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# STANDING COMMITTEE ON ENERGY
# (1999-2000)
# THIRTEENTH LOK SABHA

MINISTRY OF POWER

DEMANDS FOR GRANTS
(2000-2001)

**THIRD REPORT**


LOK SABHA SECRETARIAT
NEW DELHI
April, 2000 / Chaitra, 1922 (Saka)

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ON ENERGY (1999-2000)

Shri Sontosh Mohan Dev – Chairman

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3. Shri Prasanna Acharya
4. Shri Prakash Yashwant Ambedkar
5. Shri Rajbhar Babban
6. Shri Vijayendra Pal Singh Badnore
7. Shri Jagmeet Singh Brar
8. Shri Lal Muni Chaubey
9. Shri A.B.A. Ghani Khan Choudhury
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SECRETARIAT

| | | | |
|---|---|---|---|
| 1. | Dr. A.K. Pandey | - | Additional Secretary |
| 2. | Shri John Joseph | - | Joint Secretary |
| 3. | Shri P.K. Bhandari | - | Deputy Secretary |
| 4. | Shri R. S. Kambo | - | Under Secretary |
| 5. | Shri Arvind Sharma | - | Reporting Officer |

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* Nominated to the Committee w.e.f. 6th April, 2000.

** Ceased to be Member of the Committee w.e.f. 2nd April, 2000, consequent upon their retirement from Rajya Sabha.

## INTRODUCTION

I, the Chairman Standing Committee on Energy, having been authorised by the Committee to present the Report on their behalf, present this Third Report (Thirteenth Lok Sabha) on Demands for Grants (2000-2001) relating to the Ministry of Power.

2. The Committee took evidence of the representatives of the Ministry of Power on 28th March, 2000.

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 11th April, 2000.

NEW DELHI;
11 April, 2000
22 Chaitra, 1922 (Saka)

SONTOSH MOHAN DEV,
Chairman,
Standing Committee on Energy.

# REPORT
# PART I
# CHAPTER - 1

## Introductory

The Ministry of Power started functioning independently with effect from 2nd July, 1992. Earlier, it was known as the Ministry of Energy comprising the Departments of Power, Coal and Non-Conventional Energy Sources. Electricity is a concurrent subject at Entry 38 in List III of the Seventh Schedule of the Constitution of India. The Ministry of Power is primarily responsible for the development of electrical energy in the country and evolving general policy in the field of energy. The Ministry is concerned with perspective planning, policy formulation, processing of projects for investment decision, monitoring of the implementation of power projects, training and manpower development and the administration and enactment of legislation in regard to thermal, hydel power generation, transmission and distribution.

1.2 The Ministry of Power is mainly responsible for evolving general policy in the field of energy. 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) Administration of the Indian Electricity Act, 1910 (9 of 1910) and the Electricity (Supply) Act, 1948 (54 of 1948)/Central Electricity Regulatory Commission Act, 1998.

(v) All maters relating to Central Electricity Authority, Central Electricity Board and Central Electricity Regulatory Commission.

(vi) Rural Electrification, Power schemes in Union Territories and issues relating to Power supply in the States and Union Territories.

1.3 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.

1.4 The all India installed capacity of electric power generating stations is under utilities was 93253.04 MW as on 31.3.1999 consisting of 22443.28 MW hydro, 67560.76 MW thermal, 1842 MW nuclear and 1024 MW wind which has increased to 96266.04 MW as on 31.01.2000 consisting of 23627.28 MW hydro, 69474.76 MW thermal, 2240 MW nuclear and 1024 MW Wind Energy.

1.5 The Ninth Plan envisaged a total capacity of 40245.2 MW comprising 9819.7 MW hydro, 29545.5 MW thermal and 880 MW nuclear power. The mid- term appraisal exercise conducted in July, 1999, however, has indicated that about 28097 MW would be feasible with corresponding break up of hydro 8399.2 MW, thermal 18818.0 MW and Nuclear 880.00 MW.

1.6 The Ministry of Power have presented Demands for Grants of Rs. 2640.97 crore (2000-01) against Rs. 3451.81 crore of Budget Estimates and Revised Estimates of Rs. 3249.51 crore during 1999-2000. The details of the consolidated financial requirements for the various programmes of the Ministry are shown at Appendix.

1.7 The observations of the Committee on the basis of the scrutiny of Demands for Grants of the Ministry for the year 2000-01 vis-a-vis performance of various programmes during 1999-2000 are brought out in the succeeding Chapter.

## CHAPTER – II

### A. Plan Outlay

2.1 Major head-wise details of approved BE/RE 1999-2000, actual expenditure up to January, 2000 and likely expenditure during 1999-2000 of Ministry of Power are as under:

(Rs. in crore)

| Major Head | B.E. 1999-2000 | R.E. 1999-2000 | Exp. Upto Jan. 2000 | Likely Exp. 1999-2000 |
|---|---|---|---|---|
| A (Plan) | | | | |
| 3451 (Secretariat Eco. Services) | 0.50 | 0.50 | 0.05 | 0.50 |
| 2801 (Power Development) | 418.03 | 380.98 | 253.41 | 380.82 |
| 3601 (Grant-in-aid to State Government) | 7.25 | 5.00 | 0.00 | 5.00 |
| 4801 (Capital Outlay on Power Deptt.) | 1245.11 | 1246.43 | 1037.57 | 1246.26 |
| 6801 (Loans for Power Projects) | 1727.31 | 1563.79 | 622.45 | 1563.79 |
| 7601 (Loans & Advances to State Govt) | 1.80 | 3.30 | 1.80 | 3.30 |
| **Total** | **3400.00** | **3200.00** | **1915.28** | **3199.67** |
| B (Non-Plan) | | | | |
| 3451 (Secretariat Eco.Services | 6.06 | 6.75 | 5.36 | 6.72 |
| 2801 (Power Department) | 595.75 | 849.76 | 636.52 | 849.71 |
| **Total** | **601.81** | **856.51** | **641.88** | **856.43** |

2.2 From the above details it is observed that there is no saving in Plan and Non-Plan expenditure as against the approved RE 1999-2000. In the pre-budget discussion with Secretary (Exp.), Ministry of Finance had observed that the autonomous bodies such as Central Power Research Institute and National Power Training Institute should not depend on budgetary support from the Government and they should meet their expenditure by generating more internal resources. Accordingly, under major head 2801 the budget allocation of CPRI and NPTI was reduced by Rs. 10 crore and Rs. 5 crore respectively. The reduction of Rs. 16.25 crore at RE stage under Energy Conservation Scheme is on account of slow progress of Energy Conservation Schemes during the first half of the year. The reduction of Rs. 6 crore is on account of non-clearance of new schemes of CEA. The reduction under major head 6801 is on account of less utilisation of External Assistance through Budget by PGCIL to tune of Rs. 74.52 crore in respect of Nathpa Jhakri Transmission Line and Unified Load Despatch & Communication facilities-Northern Region (ULDC-NR) due to deferment of supplies & erection. This deferment for Nathpa Jhakri Transmission Line is reported to ensure that transmission project is in tune with generation project. There have been delays in supplies of the ULDC-NR Project. The shortfall of Rs. 71 crore under EAB in respect of Nathpa Jhakri Project is due to slow progress of work in major civil contracts on account of flash floods as well as workers strike / agitation by villagers etc.

2.3 Asked about the reasons for variation between BE and RE since 1996-97, 1997-98 and 1998-99 in plan investment in PSUs, the Ministry of Power informed the Committee in a note that the overall budgetary support to the PSUs was actually increased at the RE stage by Rs. 11.83 crore and Rs. 212.50 crore during 1996-97 and 1997-98 respectively largely on account of additional investment in the hydel sector. However during 1998-99 and 1999-2000 there has been marginal shortfall in the utilisation by Rs. 28.33 crore and Rs. 82.52 crore respectively. During 1998-99, one of the major reasons for shortfall was that some of the projects of NHPC like Dulhasti faced geological surprises resulting in lower utilisation of budgetary support. Another reason was lower utilisation of budgetary support by THDC on account of factors like suspension of work as a result of agitation by local people and less availability of matching share from Uttar Pradesh.

2.4 A glance over plan outlay for the Ministry of Power for the years 1998-99 and 1999-2000 reveals that over-optimistic targets have been projected for the Internal and Extra Budgetary Resources (IEBR). During 1998-99, against the total Central Plan of Rs. 9500 crore the IEBR component was budgeted at Rs. 6786 crore whereas the actuals were Rs. 4519.44 crore. Similarly, during 1999-2000, as against the target of Rs. 6660.27 crore, it is expected that only 5280 crore would be mobilised. The Ministry of Power have informed that IEBR during 1998-99 and J999-2000, was reduced at RE stage due to inability of PSUs to raise bonds/ debentures to the extent of approved target. 80% of the IEBR is accounted for by NTPC and Power Grid. The low utilisation of IEBR by these Corporations is mainly on account of delays in some of their major projects like Ramagundam (coal linkage delay), Rihand-II, Sipat, Simbadari and Talcher-II in the case of NTPC. In the case of Power Grid, delays in Talcher-II, NERLDC and WRLDC has been responsible for low utilisation. As regards DVC, there has been a substantial reduction in the IEBR on account of Maithon Right Bank Project not being sanctioned so far.

2.5 Explaining the modalities of IEBR projection, the Ministry of Power a note furnished to the Committee stated :

> "The IEBR projection in the budget estimates is commensurate with the capital outlays envisaged for the plan period on the basis of progress in project implementation and anticipated dates of commencement of new projects. Thus, the size of IEBR is determined mainly by the Annual Plan size. Before a new project is taken up for implementation, several issues have to be tied up, viz, fuel linkages, power purchase agreements and clearances from various agencies. The variation in IEBR between BE & RE, therefore, does not indicate the inability of the PSUs to mobilise resources but reduction in the capital outlay is on account of non-availability of statutory clearances resulting in deferment of the investment approvals of new unapproved projects. In case of NTPC, the reduction of IEBR in the past is not on account of the schemes under implementation, but it is on account of new projects which do not commence within the anticipated time schedule for various reasons. Accordingly, IEBR vis-a-vis the capital outlay gets reduced at RE stage".

