 250 MW) as a new unit has been taken up by M/s DCL.

Mejia TPS Extn. Unit No. 4 (1x210 MW)

			(Rs. in crore)
BE	RE	Actual	Variance
2001-02	2001-02	2001-02	(RE 2001-02(-)
			Actual 2001-02
100.00	6.00	0.03	59.97

#### Reasons for Variance between RE and Actual 2001-02.

Advance payment to BHEL against EPC Contract is expected to be awarded in March 2001-02. Hence it is likely that entire provision in RE-2001 –02 will be utilized in 2001-02 itself.

# (Maithon RE RPS (Equity contribution to Maithon Power Ltd.)

			(Rs. in crore)
BE	RE	Actual	RE-Actual
2001-02	2001-02	2001-02	Variance
			(RE 2001-02(-)
			Actual 2001-02
53.40	2.00	0.26	1.74

#### Reasons for Variance between RE and Actual 2001-02

Provision kept for equity contribution to cover payments for land acquisition and advance payment for EPC contract could not be utilised fully so far since the land acquisition process is still on the way and the approval for DPR is yet to be received from CEA. Hence the variation stands at Rs. 1.74 crore between RE 2001-02 and Actual 2001-02 (upto February, 02)

# **R&M Schemes (2001-02)**

		(Rs. in crore)
RE	Actual	RE-Actual
2001-02	2001-02	Variance
		(RE 2001-02(-)
		Actual 2001-02
45.79	2.76	43.03
	2001-02	2001-02 2001-02

#### Reasons for Variance between RE and Actual 2001-02.

- i. Against Rs.9.80 crore allocated for RLA study at BTPS 'A" CTPS & DTPS for R&M / L.E. work, Rs. 0.37 crore only could be spent. However, funds for Rs. 3.92 crore would be required by March, 2002.
- ii. The allocated amount of Rs.25.00 crore against Maithon GTP, could not be spent during 2001-02 as DVC Board has not accorded approval to the proposal in absence of certain clarifications. Matter is being put up to Board again in March, 2002.
- iii. Allocated amount of Rs. 0.75 crore for conditioning of Generator of Panchet HEP U-1 could not be spent till now. The activity will be taken up after RLA study.

## **TSC schemes (2001-02)**

BE	RE	Actual	RE-Actual
2001-02	2001-02	2001-02	Variance
			(RE 2001-02(-)
			Actual 2001-02
78.00	71.00	17.37	53.63

#### Reasons for Variance between RE and Actual 2001-02.

Full payment could not be effected to contractors though the work has been completed in respect of certain Schemes. In certain cases, work was stalled due to local disturbances as well as contractors own problems. In the schemes where order has already been placed, the contractors could not take up the work due to various reasons. It is expected that some pending bills (may be upto Rs. 9.00 crore) will be cleared within March, 2002.