2.6 A representative of Ministry of Power during evidence further stated:

> "The process in the Government of India is that when we make our budget, first the public sector undertaking will make its annual plan, then it will have an intent of internal and External Budget Resources. It is called IEBR. Then we go to the Planning Commission. The Planning Commission goes into each scheme in detail. At that point of time we have got the IEBR. The Planning Commission will examine that and say that this scheme is expected to come. Therefore, you can plan your raising of IEBR on that basis. After that with the Planning Commission we started a new exercise, a very detailed exercise, of what the planned fund should be. Now, we in the Ministry are always interested in the net budgetary support because that is the only thing cash in hand. The Ministry of Power has got a record. The Secretary has just pointed it out and 1 have got the figures. For 1994-95, the figure was Rs. 598 crore by way of net budgetary support. For the year 2000-2001, we have got budgetary support of Rs. 2086.99 crore. So, we have been successful in the Ministry of Power on two counts; one whatever revised estimates we have, we will meet the target. Secondly, the net budgetary support we are able to go particularly with the support of the Standing Committee, we are able to get more and more net budgetary support. But in the IEBR, some of the projects for which we have made plan for, do not come. This is very natural that something we have got geological surprises or environmental problems. There are delays in sanctions. You are very well aware that sanctions can get greatly delayed. It does happen that the process is delayed. Therefore, at the time of the revised estimates, I will cut down the size of the IEBR".

**2.7 The Committee note that Central Plan Outlay for the Ministry of Power, during 1999-2000 was budgeted at Rs. 9600.27 crore. The Revised Plan Estimates is Rs. 8049.92 crore. The plan, thus fell short by Rs. 1550.35 crore against the budgeted expenditure. The budgetary support for Central Power Research Institute and National Power Training Institute have been reduced by Rs. 15 crore during the year. Similarly, there has been reduction of Rs. 16.25 crore for energy conservation due to slow progress of the scheme during the first half of 1999-2000. The Committee are also dismayed to note the underutilisation of external assistance through budget by PGCIL to the tune of Rs. 74.52 crore in respect of Nathpa Jhakri Transmission line and Unified Load Despatch & Communication facilities - Northern Region (ULDC-NR) due to deferment of supplies and erection to ensure that transmission project is in tune with generation project which has been delayed. The IEBR component of Plan outlays of Ministry of Power was reduced to Rs. 4519.44 crore from Rs. 6786 crore during 1998-99. These were again revised downward to Rs. 5280 crore from Rs. 6660.27 crore budgeted during 1999-2000. The Committee further observe that the IEBR component with respect to National Thermal Power Corporation and Power Grid Corporation could not he mobilised during 1998-99 and 1999-2000 due to inability of PSUs to raise bonds/debentures to the extent of approved target. Similarly, NTPC, a Navratan, could neither mobilise the targeted Internal Resources, nor could it meet the target of ECB supplier credit. Although, the Government have stated that different task forces have been setup to monitor Thermal, Hydro and transmission projects, the low utilisation of IEBR**

**component is reported to he mainly on account of delays in major projects like Ramagundam, Rihand II, Sipat, Simhadari and Talcher - II in the case of NTPC and Talcher-II, NERLDC and WRLDC in case of Power Grid. The Committee are perturbed to note that in spite of their (Committee's) repeated recommendation to step up investment in Power sector by the Government as private sector has failed to respond as expected, the Ministry have not been able to utilise Plan outlays as approved during 1998-99 and 1999-2000. The Committee do not concur with the views of the Government that variations in IEBR, between BE and RE stages do not indicate the inability of PSUs to mobilise resources but is on account of non-availability of statutory clearances. In the opinion of the Committee, the reasons advanced by the Ministry are such which should have been visualised in advance and sufficient cushion should have been provided in the physical & financial targets. Even if the argument put forth by the Ministry is accepted that it does not indicate the inability of PSUs to mobilise resources, it does prove the lack of understanding of the ground realities on the part of planners/policy framers in fixing over ambitious targets and faulty project formulation and implementation machinery which tend to frustrate the IEBR targets. The Committee, therefore, recommend that Government should take into consideration the ground realities, while projecting targets for IEBR. At the same time, they should strengthen Project formulation and implementation machinery lest IEBR target should go haywire. The Committee hope and trust that the Ministry of Power will take concerted efforts to utilise fully, the enhanced Central Plan Outlay of Rs. 9720.18 crore, during 2000-01. The Committee also desire that the Government should leave no stone unturned, in mobilising the projected IEBR of Rs. 7079.21 crore during the year.**

## B. Power Generation

2.8 The Ninth Plan envisaged a total capacity of 40245.2 MW comprising 9819.7 MW hydro, 29545.5 MW thermal and 880 MW nuclear projects for the Ninth Plan. The Sector-wise additions proposed were as under:

Target:

(in Mega Watt)

| | Centre | State | Private | Total |
|---|---|---|---|---|
| Hydro | 3455 | 5814.7 | 550.0 | 9819 |
| Thermal | 7574 | 4933.0 | 17038.5 | 2954.5 |
| Nuclear | 880 | - | - | 880 |
| Total | 11909 | 10747.7 | 17588.5 | 40245.2 |

2.9 The Mid-Term appraisal exercise conducted in July, 1999, however ha! indicated that about 28097 MW capacity would he feasible. The break up o revised target is as follows:

| | Hydro | Thermal | Nuclear | Total |
|---|---|---|---|---|
| Central | 2955.0 | 5894.0 | 880.0 | 9729.0 |
| State | 5128 | 4877.0 | - | 1000.52 |

| | | | | |
|---|---|---|---|---|
| Private | 316.0 | 8047 | - | 8363.0 |
| Total | 8399.2 | 18818.0 | 880.0 | 28097.2 |

2. 1 0 The financial requirements for power generation for 2000-2001 and the actuals for 1998-99 and Budget Estimates and Revised Estimates for 1999-2000 are as under :-

(Rs. in crore)

| Actuals 1998-99 | | | Budget Estimates 1999-2000 | | | Revised Estimates 1999-2000 | | | Budget Estimates 2000-01 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Plan | Non-Plan | total | Plan | Non-Plan | total | Plan | Non-Plan | total | Plan | Non-Plan | Total |
| 1986.35 | 576.20 | 2562.55 | 2000.48 | 551.00 | 2551.48 | 1940.29 | 808.00 | 2748.29 | 1869.61 | 701.00 | 2570.61 |

It is observed that whereas Plan-expenditure on power generation is steadily on decline; non-plan expenditure is showing a rising trend.

2.11 During the year 1998-99, against the Central targets of 25 MW for hydro power generation; achievements were 'Nil' and for States it was 542.50 MW against the targets set for 519.50 MW. However, for thermal power generation against the Central targets of 166.30 MW, the actuals were 991.60 MW. Again, in the year 1999-2000, against the targets of 70 MW for Central hydro power generation, the achievements were 'Nil' up to December 1999. The hydro power generation in the State sector were 739 MW up to December 1999 against the targets set for 1493 MW. Out of the total thermal power generation of 2682 MW for 1999-2000, the achievements up to December 1999 was 1773 MW only.

2.12 When the Committee asked the reasons for poor performance generation in the first three years of Ninth Plan, the Ministry in a note stated :

> "The major shortfall in the performance vis-a-vis the targets in the case of the Ninth Plan would be in the case of the private sector which would be able to achieve only about 47 per cent of its target. The performance of the State and the Central sector would be commendable as they would be able to achieve 91 per cent and 83 per cent of their targets, respectively. The performance of the private sector has been poor primarily due to inability of SEBs to provide an adequate payment security mechanism to the IPPs and the delay in finalising the fuel linkages with Coal, Petroleum and Railway Ministries".

2.13 When pointed out whether the enhanced targets set for power generation by Central sector during last 2 years can be achieved with decline in plan expenditure, the Ministry stated that at the beginning of the 9th Plan. out of the total capacity addition target of 40,245 MW, a share of 11909 MW was to come from the Central sector. After the mid-term review in July, 1999, the feasible capacity addition was reduced to 28097 MW out of which 9729 MW is to come

from the Central sector. There has been no decline in plan expenditure for the years as may be seen from the table given below :-

(Rs. in crore)

| Years | Actual Plan Expenditure |
|---|---|
| 1997-98 | 6059.72 |
| 1998-99 | 7177.72 |
| 1999-2000 | 5014.30 (upto January, 2000*) |

* The expenditure during 1999-2000 is expected to be Rs. 8049.92 Estimate for 1999-2000, which is the Revised.

The targets for the Central sector are expected to be achieved with concerted efforts in the remaining years of the 9th Plan.

2.14 Regarding NTPC project in Sipat, Secretary, Ministry of Power informed during evidence on 28.3.2000 that the Environmental Clearance has been obtained on 14.1.2000. The project will be started during Ninth Plan and will be completed during 10th Five Year Plan.

2. 15 The investment in Thermal and Hydel Sector for the last 3 years and in the current Budget are as under :-

(Rs. in crore)

| Year | 1997-98 | 1998-99 | 1999-2000 | 2000-01 |
|---|---|---|---|---|
| Thermal | 772.58 | 844.21 | 937.84 | 827.98 |
| Hydro | 1125.53 | 1579.00 | 1606.39 | 1726.38 |

2.16 The Ministry of Power have informed that because of low addition of hydel capacity over the years, there has been decline in the share of hydel generation, adversely affecting the stability of the grid and its ability to meet peak demands. The Government has now approved the new hydel policy which lays down the mechanism for increasing investment in power sector. Thirteen projects in the Central Sector have been identified for advance action in the Ninth Plan, These projects are Chamera-II (300 MW), Parbati Stage-II (800 MW) and Kol Dam (800 MW) in Himachal Pradesh, Teesta-V (510 MW) in Sikkim. Lok Tak Downstream (90 MW) in Manipur, Tuivai (210 MW) and Tuirial (60 MW) in Mizoram. Lower Kopili (150 MW) in Assam, Kameng (600 MW) and Ranga Nadi Stage-II (160 MW) in Arunachal Pradesh, Tehri Stage-II (1000 MW) and Koteshwar (400 MW) in Uttar Pradesh and Rampur (535 MW) in Himachal Pradesh. Regarding clearance of Hydro schemes during April, 1998 to March. 1999, the Committee have been informed that Chamera HEP Stage-II, Malana HEP, Loktak down stream HEP, Tuivai HEP and Teesta Stage-V HEP have been cleared by CEA. The NHPC is also conducting a detailed survey and investigation work in respect of the Dehang and Subansiri basin in the North-East.

2.17 About the ratio of thermal hydel mix during Committee have been informed as under :-

| | |
|---|---|
| 1996-97 | 74:26 |
| 1997-98 | 75:25 |
| 1998-99 | 75:25 |

The Government have set up an additional installed 2263 MW (thermal) and 1219.5 MW (Hydro) during 2000-01.

2.18 To correct the imbalance of Thermal Hydel Mix, Secretary (Power) stated during evidence that the National Hydel Policy lays emphasis on exploiting the untapped hydro potential of the country. All steps are being taken to ensure that the fund requirements of the hydel projects in the Central sector are fully met. The Hydro Task Force is headed by the Minister himself. During 1999-2000, 13 projects have been identified for advance action in the Central sector in the Ninth Plan. The budgetary support for hydro projects in the Central sector has also been going up from year to year. The budgetary support in 1997-98 was Rs. 1125.53 crore. In 2000-2001, it is expected to go up to Rs. 1726.38 crore.