## **Status of Tailpool Dam**

- 2.223 The work on Tail Pool Dam at Panchet started by Damodar Valley Corporation in October, 1979 at an estimated cost of Rs. 3.90 crore. Due to very unfavorable law & order situation, the Corporation had to decide on 13.2.1996 to discontinue the construction work. Government of India by order dated 16.12.1996 constituted a four member expert committee to examine the feasibility of the project in view of the prevailing uncertain condition and its impact on cost estimate, completion schedule due to persistent disturbed law and order situations and to make a realistic assessment about the economic viability of the project in the light of prevailing power supply position and site conditions. The Committee could not come to a unanimous decision on restarting the work and completion of the project. The committee was equally divided regarding Techno economic viability of the project. However all the members were unanimous about the seriousness of the law & order situations on the basis of which the project suffered repeated setbacks and had to be abandoned.
- 2.224 The Standing Committee on Energy in its 3<sup>rd</sup> report (13<sup>th</sup> Lok Sabha) recommended to restart the work on the Tail Pool Dam and a five member committee comprising D.C, Dhanbad & D.M, Purlia was constituted on 19.7.2000 to suggest & finalise the aspects of land acquisition and R&R package. The committee met twice in August and September, 2000 but no progress could be made. According to the Government, the project, now has lost its relevance under the changed power scenario of the Eastern region and if the project is completed incurring additional expenditure to the tune of Rs. 50 crore, this would result in recurring annual loss of Rs. 8.68 crore to the Corporation. Also, the law and order situation has not undergone change during last 5 years. DVC is not in favour of re-start of work on this project in view of the technoeconomic and commercial consideration and also the prevalent law and order situation. The Secretary, Ministry of Power during the review meeting on 11.3.2001 towards implementation or otherwise of Tail Pool Dam Project of DVC decided that CEA & DVC officials should rework jointly to arrive at a correct project cost and resultant tariff as well as work out the commercial viability of the project and made a clear- cut recommendation.
- 2.225 Accordingly, CEA & DVC are in the process of discussions and sharing of data/information. Two meetings have already taken place the last being on 15.1.2002. The desired information as sought for by CEA during the last meeting has been furnished by DVC on 15.2.2002.

2.226 DVC took a clear stand that in the present day scenario that it would not be economically viable to generate power from the Panchet Tail Pool Dam because of enhanced cost considerations and also because of cheaper power available at highly competitive rates from other hydel Generators in the region. The Committee was also informed that as per decision of the Ministry of Power, the CEA and DVC are jointly working out the estimated cost of generation from Panchet Tail Pool Dam. The commercial viability of the project should be kept in view of the recommendations of DVC & CEA.

2.227 The budgeted outlay of DVC for 2001-02 has been decreased from Rs. 284.00 crore to Rs. 279.42 crore at Revised Estimate stage. The plan outlay of DVC for the year 2002-03 has been targeted at Rs. 840.06 crore. The Committee would like to know the steps taken by DVC to ensure that the enhanced budget would be fully utilized during 2002-03. Regarding utilization of plan outlay by different projects of DVC, the Committee have observed that during 2000-01 for transmission and distribution schemes against a budgeted target of Rs. 87.00 crore, the actual expenditure was Rs. 32.02 crore. The under-utilisation of funds was reported to be due to ROW problem faced in transmission lines, excessive rain, nonbooking of committed expenditure, non-receipt of forest clearance, etc. For Maithon Thermal Right Power Project of DVC, during 2000-01, against a plan outlay of Rs. 50 crore, only Rs. 0.06 crore has been utilized due to the reported slow progress in finalization of handing over of the land by the Government of Bihar. Again, for R&M schemes, against BE of Rs. 125.00 crore during 2000-01, actuals during the year were Rs. 5.16 crore only. The Committee have further observed that some other projects like pollution control, rehabilitation of Durgapur Thermal Power Station Unit- I & II, Mejia TPS Extension Unit-IV, Maithon RE RPS, R&M schemes for the year 2001-02 and TSC schemes for 2001-02, the fund utilization was almost negligible as compared to Budget Estimates. The Committee take a strong note of the under-utilisation of funds by DVC and are of the view that unrealistic plan outlays are being proposed by DVC management for different projects / schemes. The Committee, therefore, recommend that the DVC/Government should review the existing system of budget formulation by DVC and take all necessary steps to improve the formulation of plan outlay at budget stage so that realistic targets could be fixed and achieved. The Committee would also like to know the steps taken by the Government to ensure timely commissioning of new power plant at Durgapur, Left Bank and Right Bank Maithon Projects.

2.228 The Committee observe that against targeted thermal and gas-turbine generation of 7550 MU and hydel generation of 283 MW, Damodar Valley Corporation (DVC) achieved thermal and gas-turbine generation of 7907 MU and hydel generation of 281 MU during 2000-01. The projection for the year 2001-02 are 8845 MU for thermal and gas-turbine power generation and 350 MU of hydel power. The annual plan for 2002-03 envisages that there will be a generation of 9315 MU of which 8965 MU will be from hydel. However, the Committee observe that the Plant Load Factor (PLF) of different projects of DVC vary from 27.28% to 47.12% which is much below than average PLF of thermal power stations in the country. The Committee, therefore, recommend that the Government should take necessary steps to increase the PLF of these power stations and also attend to the problem of wheeling out excess power from certain units of DVC plants by strengthening the transmission system. The Committee would like to DVC to draw up a perspective plan alongwith investment plan for R&M activities in its various

plants to be taken up during the  $10^{\rm th}$  Plan. The Committee may be informed of the action taken in the matter.

2.229 Regarding implementation of Tailpool Dam Project, the Standing Committee on Energy have repeatedly recommended implementation of the project in its 3<sup>rd</sup> and 16<sup>th</sup> Reports, (13<sup>th</sup> Lok Sabha) on Demands for Grants for 2000-01 and 2001-02 of the Ministry of Power. The Committee have now been informed that CEA and DVC are in the process of discussion and sharing of data/information to arrive at the correct project cost and resultant tariff as well as work out commercial viability of the project to make a clear cut recommendation on the implementation of the project. In this connection, the Committee have been informed that desired information sought by CEA during the last meeting held on 25.1.2002 has been furnished by DVC on 15.2.2002. The Committee expect that techno-economic viability of the project be finalized by the joint committee of CEA and DVC at the earliest and the work on Tailpool Dam will be started at the earliest.

# P. Tehri Hydro Development Corporation Limited(THDC)

- 2.230 THDC, a Joint Venture Corporation of the Govt. of India and Govt. of U.P., was incorporated as a Limited Company under the Companies Act, 1956, in July 1988, with the following objectives:
- i) To plan promote and organise an integrated and efficient development of hydro resources of Bhagirathi river and its tributaries at Tehri and complementary downstream development(the Tehri Complex) for power generation and other purposes in all its aspects.
- ii) To undertake in a similar manner the development and harnessing of such hydroelectric sites/projects in Bhagirathi valleys as may be entrusted to the company by the State Government.
- 2.231 The 2400 MW Tehri Power Complex comprises the following components viz., the 260.5m high rock fill Tehri Dam and 1000 MW Hydro Power Plant(HPP)(Stage-I of the Complex), the 1000 MW Tehri Pump Storage Plant(PSP) situated just downstream of the confluence of Bhagirathi and Bhilangana rivers at Tehri; the 1000 MW Tehri Pump Storage Plant(PSP) and a 97.5m high concrete Dam with 400 MW hydro Power Plant at Koteshwar, 22 Km. Downstream of Tehri, along-with 800 KV Associated Transmission System for evacuation of power from the Tehri Hydro Power Complex. The corporation has an authorised share capital of Rs. 2000 crore. The cost of the project is being shared in the ratio of 75:25 (equity portion) for power component, while the irrigation component(20% of Stage-I cost) is to be entirely funded by the State Government.
- 2.232 The Government has approved in March, 1994 the implementation of Tehri Dam & HPP(1000 MW) as Stage-I of Tehri Power Complex; the other components were to be implemented subsequently as per the availability of resources. The Tehri Stage-I is currently at an advanced stage of implementation. The Government has also accorded approval in April, 2000 for implementation of 400 MW Koteshwar HEP. Work on this project has been taken up. The 1000MW Tehri Pump Storage Plant(PSP) would be taken up after firming up of DPR, for which French Consultants have been engaged to prepare DPR, under mechanism of French Aid; the DPR was scheduled to be finalised by the end of 2001.