2.19 About the time and cost-overrun of the Tehri Hydro-Electric Project (THEP) and the steps that have been taken to commission the project expeditiously the Government have informed the Committee in a note as under :-

> "The Tehri Stage-I (1000 MW) was cleared by Government for execution at a cost of Rs. 2963.66 crore (March, 1993 PL, excluding IDC) in March, 1994 with commissioning schedule of March, 1999. The Revised Cost Estimate (August, 1999 PL) works out to Rs. 5260.25 crore (excluding IDC & FC) and same has been cleared by PIB in its meeting held on 07.03.2000. The various works are now progressing very well, and the first unit of 250 MW is scheduled to be commissioned by March, 2002 and balance 3 Units of 250 MW each at an interval of 3 months each. All the 4 Units would be commissioned by December, 2002".

2.20 Regarding the rehabilitation of project affected families, the Committee C note that there are as many as 10,200 families (5291) urban and (4909) rural which are fully affected with the construction of the project. Besides, there are 3998 partially affected families, who do not require any relocation. Phase-I of the rehabilitation of project affected families covering all the 5291 urban families and 2064 fully affected rural families of completion. In Phase-II rehabilitation programme fully affected rural families is in the advanced stage of completion. In Phase-II rehabilitation programme, out of 2845 remaining fully affected rural families, 435 families have already been rehabilitated. For the remaining 2400 families, process of acquisition of additional land is under process.

**2.21 The Committee are dismayed to note that the capacity addition during Ninth Plan has been drastically reduced to 28097.2 MW from 40245.2 MW during mid-term appraisal conducted in July, 1999. The Committee note the dismal performance in achieving hydel power generation by the Central schemes during 1998-99 and 1999-2000 where no additional capacity has been installed against the targets of 95 MW. The hydel capacity addition in state sector is also not satisfactory**

**in 1999-2000 where against the set target of 1493 MW, the achievement (upto December, 1999) is only 739 MW. The Committee note that the government have announced a National Hydel Policy to exploit the untapped hydro potential of the country and also step up the investment in Hydel sector during the last 3 years as compared to the investment in thermal sector. The Committee feel that the ideal ratio of 60:40 thermal-hydel mix of power generation is unlikely to he achieved in near future. Instead, the ratio of thermal hydel mix is showing a decreasing trend during the last 3 years and at present it is 75:25. The new policy initiative by the Government to generate more hydel power so as to improve ratio of thermal hydel mix and stabilise the grid has not yet achieved the pace that is required since no hydel power has been added in the Central sector during the last 2 years. The Committee expect the Government to make all out efforts to at least achieve the revised targets fixed in hydel power during the remaining years of Ninth Plan and for which it should provide sufficient budgetary support to the programme especially to the ongoing projects like Tehri-Hydro Electric Project and remaining Teesta project, etc. The Committee also desire that special care should be taken to rehabilitate project affected people.**

## C. Prospective Plan for Power Generation

2.22 The Government has prepared a perspective plan which stipulate "Power on Demand" by 2012 for which a total installed capacity of 2,40,000 MW could be required. This is based on the demand projected in the Power Survey. This would mean that an annual increamental can 10,000 MW to 12,000 MW would be required in the next 10 to 12 years.

2.23 But the capacity addition during 8th Plan and first three years of 9th Plan were below targets and it cast doubts of the Government to meet the targets sets. The Government have stated that a distinction has to he drawn between what is the estimated demand and what is actually feasible in the different sectors. This will also depend on the progress of reforms, the response of the private sector and the health of power sector. The Government of India can, with some degree of precision draw-up plans for capacity addition in the Central sector through the CPSUs.

2.24 When asked to explain as to how the Government propose to achieve even revised targets of hydel power set forth for 9th plan, the Ministry in a written note stated as under:-

> "The Government is giving priority to hydro plants and core is being taken to provide in full for all on-going projects through net budgetary sources. No hydro projects work is suffering for want of funds. A strict monitoring is maintained over the progress of hydro projects works and through the Hydro Task-Forces headed by the Ministry of Power and the Empowered Committee. They have been reviewing the project periodically".

2.25 Perspective plan for $10^{th}$ & $11^{th}$ plan project capacity addition of 65.000 MW in Central sector and 56,500 MW in State/Private sector. The Committee desired to know

whether SEBs and other State sector utilities have resources to develop such generation capacity to achieve such optimistic targets that have been set for them. The Ministry of Power in a written reply submitted to the Committee have stated that out of the total requirement of about 65,000 MW in the Central sector, about 38,500 MW have been identified and of these, about 10,900 MW stand identified as NTPC projects for the Tenth Plan and 9,690 MW in the Eleventh Plan. About the progress of Nabinagar Project, Ministry of Power mentioned that Nabinagar was identified in February, 1996 for development as first Mega Power Project under the Government of India Mega Power Policy announced in November 1995. But in spite of the best efforts, the project could not make much headway. The capacity addition plans in the hydro-electric sector for the 10th Plan the description of projects where advance action has been taken, are indicated as under :-

**Capacity 10th Plan**

| | |
|---|---|
| Tehri | 750 MW |
| Koteshwar | 400 MW |
| Kopili | 25 MW |
| Teesta-V | 510 MW |
| Loktak Downstream | 90 MW |
| Dhauliganga | 280 MW |
| Chamera-11 | 300 MW |
| Turial | 60 MW |
| **Total** | **2415 MW** |

**Advance Action**

| | |
|---|---|
| Parbati | 2051 MW |
| Koel Karo | 710 MW |
| Kameng | 610 MW |
| Tuivai | 210 MW |
| Tipaimukh | 1500 MW |
| Kol Dam | 800 MW |
| Dehang & Subansiri | 20700 MW |
| **Total** | **267581 MW** |

**2.26 Taking note of the below target capacity addition of power during 8th Plan and first three years of 9th Plan, the Committee find the goal of the Government of achieving "The power on demand by 2012" as over-optimistic. The Committee find that against the annual incremental capacity of 10000 MW to 12000 MW required to achieve 'Power on demand' target by 2012, the Government have set targets of capacity addition of 2125.5 MW of thermal and 1219.5 MW of Hydro during 2000-01. The Committee apprehend that the much hyped 'Power on Demand by 2012' might witness the same fate, as of capacity addition programmes during 8th Plan and first three years of 9th Plan. The Committee, therefore, recommend that to achieve 10th & 11th Plan target of 20590 MW capacity addition of NTPC project and hydro electric capacity additions of 2415 MW during Xth Plan and hydro**

**projects of 26581 MW where advance action has been taken, should he given higher budgetary support. The Committee also desire that the Government should explore the possibility of various pending / abandoned projects like Nabinagar Super Thermal Power Project etc. to ensure that the objective of "The Power on Demand by 2012" can he achieved.**

## D. Private Sector Participation in Power Development

2.27 During Eighth Plan as against the target of 30,538 MW of capacity addition, only 16,422 MW could be realised. The plan failed due to the inability of the private sector to realise the targeted capacity addition. During Ninth Plan also too much reliance is being placed on private sector which has not come up to the expectations. This has led to downsizing of Ninth Plan targets to 28097 MW from initial capacity addition of 40,245 MW.

2.28 The Secretary, Ministry of Power informed the Committee that the major reason for reduction in the capacity addition target has been the steep shortfall in the private sector. While the State sector is more or less expected to achieve the targets, the private sector is likely to add only about 8,300 MW as against the original target of 17,588 MW including the liquid fuel sector target of 6,000 MW.

2.29 Asked about reasons for tardy progress by private sector, in power development, the Ministry in a note stated that the foremost problem due to which many projects have been unable to achieve financial closure in spite of progressing well on other fronts remains the poor financial health of the State Electricity Boards (SEBs), who do not have the financial capability to support more than a few projects in terms of regular reimbursement of bills, opening of letters of credit and escrow accounts. A bankable escrow cover has been sought by almost all the IFIs financing IPPS. The states do not have sufficient escrow space to accommodate all the IPPS. Difficulties have been witnessed in identifying the quantum of escrow capacity available with the states. In several cases, the escrowable capacity identified by the State Governments have not been accepted by the financial institutions. The inability of the State Governments to accommodate all the IPPs for allocation of escrow cover has also lead to litigation by some of the IPPs. The delay in non-finalisation of various contracts such as Power Purchase Agreement, Fuel Supply Agreement and Fuel Transportation Agreement etc. acceptable to all the concerned parties and Court cases in the form of Public Interest Petitions etc. are the other reasons for slow progress.

2.30 The projects are generally awarded to IPPs by the state governments and the power purchase agreement, implementation agreements etc., are signed between the IPP and the concerned state authorities. No agreement, as such, is signed with the Central Government. However, in order to weed out the non- serious players, the Ministry of Power has been applying deadlines for meeting various milestones such as obtaining in principle clearance' of Central Electricity Authority (CEA), submission of complete Detailed Project Report (DPR) for accord of techno-economic clearance (TEC) by CEA, achieving of financial closure and submission of firm financial package to CEA. IPPs

who do not adhere to the deadlines will have their clearances cancelled. The PPA also incorporates penalties for delay on the part of the developer.

2.31 When asked to furnish the information regarding Escrow capacity of States the Ministry of Power furnished the following information:-

> "**Madhya Pradesh**: CRISIL has concluded study on the escrowable capacity in respect of Madhya Pradesh. Financial Institutions have fixed escrowable capacity of MPEB as 2561 MW. MPEB has issued letter of comfort for grant of escrow cover to four projects viz. Bina, Pench, Maheshwar and Korba totaling 2230 MW (Maheshwar project has been considered as a peaking station and hence escrow cover for only 82 MW has been granted) Some IPPs who were not provided escrow cover by MPEB have approached the Court and the matter has been decided by the Supreme Court upholding escrow to Bina, Maheshwar and Korba (Daewoo) but striking down allocation to Pench. State Govt. has now given escrow to Guna project also.

**Maharashtra:** No details are available in the Ministry regarding the exercises, if any, conducted by Maharashtra for assessing the escrowable capacity. However escrow has been committed for the following counter-guaranteed projects:

I. Dabhol CCGT Phase-1 (740 MW) (Escrow has also been committed to Dabhol Phase-11 444 MW to which GoI Counter-guarantee is not available)

II. Bhadrawati TPP, 1082 MW

**Andhra Pradesh**: The study to assess escrowable capacity was conducted by ICICI and the same has been concluded. 'Re firm figures are not known, but IFI decided to support the projects for a total capacity of 2400 MW. The Government of Andhra Pradesh/APTRANSCO are yet to take a decision to short list the power projects for whom escrow cover would he provided by them. Escrow agreement has already been signed in respect of at least one IPP, viz., M/s GVK Industries, for their Jegurupadu power project.

**Karnataka:** Study on the escrowable capacity has already been completed. The State Government has appointed a Committee under Shri Deepak Parekh to advise the State Government on the issue of escrow cover. lie Committee has since submitted its report and the same is under examination by the State Government.

**Tamil Nadu:** CRISIL was engaged by TNEB to assess their escrowable capacity. In its report, CRISIL has not recommended any firm capacity. Instead they have projected three scenarios:

(i) Base Case Scenario with 2564 MW

(ii) Scenario I with 3069 MW

(iii) Scenario II with 3622 MW

The report has concluded that the firm escrowable capacity of Tamil Nadu can be assessed only after the level of financial support, that would be extended by the State Government to TNEB is known. In the meanwhile, TNEB has reportedly allotted escrow to six projects viz. Pillaiperumalnallur, Basin Bridge, North Madras (Videocon), Samalpatti, Samayanallur and Neyveli ST-CMS totaling to 2042 MW".

2.32 When the Committee enquired whether the Government propose any structural changes considering depletion of escrow account, the Ministry furnished the following information:

"The insistence on Escrow by financial institutions has prevented many power projects from achieving financial closure. The discretion to allocate escrow cover rests with the State Governments. Recognizing the limited escrowable capacity available with the states, the Ministry has taken up with the financial institutions and the Ministry of Finance, the need to go by the future potential of the power sector in a particular State and the steps taken by them for rationalizing tariffs and reform in the power sector. Ministry of Power has been of the view that the developers and their lenders should not necessarily depend on Escrow provisions and should take into account the fundamentals of the State Government and the concrete steps taken by them for reform of State Electricity Boards so that they generate adequate resources and do not have to depend on GOI guarantees".

2.33 The Committee have been informed that the Government of India policy permits upto 100% equity investment in power projects by foreign companies. Prior to January, 1997, all the foreign investment proposals were being posed to the Foreign Investment Promotion Board (FIPB) for consideration, irrespective of the extent of foreign equity involved. Since January, 1997, proposals relating to generation and transmission of electricity having a foreign equity component of up to 74% of the total equity were placed on the automatic approval route. All such proposals, where the foreign equity was up to 74% could approach RBI directly without having to come to the FIPB.

2.34 It has subsequently been decided to enlarge the provisions for automatic approval for such projects. Accordingly, vide., a press release dated 13th June, 1998 of the Ministry of Industry (D/o Industrial Policy & Promotion), projects for electric generation, transmission and distribution have now been permitted foreign equity participation upto 100% on the automatic approval route provided the foreign equity in any such project does not exceed Rs. 1500 crore.

The categories which would qualify for such automatic approval are:-

(i) Hydro-electric power plants

(ii) Coal/lignite based thermal power plants

(iii) Oil based thermal power plants

(iv) Gas based thermal power plants

2.35 As on date, 95 private power projects amounting to 54,967 MW of installed generation capacity are being monitored by the Central Government. Out of these private power projects, 59 projects for around 36,700 MW capacity are having foreign developers. As per available information, foreign investment of around Rs. 10,500 crore have already been made in the private power sector.

2.36 In order to instil some confidence in the private power developers, particularly the international investors, Government of India decided to issue counter guarantees to an initial batch of eight projects-referred to as the 'fast track' projects. This Central counter guarantee was to act as a financial comfort to the investors and more particularly to their lenders. The GoI counter guarantee has been limited only to these 8 power projects. Therefore, the other IPPs have to look for other security arrangements. The following alternatives to the GoI counter guarantee have been suggested:-

(a) Letter of credit and State Guarantees.

(b) Opening of an 'escrow' account, in which payment by identified consumers are credited and the liability for payment to the IPP is a first charge on this account.

(c) Linking power generation with distribution.

2.37 The Government have stated that these alternatives, or combinations thereof, have been adopted by some States in their negotiations with the private power project promoters. Apart from these alternatives to the GoI counter guarantee, the States are being encouraged to pursue the reforms vigorously. The Government has been laying strong emphasis on the reform process to improve the health and sustainability of the Power sector as a whole, particularly at the State level. With the setting up of the Electricity Regulatory Commissions, the unbundling of the loss-making utilities with greater focus on profit centres, compulsory metering, energy audit, energy conservation, DSM and other similar steps, it is hoped that the State sector as well as the private sector will be able to meet the requirements anticipated of them, and the gap between demand and supply will be closed.

**2.38 The Committee observe that the major reason for reduction in the capacity addition was the deep shortfall in the target set for private sector. Only 8 private power projects with a total capacity of 3474 MW of power generation are reported to be under construction. The dismal performance in achieving power generation targets by the private sector can be gauged from likely capacity addition of only 8300 MW against the original target of 17588 MW including the liquid fuel sector target of 6000 MW. The refusal of Counter Guarantee by the Central Government and failure on the part of State Governments to provide letter of credit and State**

**Guarantees alongwith their inability to provide Escrow Cover to IPPs in view of the poor health of SEBs/ Electricity Departments have resulted in checking the flow of private investment in the power sectors. Although, the Government have taken a number of steps to encourage the States to undertake power sector reforms so that SEBs can become financially strong to attract private investment on their own, the Committee feel that too much reliance on the private sector at this stage is not justified. As such while fixing targets for private sector, the Government should give due consideration to the financial position and Escrow capacity of the SEBs/State Governments so that an accurate estimate can he made of the targets to he realised by the private sector. The Committee, therefore, desire that based on the present escrow capacity, etc. of each State to attract the private investment in power sector, the Government should redraw the targets for 9th , 10th and 11th Plans for the private sector and to find corrective and pragmatic steps to encourage private sector. The difficulties experienced by the private sector in getting various clearances like environment and forest etc. also need to he gone into urgently to ensure that private sector can play a positive and meaningful role in the development of power sector. It will he desirable, if a 'Single Window Clearance Scheme' is introduced for clearing the project expeditiously.**

## E. Accelerated Power Development Programme (APDP) & R&M

2.39 The mid-term appraisal of the energy sector indicated that power, generation capacity based on coal available during the 9th plan would be around 28044 MW against the target of about 40000 MW, with the shortfall mainly due to private sector projects not coming up. In view of this, the Planning Commission has asked the Government to create Rs. 3,000 crore Accelerated Power Development Programme (APDP) fund to assist States taking up various reforms in the power sector including renovation and modernisation of plants. The Finance Minister has therefore announced in the budget that in order to give fillip to the reform process in the power sector and for undertaking investments on renovation and modernisation of old and inefficient plants and for strengthening the distribution system, a new scheme for providing assistance to State utilities is to he introduced. Under this scheme, additional Central Plan assistance of Rs. 1,000 crore will be provided to State and Union Territory Governments.

2.40 Asked to furnish the details of Accelerated Power Development Programme Scheme formulated by Planning Commission and how and when the Government proposed to implement the scheme by additional Central assistance of Rs. 1000 crore to State and Union Territories, the Ministry of Power informed the Committee in a written reply that a provision of Rs. 1,000 crore has been made in the Budget for 2000-01 in Demand No. 30 of Ministry of Finance. APDP scheme will finance (a) Renovation and Modernisation/Life Extension Projects and (b) Upgradation/Strengthening of Sub-transmission & distribution. The details of Accelerated Power Development Programme scheme are being worked out by the Planning Commission.

2.41 In this evidence as under Connection, the Secretary, Ministry of Power stated during evidence as under:-

"I would like to say that Rs. 1,000 crore have been provided for the scheme which is mainly for renovation and modernisation and for strengthening of distribution system in the State. The modalities for implementing this scheme are being worked out by the Planning Commission. Disbursements under this scheme shall he linked to commitment to reforms by the concerned States".

2.42 The Ministry of Power further informed the Committee that in pursuance of the recommendations of the 11th Report of the Standing Committee on Energy (1998-99) on "Renovation and Modernisation of Power Plants", the Central Electricity Authority constituted a Steering Committee under the Chairmanship of Member (Thermal), CEA, PFC, Planning Commission, BHEL and Power Utilities. The Committee had deliberated in details about R&M and Life Extension Programme of thermal power stations in the country. The perspective plan is under advance stage of finalisation and as per the broad assessment, a capacity of about 11000 MW is presently due for RLA/Life Extension programme and the execution could be taken up in phases depending upon the availability of funds, etc. To carry out the life extension programme for the above capacity, an investment of about Rs. 8500 crores would be needed. In addition to the special funds to he made available under the Accelerated Power Development Programme (APDP), PFC is also providing loan assistance on subsidised rates to SEBs for carrying out life extension programme.

**2.43 The Committee are happy to note that as per their recommendation in the 11111 Report of the Standing Committee on Energy on Renovation & Modernisation of Power Plants, the Central Electricity Authority constituted a Steering Committee to deliberate in detail about R&M and life extension programmes of Thermal Power Stations in the country. A perspective plan is under advanced stage of finalisation and as a broad assessment, a capacity of about 11000 MW is presently due for Remnant Life Assessment (RLA) / Life Extension Programme with an investment of about Rs. 8500 crore. The Committee, therefore, welcome the new scheme of Accelerated Power Development Programme (APDP) to finance schemes of Renovation and Modernisation/Life Extension Programme and upgradation/strengthening of sub-transmission and distribution system. The Committee hope that the details of the new scheme would he worked out by the Planning Commission at the earliest. The Committee are further of the opinion that concerted efforts should he made by different planning agencies / implementing agencies to make the perspective plan for R&M and strengthening distribution systems a real success. The committee would also like to he informed about details of the perspective plan for R&M being finalised by the Steering Committee and the APDP scheme by Planning Commission within three months.**

**F. Guidelines for sharing of Power**

2.44 It was brought to the notice of the Committee that the Government propose to change Gadgil formula for power sharing by the States from Central utilities henceforth. It is understood that States will have to sign power purchase pacts with Central Utilities. When Committee asked to clarify, Secretary (Power) informed the Committee during evidence as under:-

"The existing formula for allocation of power from the Central sector power stations will now be replaced by guidelines. The formula is generally known as Gadgil formula for the power sector and it is not being tampered with at all. The 10 per cent thermal power to the States where the thermal power station is situated is not being changed. The 12 per cent free power for hydel projects is not being affected. This will continue. The formula has not been tampered with. It is not even applicable to the projects for which PPAs have been signed. It will he applicable only as a guideline for new projects that will come up".