2.333 The U.P. State government had entrusted investigation, development and execution of two Green Field Hydro Electric Projects i.e. 416 MW Pala Maneri & 520 MW Loharinag Pala located upstream of Maneri Bali Stage-I on the river Bhagirathi. The investigation work for these two projects were identified and taken up. State Government, subsequently informed to keep the work of these two projects in abeyance pending the formation of Uttranchal State. The State Government is also considering to hand over the execution of the 304 MW Maneri Bhali Stage-II to THDC, which has been held up due to various constraints. With the formation of Uttranchal State the transfer of the project could not take place. THDC has taken up the matter with the Government of Uttranchal for handing over of these projects to THDC. In this regard, Hon'ble Minister of State for Power, Government of India had also written to Chief Ministers of Uttranchal and UP handing over of the above Projects as well as other Projects in Bhagirathi(and Alaknanda) basin(s) to THDC.

2.234 The budgetary support and IEBR component for 2001-02 and 2002-03 in respect of THDC are given below:

C					R(Rs. in crores)
	BE	RE	BE	Variation	Variation
	2001-02	2001-02	2002-03	between	between
				BE 2001-02&	RE 2001-02&
				BE 2002-03	BE 2002-03
GBS	200.00	142.76	146.00	-54.00	+3.24
IEBR	1028.17	803.55	993.80	-34.37	+190.25
PFC Loan	643.66	400.00	780.00		
ECB	384.51	403.55	213.80		
Total					
(GBS+IEBR)	1228.17	946.31	1139.80	-88.37	+193.49

There is reduction of Rs. 88.37 crore in BE 2002-03 as compared to BE 2001-02 outlay(GBS+IEBR).

- 2.235 About the reasons for reduction of plan outlay(both budgetary support and IEBR component) during 2001-02, the Ministry of Power informed the Committee that the plan outlay(GBS and IEBR) of THDC for the year 2001-02 has been reduced from BE Rs. 1228.17 crore to RE Rs. 946.31 crore due to the following reasons:
  - i) Non-availability of Rip-rap material from Asena Quarry for the dam
  - ii) Deferment of Major Civil Work of Koteshwar Project
  - iii) Work Stoppage due to agitations from 31.3.2001 to 23.4.2001
  - iv) Delay in taking up stilling basin work due to delay in closure of diversion tunnels T-e and T-4 of Tehri HE Project.
- 2.236 The Committee have been further informed that various infrastructural works, all the four diversion tunnels and coffer dam have been completed. The construction activities at the project site are at an advance stage of completion and the first unit of 250 MW is scheduled to be commissioned in March, 2003 and remaining 3 units of 250 MW each by August, 2003.
- 2.237 About the commissioning schedule of the project, during examination of Demand for Grants (2001-02) of Ministry of Power, the Government had informed the Committee in a post evidence reply as under:-

"The commissioning schedule of Tehri Hydroelectric Project Stage-I(1000 MW) is December, 2002. To achieve the schedule, the Diversion tunnels T-3 and T-4 were envisaged to be closed by March, 2001 alongwith the vacation of Old Tehri Town. Since this has not been possible and tunnels have not been closed so far, it is estimated that there would be a revenue loss of Rs. 3.00 crore approximately per day on account of nongeneration of electricity in addition to the cost overrun due to escalation on balance work and an interest burden on loan portion. The time overrun is linked with the vacation of Old Tehri Town for which the efforts are on".