2.45 The witness further stated:-

"The CPSU shall offer power to each State or Union Territory in a region from the new central sector thermal, nuclear and hydro power stations in accordance with the entitlements through a Power Purchase Agreement, that is, PPA. What we will say is that this station is coming up in this State; if it is a hydel station, you will be entitled to 12 per cent power; and for the rest of the power, according to your entitlement, but please sign PPA for the project. If the State says that they do not need power, we will again say that we would not go out of that region; we will be within that region; we will make an offer within that region, if they want power. If the whole region says that they do not need power, then only we will go to other regions. But the entitlement will not change. The entitlement will remain the same. The States will still be entitled to that power. All that they have to do is to sign the PPA. Allocations already made to the constituents in a region from the existing central power stations will not be affected".

**2.46 The Committee take a serious note of the Government's proposal to replace the Gadgil formula for power sharing by the new guidelines to he observed while setting up new power projects. Although, the Secretary, Ministry of Power has informed the Committee that the formula for allocation of 10% thermal power to the States and 12% of power from hydel projects to a State where these projects will he set up is not being tampered, with, the Committee feel that guidelines for the signing of the Power Purchase Agreement (PPA) by the concerned State Government may bind the State Government to comply with the terms and conditions of PPAs which may adversely affect their rights as per the existing Gadgil formula. The Committee desire that before implementing these guidelines, Government should take the State Governments into confidence so as to protect the interest of the States where new power projects are to he set up. The Committee would like the Ministry to draw up a model Power Purchase Agreement and circulate it to all State Governments and invite their comments.**

## G. Transmission and Distribution Sector

2.47 The investment pattern in transmission and distribution sector vis-a-vis, generation sector over the different plan periods had been as under:

| SI. | Plan Period | Expenditure Incurred on | Ratio Between & |
|---|---|---|---|

| No. | | Generation (Rs. in Crore) | | T&D | +RE |
|---|---|---|---|---|---|
| | | T&D | & RE | | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| 1 | Plan (1951-56) | 105 | 140 | 1: | 1.33 |
| 2. | 2nd Plan (1956-61) | 250 | 190 | 1: | 0.76 |
| 3. | 3rd Plant (1961-66) | 777 | 454 | 1: | 0.58 |
| 4. | Three Annuals (1966-69) | 676 | 528 | 1: | 0.78 |
| 5. | 4th Plan (l969-74) | 1505 | 1386 | 1: | 0.92 |
| 6. | 5th Plan (I974-79) | 4467 | 2963 | 1: | 0.66 |
| 7. | Annual Plan (1979-80) | 1429 | 1098 | 1: | 0.77 |
| 8. | 6th Plan (1980-85) | 12116 | 6320 | 1: | 0.52 |
| 9. | 7th Plan (1985-90) | 24528 | 12392 | 1: | 0.5] |
| 10. | Annual Plan (1990-91) | 7003 | 2930 | 1: | 0.42 |
| I1 | Annual Plan (1991-92) | 10373 | 3250 | 1: | 0.3] |
| 12. | 8th Plan (1992-97)* | 49424 | 26281 | 1: | 0.53 |
| 13. | 9th Plan (1997-2002)** | 194000 | 134400 | 1: | 0.69 |

The Figures for these periods are the outlays.

As per working group reopen for 9'" Plan power development.

2.48 The investment in T&D sector has generally been lower than that on generation. The ratio of investment on generation and T&D (including RE) had been less than the ideal ratio of 1:1 except during the first plan period. The low investment on T&D has generally led to the neglect of distribution sector and the funds provided were mostly used for meeting normal works which comprised of giving new connections and reinforcements needed thereof. The Government have informed the Committee that adequate resources were not available for investment on system improvement schemes for strengthening sub-transmission and distribution system.

2.49 The investment pattern of the budgetary support in generation and transmission sector during the last three years and in the current financial year is as under:-

(Rs. in crore)

| | 1997-98 | 1998-99 | 1999-2000 | 2000-2001 |
|---|---|---|---|---|
| Generation | 1898.11 | 2423.21 | 2544.23 | 2554.36 |
| Transmission | 309.61 | 182.97 | 300.74 | 168.10 |

2.50 The Government now is stated to be considering to set up special fund for providing assistance to SEBs to undertake improvements in power transmission and distribution systems under the Accelerated Power Development Programme (APDP). The funds are proposed to be provided to the State utilities for (i) renovation, modernisation and uprating of hydro, thermal stations (ii) strengthening, upgradation/improvement of sub-transmission and distribution schemes. The modalities for implementation of the APDP are being worked out. Consistent with its envisaged role as a Development Financial Institution, Power Finance Corporation (PFC) continues to attach high priority

and importance to qualitative improvement in the functioning of SEBs/ State Generating Corporations in managerial, technical and financial areas through formulation and implementation of Operational and Financial Action Plans (OFAPs) for its borrowers. These Plans are prepared in consultation and agreement with the Utility and the State Government concerned. Besides disseminating vital information through regular conduct of workshops/seminars, PFC also organises customised training for Power Sector Personnel in India and abroad. The Corporation has decided to provide technical financial assistance to the State Government/Power Utilities for structural reforms of the State Power Sector. The Ministry of Power have informed the Committee that a Reform Group has been constituted in the Institutional Development Division to advise and assist the State Government in the formulation of suitable restructuring programmes. Presently, 11 States have agreed to reform their power sector with the technical and financial assistance from PFC.

2.51 When enquired about sanction and disbursement for strengthening sub-transmission and distribution network by PFC, the Committee have been informed as below:-

(Rs. in crore)

| Sl. No. | Scheme | Cumulative Sanction upto February, 2000 | Cumulative disbursement upto February, 2000 |
|---|---|---|---|
| 1. | Transmission | 5118 | 3953 |
| 2. | Urban Distribution | 1517 | 1169 |
| 3. | Installation of Capacitor | 468 | 383 |
| 4. | System improvement (including installation of meters), SCADA, PLCC, etc.) | | |

2.52 Unmetered supplies are normally provided to subsidised consumers belonging to agriculture and low income groups, which emerge from State Government policies which is one of the major causes of SEBs financial crises. Since PFC has taken proactive action to promote metering and to reform and restructure the distribution sector, gradual action to improve metering arrangements are being made by SEBs/ State Utilities. The metering installations emerge from:-

Improvement in metering technology,

Replacing defective meters

Providing meters at premises of unmetered consumers. Normally, SEBs provide meters for unmetered consumers where consumers are not heavily subsidised.

2.53 Regarding funds for installation of meters by SEBs so as to reduce their transmission and distribution losses, the Committee have been informed in a writ ten

reply that PFC provides financial assistance to SEBs for installation of meters. In fact, PFC accords higher priority to metering schemes by charging lower interest rates (as compared to generation projects etc.) and larger extent of financing i.e. upto 80% of the project cost. Further metering schemes are covered under GoI's Accelerated Generation and Supply Programme under which SEBs are eligible for concessional interest at 4% below the normal lending rate of PFC on disbursement made during 91' plan (the concession in 5% below the normal lending rate, if the scheme is situated in North Eastern Region). Also, certain eligibility criteria for the borrowers like borrowing entity achieving 3% ROR, borrowing entity having OFAP etc. are relaxed for metering schemes.

2.54 PFC gives highest priority to system improvement schemes of SEBs/ State Utilities to cover metering and capacitor installations. State wide computerization of billing and studies related to the same are also financed by PFC to improve billing and revenue collections. Five SEBs have computerized Billing process in total, and in the remaining SEBS, computerisation is in different stages of completion. The improvement in revenue collection is sought from SEBs through the mechanism of Operational and Financial Action Plan (OFAP). The OFAP comprises a series of time bound action programmes. Metering, Billing and Collection from one of the thrust areas of OFAP.

2.55 For installation/replacement/new connections of energy meters and energy audit schemes, PFC has provided financial assistance in 16 loans for an amount of Rs. 280.95 crore against which Rs. 88.27 crore have been disbursed upto 29.2.2000. The amount sanctioned by PFC against metering and energy audit schemes is about 80% of the respective project/scheme cost. Further, two schemes of PSEB and ASEB for Rs. 36 crore and Rs. 3.2 crore respectively were under discussion with PSEB and ASEB.

2.56 The Committee also observe that Metering and Energy Audit schemes supported by PFC have not found favour with the implementing agencies. APTRANSCO, ASEB, KPTCL and MPEB have not availed any assistance as on 29.2.2000 although amounts of Rs. 33.80 crore, Rs. 13.40 crore, Rs. 188.20 crore and Rs. 5.78 crore respectively have been sanctioned. Similarly, SEBs have not taken much interest in availing financial assistance as grants for undertaking studies, since only 0.67 crore were disbursed, as against sanctioned amount of Rs. 11.22 crore.

2.57 Asked about the reasons for low utilisation of grants for undertaking studies the Ministry of Power informed the Committee in a post evidence reply that studies are time consuming activities. One of the conditions under which grant is sanctioned is that State Governments should provide an undertaking that recommendations of the Studies would he implemented. This delayed agreements on Grants and start of Studies in many cases. Further, the reform and restructuring activities continuing in many States have diluted the concentration of SEBs expertise to undertake studies themselves.

**2.58 The Committee are dismayed to note that transmission and distribution sector has been a neglected area. The Committee are surprised to note that although the budgetary support for Generation has been increased from Rs. 896.11 crore in 1997-98 to 2554.36 crore in 2000-2001, the investment for transmission has declined**

**from Rs. 309.61 crore in 1997-98 to Rs. 118.10 crore in 2000-2001. With the consistent increase in power generation, the Committee fail to understand the decreasing investment in evacuation of power. The Committee recommend that the Government should take up the matter with the Planning Commission and ensure adequate investments in Generation and T&D from the year 2000-2001 itself. The Committee are perturbed to note that funds provided for T&D are mostly used for meeting normal work comprising giving new connections and reinforcement needed therefor. The Committee observe that although PFC accord high priorities to improve system such as installation of capacitor, meters, etc. and provide loans at lower rate of interest, the overall investment in T&D Sector remains much below the desired level to equal investment as in generation sector. The Committee have been informed that unmetered supplies are provided to subsidised consumers belonging to agriculture sector and also low income groups, which emerge from State Government policies. At present only 50% of National Electricity Consumers are metered and only 60 % revenue is collected from 50 per cent of population. The Committee consider this to he a big national loss. For the Metering and Energy Audit Scheme supported by PFC, a fund of Rs. 280.95 crore has been sanctioned to SEBs/EDs, but only a sum of Rs. 88.37 crore have been disbursed. The Committee would therefore like the PFC to complete the disbursement and ensure that the scheme is carried out as targeted. Similar efforts should also be made by PFC to speed up grants/loan agreements for studies to be carried out by SEBs/EDs to activate speedy completion of studies. The Committee also recommend that PFC itself should install meters and collect a part of revenue, from the consumer to meet the cost in this regard. The Government should make all out efforts to make equal investment in T&D Sector, so that the generation capacity existing and added can reach the consumers and they may not have to back down their plants for lack of evacuation facilities as is now done by NTPC in the eastern region.**

## H. T&D Losses

2.59 A State-wise statement showing Transmission & Distribution losses (including commercial losses such as pilferage etc.) indicate that the percentage losses are as high as 47 for States like Delhi, J&K, Mizoram etc. (Annexure-1)

2.60 Asked about the short-term and long-term measures that have been taken to contain these losses, especially in the field of technology upgradation and energy management, the Ministry of Power informed the Committee that Power distribution falls within the purview of the State Electricity Boards/Electricity Department constituted by the State Government. As such the concerned Power Utilities have to take appropriate measures for the reduction of T&D losses by arranging requisite resources for system improvement schemes and also by taking effective steps against theft of electricity. Guidelines have been issued by CEA in July, 1991 to contain T&D losses. In May, 1992 guidelines regarding Energy Audit have been issued. An incentive scheme was introduced by the Government of India which was revised in July, 1993 to award best performing SEBs/EDs and cash award to individual institutions developing new devices or suggesting new ideas which help in saving energy by optimum utilization of T&D system in better quality of Power supply or improved efficiency of electrical appliances.

2.61 The Committee observe that the Grants-in-aid for better performance of TPS, reduction in T&D losses and incentive for reduction of secondary fuel oil consumption and auxiliary power consumption has come down from actuals of Rs. 6.03 crore in 1998-99 to Rs. 5 crore in 1999-2000 (revised) and budgeted to Rs. 4.75 crore during 2000-2001. The incentive for meritorious award to thermal power station for improvement in the performance during the peak period and for economic and efficient operation of TPS have been budgeted each at Rs. 2.25 crore for 2000-2001 against the actual expenditure of Rs. 2.50 crore and Rs. 2.44 crore respectively during 1999-2000.

2.62 Enquired about the reasons for declining expenditure, every year on a plan to pay incentives for better performance by power projects and why the incentive for meritorious award to thermal power station for improvement in the performance during the peak period and for economic and efficient operation of TPS have been budgeted each at Rs. 2.25 crore for 2000-2001 against on actual expenditure of Rs. 2.50 crore and Rs. 2.44 crore respectively during 1999-2000, the Ministry of Power informed the Committee that the incentive schemes are being operated to inculcate a competitive spirit and to motivate the power utilities to achieve high level of performance, maximizing electricity generation, reduction in energy losses in thermal. power stations. Shields, medals and cash incentives are distributed among the personnel of utilities for achieving improvement in the performance of thermal power stations and for reduction in T&D losses in the power system networks.

2.63 The provision for distribution of awards for Meritorious performance of Thermal Power Stations and Incentives for reduction of Secondary Fuel Oil Consumption and Auxiliary Power consumption is made depending on overall availability of funds for the power sector as a whole. 71e Budget provision of Rs. 2.25 crore each for meritorious awards for better performance of Thermal Power Stations and incentive for reduction of secondary fuel oil consumption and auxiliary power consumption for the year 2000-2001 will be reviewed at RE stage when the recommended amount under these schemes are finalised by CEA.

2.64 About the impact of these schemes to raise average National Plant Load Factor and bringing down the T&D Losses; the Committee have been informed that the all India Plant Load Factor (PLF) of Thermal Power Stations has increased from 53.9% in 1990-91 to 65.6% (April - December, 1999). Besides other factors like better maintenance practices, R&M etc., one of the factor for improvement in PLF has been inculcating competitive spirit in power utilities and its personnel by awarding them under Meritorious productivity reward scheme for improvement in performance level from the previous year. The Incentive Schemes for Economic and. efficient operation of Thermal Power Stations have also resulted in overall improvement of specific fuel oil consumption and auxiliary power consumption by the Thermal Power Stations in the country.

2.65 Asked to what extent T&D losses have been brought down, consequent upon power sector reforms, unbundling of SEBs undertaken by State Government, the Ministry of Power informed the Committee in a post evidence reply as under:-

"Reforms process in terms of unbundling/corporation of SEBs etc. has been initiated only in the recent past. In Orissa, there has been significant improvement in the PLF of the Thermal Stations (from 35.5% to 76.2% in FY 99) consequent on reforms. As regards the T&D losses, the reporting of such losses has become more realistic in the post reform phase. For instance, Orissa reported only 33% as T&D losses before restructuring its power sector. After restructuring, the T&D losses in the State are shown to be 5 1 %. In the State of Andhra Pradesh where the T&D losses were reported to be 25% before restructuring, it is now estimated to be 45% after restructuring. Other reforming States like Haryana have now estimated losses at 40% and Rajasthan at 43% against earlier reported level of 32% and 26% respectively. This quantum jump in the T&D losses is apparently because of the practice adopted by the vertically integrated SEBs to misclassify losses. T&D losses of private companies engaged in the distribution of power in Mumbai, Calcutta and Ahmedabad for the year 1998-99 are as follows:

| | | |
|---|---|---|
| Mumbai | BSES | 1 5.00% |
| Calcutta | CESC | 19.9% |
| Ahmedabad | AEC | 18.63% |

The T&D losses of these companies are substantially low as compared to Delhi Vidyut Board whose reported T&D Losses are 49%. With the unbundling of SEBs and privatisation of distribution it is expected that T&D losses will come down".

2.66 The SEBs have large over-dues to the Central Sector Power and Coat utilities. A scheme for securitisation of their dues with the support of Central Government has been finalised to assist the SEBs to clear their dues. Central Government support have been stated to be linked to reform in the operation of SEBs. It has also been brought to the notice of the Committee that subsidies offered by State Government for scheme such as free/subsidised electricity to agriculture / domestic sector etc. have not been reimbursed to SEBs, resulting in their poor financial health.

2.67 When asked whether Central Government is contemplating to securitise the dues of SEBs on account of subsidies etc. which have not been reimbursed from the States plan assistance or any other receivable the Ministry of Power, in a post evidence reply informed the Committee that there is no such proposal.

**2.68 The Committee have been informed that consequent on the introduction of incentive scheme, All India Plant Load Factor (PLF) has increased from 53.90% in 1990-91 to 65.6% in April-December, 1999. However, the Committee are constrained to note that despite the incentive scheme, the T&D losses during the last 3 years could not be brought down. The Committee also note the Grants-in-aid, which were instrumental in motivating the power utilities to achieve high level of performance have been reduced. The Committee fear that as a result of this the prospects of reduction in energy losses may further deteriorate. The point put forth**

**by the Government that the Budget provision of Rs. 2.25 crore each for meritorious awards for better performance of Thermal Power Stations (TPS) and reduction of secondary fuel consumption etc. for the year will he reviewed at the Revised Estimates stage is not acceptable to the Committee. The Committee feel that enough Grants-in-aid should have been provided at Budget Estimate stage itself.**

**2.69 The Committee are further perturbed to note that in spite of the reform process underway, there is no significant improvement in T&D losses. The T&D losses for Orissa are at 51 %, for Andhra Pradesh after reform it has increased from 25 % to 45 % as compared to 15 % losses to 19.9 % losses where private companies are engaged in the distribution of power such as Mumbai, Calcutta, etc. The contention of the Government that reporting of such losses has become more realistic, is also not acceptable to the Committee. The Committee, while urging the Government to ensure the correct reporting of T&D losses by SEBs/EDs also desire that they should take necessary steps to reduce the T&D losses by upgrading equipment etc. in a phased manner. The Committee would also like the Government to ensure reimbursement of power bills on subsidised/free power by SEBs/EDs from the State Plan assistance or any other receivable.**

## I. Training

2.70 The National Power Training Institute, Faridabad, set up by Government of India is a National Apex body in Human Resources Development in Power sector. The Institute was set up by upgradation of erstwhile Power Engineering Training Society (PETS) with effect from 1st April, 1993. The Institute operates on an all-India basis through its four regional power training Institutes at Neyveli (Tamil Nadu), Durgapur (West Bengal), Badarpur (New Delhi) and Nagpur (Maharashtra).

2.71 The details of budgetary allocation in respect of National Power Training Institute, the National apex body for training in the power sector, are given below:-

(Rs. in crore)

| Year | B.E. | | | R.E. | | |
|---|---|---|---|---|---|---|
| | Plan | Non-Plan | Total | Plan | Non-Plan | Total |
| 1996-97 | 2207.00 | 265.00 | 2472.00 | 2156.00 | 265.00 | 2429.00 |
| 1997-98 | 1186.00 | 250.00 | 1436.00 | 892.00 | 367.00 | 1259.00 |
| 1998-99 | 902.00 | 350.00 | 1252.00 | 425.00 | 442.00 | 867.00 |
| 1999-2000 | 650.00 | 492.00 | 1142.00 | 150.00 | 435.00 | 585.00 |

2.72 There exist a mis-match between B.E. and R.E. for training programmes of NPTI in terms of trainee week and the physical targets have not been achieved. The training week programme targetted and undertaken in respect of National Power Training Institute indicates that the 'Long-term programme for Engineers' was 10218.2 against the target of 16135.2 during 1998-99 and upto February, 2000, it was 1069.2 against the target of 15051.8 for 1999-2000. Similarly, the targets for 'Short-term course for operators' could not be achieved during 1999-2000. However, the targeted 'Long-term course for technician' was about 4 times the target set during 1999-2000. The targets of

'Long term course for operators' and 'on plant' were 'NIL' whereas the actuals were 41.4 and 732.2 respectively for 1999-2000 (upto February, 2000). For CEA, the targeted training programmes were never achieved during the last 3 years.

2.73 Asked about the reasons for variations in targets & achievements and what structural changes the Government propose to strengthen training activities; the Ministry of Power, in a post evidence reply furnished to the Committee stated as under :-

> "NPTI is dependent for its training programmes on sponsorships by the State Electricity Boards. The long term training programmes range from 26 to 52 weeks and the short term training programmes from one to four weeks. NPTI could not meet its long term programme for engineers (including postgraduate diploma courses) on account of inadequate sponsorships. It is obvious that NPTI had been over optimistic in scaling up its targets substantially over the last three years in this category of training. On the other hand, the short term training programme for engineers has proved more popular. The long term training course for technicians is popular. There has been a scaling down of targets on account of restructuring of the training programme keeping in view the changing needs. The present financial health of the SEBs is not conducive to substantial expenditure on training and NPTI tries to train as many technical staff as it can on the basis of available nominations and its infrastructure".