- 2.238 About the (R&R) of Project Affected Persons(PAPs) by the Government of Uttranchal the Committee been informed that the work is being implemented in two phases. The first phase includes all 5291 urban families and 2664 rural fully affected families. About shifting of Government Offices/Institutions, the Ministry of Power has stated that all the Government/Semi-Government Offices and other Educational Institutions located in Old Tehri Town have been shifted to New Tehri Town except, Police Station and Hospital which will be shifted in last phase.
- 2.239 The Phase-I of the rehabilitation process, which was connected with the construction of Coffer Dam, has been completed. The rehabilitation process for the II-Phase Rural Rehabilitation, connected with the completion of the main dam and final impoundment of reservoir, is underway. The Government of Uttranchal shall shift the urban families from Old Tehri Town before the monsoon i.e. by June, 2002. The State Government of Uttranchal is reportedly according highest priority to the early resettlement of all the remaining rural families, and all necessary steps in this direction are being taken so as to complete the entire rehabilitation by June, 2003.
- 2.240 Regarding plan outlay for Tehri Hydro Development Corporation, the Committee observe that against budgetary support of Rs. 200 crore, the revised estimates have been Rs. 142.76 crore. The IEBR component was also reduced to Rs. 803.55 crore from budget estimate of Rs. 1208.17 crore. Further, Power Finance Corporation loan was revised to Rs. 400.00 crore from Rs. 643.66 crore budgeted during 2001-02. The Committee are constrained to note that although they have recommended that all necessary steps should be taken to get the old Tehri Town vacated by unauthorized occupants who are responsible for further escalation of project cost, families from old Tehri Town are expected to be shifted from there only by June, 2002. The entire rehabilitation programme is likely to be completed by June, 2003. The Committee, cannot, but deplore the way the Government/THDC have failed to ensure timely commissioning of the project as scheduled in December, 2002 which is now much delayed. As per revised schedule, the first unit of 250 MW is to be commissioned in March, 2003 and remaining 3 units of 250 MW each in The Committee would like to know the reasons for delay in August, 2003. commissioning of the project and the steps taken to fully utilise the yearly allocations and ensure that the revised schedule is not delayed further. The Committee would also like to know the present status of the civil works of Koteshwar project which is also being implemented by THDC.

# Q. Realisation of Outstanding Dues

2.241 About the outstanding dues (indicative) payable to Central Public Sector Undertakings (including surcharge) by different SEBs/States as on 30.9.2001, the Committee have been informed that these are as under: -

(Rs. in crore)

Names of PSUs	Principal	Surcharge	Total
NTPC	12089.42	7033.34	19122.76
NHPC	1100.77	1126.86	2227.63
PGCIL	956.80	325.10	1281.90
NEEPCO	785.47	374.71	1160.18
DVC	1315.78	1649.52	2965.30
Total	16248.24	10509.53	26757.77
NEEPCO Interest as on 31 <sup>st</sup> March, 2001.			

2.242 Enquired about the Billing, realization and shortfall in payment of full billing to NTPC by various SEBs for the past 3 years, the Ministry of Power have given the following year-wise information:-

Year	Billing (Rs. in	Realisati	on	Shortfall
	crore)	Amount (Rs. in crore)	%	(Rs in crore)
1998-1999	14795.99	12168.73	82.2	2627.26
1999-2000	17183.35	14450.47	84.1	2732.88
2000-2001	19539.41	17506.14	89.6	2033.27
2001-2002 (Up to Feb, 02)	19273.53	14319.84	74.3	4953.69

2.243 Regarding steps that have been taken by NTPC to recover the past dues and to ensure full payment of current dues in future the Committee have been informed of the following steps: -

## (a) Intensive Follow-up

The matter of outstanding dues and payment of current bills has been taken up by NTPC and the Government of India at the level of Chief Minister, Minister of Power, Chief Secretary of State and Chairman of SEB. Periodic meetings are arranged to find solutions to issues relating to payment of dues.

# (b) Special Incentive Scheme

NTPC introduced a Special Incentive Scheme in September, 1994 to provide incentive to SEBs who establish LC to ensure payment of full amount of current monthly bills. By enhancing their LC to the required level, SEBs can avail 2.5% rebate on payments made in four equated weekly installments and also obtain reimbursement of charges incurred for LC operation.

## (c) Central Appropriation

The Government of India has from time to time been helping to bring dues within the convenient level of 2 months. The Government of India since 1987-88 has approved Central Appropriation out of Central Plan Assistance to States to help in recovery of outstanding dues of CPSUs and NTPC against various defaulting SEBs.

# (d) Regulation of Power Supply

NTPC has also taken up regulation of power supplies where all efforts to persuade SEBs to liquidate dues have failed.

# (e) Mutual Adjustments

Arrangement with SAIL and IISCO for settlement of outstanding dues owed by DVC to them through round adjustment.

## (f) Bonds

NTPC has accepted bonds against outstanding dues of various SEBs.

## (g) Take-over

NTPC has taken over three power stations from SEBs of UP and Orissa towards settlement of old outstanding dues. The details of thermal plants taken over by NTPC in the past are as under: -

Name of the Power Station	Capacity	Date of take over	Taken over from	
Talcher Thermal Power	460 MW	3.6.1995	Orissa	
Station (460 MW)				
Tanda Thermal Power Station	440 MW	14.1.2000	UP	
(440 MW)				
Unchahar Thermal Power	420 MW	13.2.1992	UP	
Station (420 MW)				

## (h) Long-term Payment Safeguard

NTPC has provided special payment safeguards in the power purchase agreements being signed for its new projects. These include back up for the LCs by way of Escrow Arrangement, State Government Guarantee and Tripartite Agreement for direct payment out of State's RBI Account in case of default in payment.

## (i) Direct Power

NTPC has been permitted by the Government of India for direct power supply to financially sound bulk consumers like Railways".

2.244 The Ministry of Power further informed the Committee that NTPC and all other Power PSUs have extended full support to the package recommended by the Expert Group and approved by the High Level Empowered Group in spite of the major sacrifices to be made. All CPSUs would be making sacrifices on implementation of Expert Group Report on One-Time Settlement of Dues payable by SEBs to CPSUs. The impact in respect of NTPC alone for settlement of outstandings dues as on 28.02.2001 would be as under: -

a)	Due to write-off of surcharge (60%)	Rs. 3634.00 crore
b)	Due to opening of LC by specified date (2% of	Rs. 268.00 crore
	nominal value of bonds)	
c)	Due to incentive payment of SEBs for ensuring full	Rs. 2548.00 crore
	and timely payments over the next 4 years.	
d)	Substitution of SEB bonds with State Government	Rs. 480.00 crore
	bonds (differential interest)	

e)	Benefit due to deferred liability	Rs. 2372.00 crore
	Total	Rs. 9302.00 crore

2.245 In this connection, the Secretary, Ministry of Power informed that there was an Empowered Committee of 9 Chief Ministers that met and endorsed this thing subject to the fact that half of the States have to agree. So, in June, Ministry of Power wrote to all the States that agreed at the earliest. Andhra Pradesh and West Bengal were the first to agree. Once it is approved, it will be a major thing. The dues of SEBs will now be wiped out because there will be bonds. CPSUs, of course, will not get money. But they will get, at least, something like bonds that they can use. He further added the total dues is 41,000, about 260 crore is the principal and Rs.150 crore is the interest. 60 per cent will be waived.

2.246 However, considering the overall improvement in financial discipline from implementation of the above proposal and provision for full payment of monthly bills in future, NTPC and other CPSUs have reportedly extended their support to the scheme.

2.247 Although, the Committee are happy to note that Government have accepted the package recommended by the Expert Group headed by Montek Singh Ahluwalia, whereby 60% of surcharge will be written off, the Committee are constrained to note that CPSUs will have to make sacrifices amounting to thousands crore of rupees at a time when they require improved investments. NTPC alone will be loosing by Rs.9302 crore as per the package accepted by the Government. The Committee are dismayed to note that although the Government of India have approved recovery of outstanding dues of CPSUs by Central appropriation out of Central Plan Assistance to States since 1987-1988 and have also taken steps like intensive schemes, bonds, takeover, etc., NTPC dues increased from Rs.2627.26 crore in 1998-1999 to Rs.4953.69 crore during 2001-2002(February, 2002). In the present circumstances, the Committee recommend that the Government should take all necessary steps so that full payment of monthly bills is ensured in future. The Committee would like to know the action taken by the Government in this regard.

New Delhi; <u>April 10, 2002</u> Chaitra 20, 1924 (Saka) SONTOSH MOHAN DEV, CHAIRMAN STANDING COMMITTEE ON ENERGY