2.74 The Ministry have further informed that all the CPSUs have been asked for the specific training needs of its personnel at various levels inclusive of fresh inductees and in-service training so as to rationalise training programmes in the various constituents of the Ministry of Power. Ministry has also written to recognised institutes of management to assess the training facilities in an endeavour to cater to training needs in different scThes and at different levels. In the coming months, a comprehensive training programme is likely to be finalised. An exercise to prepare a comprehensive training policy for the power sector personnel, particularly for those in the central power sector is under consideration.

**2.75 Training is one of the most important tools of human resource development in any organisation and its importance can hardly he over emphasised in a technical field like power sector. But the Committee is unhappy to note that budgetary allocations for the purpose have declined at an alarming rate indicating Governments apathy towards this important HRD activity. The Committee observe that the targets fixed have never been achieved during the last three years. Although long-term course for technicians and for operators and short-term training programme for Engineers have been successful, targets for long-term training course for Engineers and short-term course for the operators by NPTI could not be achieved during 1999-2000. The Committee feel that one of the reasons for failure of the Institute to meet the targets in respect of long term training programmes for Engineers may be the inability of SEBs to relieve their staff for a long period ranging from 26 to 52 weeks. Such a long absence of employees from their work is likely to adversely affect the already weak financial performance of SEBs and hence their reluctance to send their employees for the training courses. The Committee**

**suggest that such programmes should he restructured and divided into a series of shorter duration courses in consultation with SEBs for the duration for which they can easily depute their employees for training.**

## J. Hydroelectric Power Generation by NHPC

2.76 National Hydro Power Corporation was incorporated in 1975 with the main objective to develop hydro-electric power projects in the central sector in all aspects including investigation, construction, generation, operation & maintenance of hydro-electric power stations, tidal, wind and geo-thermal power projects.

2.77 Budget Estimates of NHPC during 1999-2000 were revised to Rs. 1025.20 crore (Budget support - Rs. 600 crore and IEBR component- Rs. 425.20 crore) from Rs. 835 crore (Budget support - Rs. 500 crore and IEBR component - Rs. 335 crore). The plan outlay of NHPC for the year 2000-01 is increased to Rs. 1264.16 crore.

2.78 It has been observed from the performance budget of the Ministry that for Dulhasti on-going project the B.E. were reduced from Rs. 391 crore to Rs 289.54 crore whereas in case of Rangit it were raised from Rs. 8.30 crore to Rs.100 crore. Similarly, for Chamera-II project, it were revised to Rs. 285 crore from Rs.100 crore initially projected.

2.79 Enquired about such mis-planning for the ongoing power schemes by NHPC at budget stage and what remedial measures have been taken to avoid recurrence of such incidents in future, the Government informed the Committee in a written reply that when the requirement of funds in Budget Estimates 1999-2000 for Dulhasti Project was proposed, the work on the project was going on in full swing and the project was expected to be completed by March 2001. However, as the progress in the tunnel upstream face remained slow due to cavity formation and because of non-operation of Tunnel Boring Machine since June 1999, the anticipated expenditure on the project could not be met and accordingly the requirement was reduced from Rs. 391 crore to Rs. 289.54 crore.

2.80 For Rangit project, the outlay was limited to Rs. 8.30 crore because that was the balance amount left as on 31.3.99 from the approved cost of Rs. 361.86 crore, even though, the requirement projected was more, with anticipated completion of project in March 1999. As the project could not be completed in time due to collapse of Rishi-Khola Bridge which hampered the movement of essential construction material and because of unprecedented heavy rainfall which resulted in washing off downstream coffer dam and flooding of stifling basin & power house, the project could only be commissioned in December 1999. As the completion cost of the project has gone up to about Rs. 478 crore, a requirement of Rs. 100 crore was projected based on the likely expenditure. Regarding Chamera Project Stage II, an amount of Rs. 290 crore was proposed as Budget Estimate in 1999-2000 with the assumption that the project would be sanctioned by the Government. However, the proposed outlay was reduced by the Planning Commission because the project was not sanctioned by the Government. However. it was assured that the outlay would be enhanced in the revised estimate if the

project is cleared. As the project was sanctioned in June 1999 the outlay was revised based on actual requirement of funds.

2.81 The Government have further informed that some steps are being initiated to minimize the intensity and impact of geological surprises. These include, intensive Survey and Investigation and a two-phase schedule for project construction. In the first phase Survey and Investigation, pre-construction activities and development of infrastructure facilities would he taken up. Active construction work would be taken up in the second phase. Two of the new projects that have been entrusted to NHPC for execution are being planned in this manner viz. Parbati H.E. Project Stage-II (800MW) Himachal Pradesh and Debang (13400MW) and Subansiri (7,300MW) Hydro-electric Projects in Arunachal Pradesh.

2.82 Asked about the implementation of Koel Karo HE Project (710 MW) of NHPC in Bihar which was originally approved in June, 1981 at an estimated cost of Rs. 446.67 crore at March 1980 price level, the Ministry of Power informed that no major work could be started 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 6.2.89 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. 1338.81 crore in November, 1991. Rs. 31.68 crore have already been spent on the project. In a meeting of the Central Empowered Committee (CEC) constituted by the Government for reviewing Central Sector projects making slow progress, held on 26.2.97, it was decided to freeze further expenditure on the project thereby putting a stop to work on the project.

2.83 The Government have informed the Committee that Koel Karo HE Project in Bihar is one of the projects identified as Mega power projects under the Mega Power Project Policy approved by the Government on 8.10.98. The mega projects are entitled for concessions which would make the tariff from the project more attractive.

2.84 To a query that how the Government/NHPC would utilise the proposed outlay of Rs. 422.25 crore during the 9th Plan with annual budget provision of only Rs. 10 crore during 2000-2001 for Koel- Karo Project, the Ministry of Power replied as under :-

> "The PIB meeting to consider RCE proposal for execution of Koel Karo Project was held on 16.3.99 wherein the PIB recommended to the CCEA the revised cost estimate of the project at an estimated cost of Rs. 2368.41 crores. The outlay of Rs. 492.25 crores during the 9th plan was based on the assumption that the project will be sanctioned by the Government by April 99 and active construction on the project will be taken up. However, prior to a decision being taken with regard to investment approval of the Government for the Revised Cost Estimate, two conditions have to be met i.e. Environment & Forest clearance and consent of the consuming States to purchase power from the Project.

In pursuance to this, Government of Bihar has been requested for conducting fresh survey of Project Affected Persons (PAPs) in order to enable NHPC to formulate the Environmental Management Plan (EMP) in accordance with the guidelines of the Supreme Court. It is necessary to have firm commitment from buyers for the power from Central Sector Power Projects before execution. Orissa and West Bengal have declined to purchase power from the Project since the tentative tariff amount to Rs. 7.13 per unit considered too expensive by them. Bihar has committed to purchase power from the project to the extent it will require to draw power at the prevalent tariff rate. As such, it may not be possible to fully utilize Rs. 422.25 crore during the 9th plan period The project is scheduled to be completed in a period of 8 years from the date of sanction".

**2.85 The Committee observe that the Budget Estimate of Dulhasti project of NHPC was reduced from Rs. 391 crore to Rs. 289.54 crore and that of Chamera-II revised to Rs. 285 crore from Rs. 100 crore initially projected. The Committee are concerned to note that although for Dulhasti Project, the low utilisation of funds has been attributed to slow progress in the tunnel upstream face and non-utilisation of tunnel Boring Machine since June, 1999, the Budget Estimate for Chamera-II project has been revised from Rs. 100 crore to Rs. 285 crore even though the project could not he sanctioned by the Government till June, 1999. The Committee are concerned at the casual manner in which the Government / NHPC has made budgetary provision for the ongoing / future project and revising it later on. The Committee would like to know the utilisation of revised estimate for the project during 1999-2000. The Committee have been informed that steps have been taken to minimize the intensity and impact of geological surprise by taking intensive survey and investigation. These will he completed in two phases, the first phase will include Survey & Investigation, pre-construction activities and development of infrastructure facilities. Active construction work would he taken up in the second phase. The Committee would like to know the implementation schedule of the two new projects viz Parbati Hydro Electric Project Stage-1 (1800 MW) in Himachal Pradesh and Dehang (13400 MW) and Subansiri (7300) Hydro Electric Project in Arunachal Pradesh planned in this manner. The Committee desire that NHPC should make realistic estimates of the fund requirements for its various projects and should make all efforts to utilise the same to avoid cost and time over- runs of the projects.**

**2.86 The Committee are surprised to note the dismal performance of the Government in commissioning Hydel power projects. The Koel Karo Hydro Project (770 MW) was originally approved in June, 1981 at an estimated cost of Rs. 446.67 crore. The Government of India revised the cost estimates to Rs. 1338.81 crore in November, 1991. Although, Rs. 31.68 crore have already been spent on the project, the Committee have been informed that the Central Empowered Committee constituted to review slow progress making Central Sector Projects has recommended to freeze further expenditure on the project. The project has been reconsidered and identified as Mega Power Project on 8.10.98. The Committee note that despite the fact that the project has been identified as Mega Power Project entitled for certain concessions and an outlay of Rs. 422.25 crore has been proposed**

**for Ninth Plan, the project is still held up for want of Environment & Forest clearance and consent of the concerned States to purchase power from the project. In view of fact that the project has been allowed to linger on for a period of 20 years, the revised cost estimates have gone up to Rs. 2368.41 crore and tentative higher tariff amounts to Rs. 7.13 per unit. The Committee strongly urge the Government to pursue with the Government of Bihar to conduct a fresh survey of Project Affected Persons (PAP) to enable NHPC to formulate Environment Management Plan (EMP) in accordance with the guidelines of the Supreme Court so that the project could he taken up expeditiously.**

## K. Rural Electrification Schemes

2.87 Rural Electrification is the backbone of rural economy and a basic input for rapid rural development. It is also the main infrastructure for ensuring speedy growth of the agriculture sector and agro based industrial structure in rural areas. By March, 31st 1999, out of total 5.07 lakh villages, about 5.05 lakh villages accounting for 86% of the total have been electrified. In addition, out of the total estimated pumpsets potential of 195.94 lakh, about 122.17 lakh pumpsets (63%) have been energised. During 1999-2000, about 2,000 new villages are expected to be electrified and about 2.5 lakh pumpsets likely to be energised.

2.88 Rural Electrification programmes are formulated and executed by the State Electricity Boards/Power utilities and / or Power Departments of the State Governments. The main sources of funding Rural Electrification programme are as under:-

(i) Rural Electrification Corporation

(ii) Plan allocation to the States.

(iii) Funds support from Government as loan and grant

(iv) Institutional financing bodies like commercial banks, NABARD etc

(v) International financing agencies like OECF etc

2.89 The Rural Electrification Corporation (REC) was established as a Public Sector Undertaking in July, 1969. Initially, the principal objectives of the corporation were to finance Rural Electrification Schemes and promote Rural Electric Cooperatives for funding rural electrification projects all over the country. The tasks assigned to the corporation have been suitably expanded from time to time. As of now, the main objects of the corporation are as under :-

To finance -rural electrification schemes in the country;

(i) To subscribe to special rural electrification bonds that may be issued by the State Electricity Boards on conditions to be stipulated from time to time.

(ii) To promote and finance rural electricity co-operatives in the country.

(iii) To administer the money received from time to time from the Government of India and other sources as grants or otherwise for the purpose of financing rural electrification in the country in general.

(iv) To promote, organise or carry on the business of consultancy services and / or project implementation in any field of activity in which it is engaged in India and abroad.

(v) To finance and / or execute works on small/mini/micro generation projects, promotion and development of other energy sources and to provide financial assistance for leasing out or to directly lease out or otherwise the above sources of energy including small/mini/micro generation projects.

(vi) To finance survey and investigation of projects failing in the ambit of REC.

(vii) To promote, develop and finance viable decentralised power system organisations in cooperative, joint, private sector, panchayat and/or local self bodies.

2.90 In keeping with the guidelines issued by the Ministry of Welfare/ Planning Commission, REC under its Annual Plan 1999-2000, has made a provision of Rs. 53 crore under Tribal Sub-Plan (TSP) and Rs. 105 crore under Special Component Plan (SCP) for taking up electrification of 415 Tribal villages and 2440 Dalit Bastis aiming at upliftment of the weaker sections of the society in rural areas. Upto the end of December, 1999 some of the SEBs/Power Department are reported to have electrified 33 Tribal villages and 2073 Dalit Bastis, and these works are reported to be in progress in other States. For the financial year 2000- 2001, REC has kept a provision of Rs. 44.50 crore for Tribal Sub-Plan (TSP) and Rs. 74 crore under Special Component Plan (SCP) for taking up electrification of 100 tribal villages and 500 Dalit Bastis.

2.91 The Government have informed the Committee that since, the major programme of electrification of new villages including Dalit Bastis is concentrated in MNP States namely; Uttar Pradesh, Bihar, Orissa, West Bengal, Madhya Pradesh, Rajasthan and North-Eastern and further since the MNP funds for rural electrification were decided to be provided by Government direct to the States concerned (and not through REC), the reduced target of electrification of 100 Tribal villages and 500 Dalit Bastis was proposed for funding through REC under its Normal Programme. However, in keeping with the guidelines issued by the Ministry of Welfare/Planning Commission, based on the proposal for budgetary allocation of Rs. 460 crore for rural electrification through REC, financial provision of Rs. 44.50 crore under Tribal Sub-Plan (TSP) for electrification of tribal villages and intensive electrification in tribal areas and provision of Rs. 74.00 crore under Special Component Plan (SCP) for electrification of Dalit Bastis and their intensive electrification was proposed during 2000-01.

2.92 Under Kutir Jyoti Programme a single point light connection is released to the households of rural poor falling below poverty line including Dalits and Adivasi families. This is given as grant through States/SEBs. Under this programme the Committee observe that States like Assam, Haryana and West Bengal have reported 'Nil' achievement (up to December, 1999), although sufficient targets were given. At macro-level the physical achievement was just 27% in 1999-2000. There is a continuous decline in the pace of rural electrification. From one lakh villages electrified in Seventh Plan, the number came down to just 17,000 in Eighth Plan. States like Assam and Bihar were showing 'Nil' Reports during 1998-99.

2.93 A glance over state-wise targets and achievements' for village electrification, pumpset energisation and Kutir Jyoti connection by REC show that these have been never achieved during the last 3 years. Although the major programmes have been targeted in States like Andhra Pradesh, Assam, Bihar, Uttar Pradesh and West Bengal, the achievements are much short of the target and even 'NIL', for Kutir Jyoti connection against the set target of 17,000 in Assam for 1999-2000 and 29264 against the target of 52,000 for Bihar.

2.94 As on 01.4.99, out of a total of 5,87,258 inhabited villages in the country (as per 1991 census), as many as 5,04,823 have been electrified leaving a balance of 81,435 villages. Nine States (Andhra Pradesh, Goa, Gujarat, Haryana, Kerala, Maharashtra, Punjab, Sikkim and Tamil Nadu) have electrified all their villages (as per 1981 census), leaving the balance of 81,660 villages to be electrified in the remaining thirteen States, No targets were fixed for electrification of villages in Bihar during 1999-2000. The pump energisation programmes for Bihar was 'NIL' against target of 2000 during 1998-99 and target for 1999-2000 are 'NIL'. The State-wise position of the villages remaining to be electrified and number of villages electrified annually during the last 5 years is given at Annexure-II.

2.95 The Committee have been informed that the pace of village electrification has been slowing down and unless this trend is reversed in many of the remaining State, 100% electrification of villages will continue to be elusive objective. Going by the average annual rate of village electrification in these States, the remaining villages will all be electrified in 702 years. The State-wise position is given at Annexure-III.

2.96 When asked the reasons for not utilising even the grants made available under Kutir Jyoti, the Committee was informed that despite grants being available, some of the SEBs are showing reluctance to implement Kutir Jyoti programme and release single point light connections to households of rural poor as they stand to lose financially.

2.97 When the Committee pointed whether Ministry of Power propose to make any structural change in the programme to increase coverage and intensity, it was informed that REC has proposed the following for implementation of Kutir Jyoti programme :

(i) Payment of grant amount for realise of Kutir connections may be made to the implementing agencies viz., SEBs/Power Department/State

Governments as 100% advance instead of the existing provision of 50% as advance and 50% on actual release of connections and on furnishing the list of beneficiaries.

(ii) Unit amount of grant per Kutir Jyoti connection as at present (Rs. 1000/- with meter and Rs. 800 without meter) being insufficient may be enhanced to Rs. 20001- with meter and Rs. 15001- without meter. It was also suggested that atleast for North-Eastern States, the proposed increase in unit cost may be considered immediately.

The matter is under consideration

2.98 Enquired about the reasons for projecting higher targets in spite of the fact that SEBs / implementation agencies are unable to achieve them and the steps that have been taken by the Government to achieve the targets in future, in a post evidence reply furnished to the Committee, the Ministry of Power have informed as under :-

"Under REC funded programme of rural electrification, the targets for village electrification and pumpsets energisation during each year are arrived at in consultation with SEBs/Power Departments of the State Governments, taking into account their priorities for taking up the programme and their past performance. As regards target of Kutir Jyoti connections, given the total size of the programme as decided by Government during each year, State- wise targets are fixed keeping in view of the proportion of rural population below poverty line in each State and after consultation with them".

2.99 Despite the targets having been set in consultation with the SEBs/State Governments, some of them are reluctant to implement the programme mainly due to unremunerative nature of the programme and inadequacy of the power infrastructure support to release the connections.

2.100 Investments in rural electrification being capital intensive and financially unremunerative to SEBs/State Power Utilities, many of them in view of their weak financial position and increased pressure on the resources are showing increasing reluctance in borrowing money on commercial terms for investments in these programmes. The issue was also discussed in the Conference of the State Power Ministers held on 26th February, 2000.

2.101 Regarding proper implementation of programme, the Government has reported that REC is a financial institutions. It facilitates by financially supporting the village electrification and other rural electrification programme through its loans to SEBs / State Power Utilities. REC's loans against sanctioned rural electrification schemes are disbursed by way of reimbursement based on reported progress of works as monitored and not on the basis of number or list of electrified villages.

2.102 The Government, in a bid to tighten and streamline the supervision over village electrification have reported to be written to all SEBs / State Government suggesting that

list of villages electrified should be furnished to the local MLAs / MPs and also that an arrangement may be evolved so that electrification of any village is certified by the local panchayats.

2.103 R.E.C. was set up initially with the Principal Objectives to finance Rural Electrification Schemes and promote Rural Electric Cooperatives, for funding rural electrification projects all over the country. Considering that tasks assigned to corporation have expanded manifold, asked whether Rural Electrification Corporation approached Rural Infrastructure Development Fund (RIDF), for funding various rural electrification projects, the Government informed that to augment the availability of funds for Rural Electrification, Ministry of Power approached Ministry of Finance for allotment of RIDF funds for REC. Decision in the regard is awaited.

2.104 The Standing Committee in their Ninth Report (12th Lok Sabha) while commenting on the definition of electrified villages had recommended that a village or a hamlet should he declared electrified only when at least 10% of the household of a village or hamlet are electrified. Asked about the follow up action that the government have taken thereon the Committee have been informed as under:-

> "The present definition was finalised after detailed consultations with SEBs, CEA etc. even with the present definition, it will take a very long time to electrify all villages at the present rate of electrification. Initial connection to a village is most capital intensive. Subsequent extension to households can be undertaken more economically by individuals. A more liberal definition means greater resources will be required to cover the villages. Definition can be revised after reasonable coverage is achieved".
>
> The present definition was evolved after wide consultation with State Governments /SEBs. As per the new definition "A village is deemed as electrified if electricity is used in the inhabited locality within the revenue boundary of the village for any purpose whatsoever.
>
> According to this definition a village is declared electrified only when the electricity is being used in the inhabited locality. This implies that access is available for further connections".

**2.105 The Committee are distressed to note that Rural Electrification Programmes like Tribal sub-plan, special component plan, village electrification and pump set energization are not progressing as per the target fixed for each of them. Against a target of 415 Tribal villages to be electrified during 1999-2000, only 33 tribal villages have been electrified upto December, 1999. The Committee have been informed that under Kutir Jyoti Programme, a single point light connection is released to the households of rural poor, including Dalit and Adivasi families falling below poverty line. This is given as grant. The Committee are constrained to note that under Kutir Jyoti Programme, the actual achievement at macro-level was just 27 % (upto December, 1999). States like Assam, Haryana, J&K, Manipur, Sikkim and West Bengal have not electrified any of Dalit and Adivasi families, in spite of projecting**

**hefty targets. The Committee are surprised to find that some of the SEBs are reluctant to implement Kutir Jyoti Programme, as they stand to lose financially. The Government should initiate action with the State Govt. regarding implementation of Kutir Jyoti Programme. The Committee desire that changes in guidelines, proposed by REC, i.e. cent per cent advance payment of grant amount to implementing agencies and enhancement of amount of grant per Kutir Jyoti connection, he implemented forthwith. The Committee have been informed that the targets for village electrification and pumpsets energisation under REC funded programme of rural electrification are arrived at in consultation with SEBs / Power Departments of the State Governments, taking into account their priorities for taking up the programme and their past performance. The Committee feel that some of the State Governments may he reluctant to implement the programme mainly due to the unremunerative nature of the programme and because of inadequate power infrastructure to support the scheme. The Committee therefore, are of the opinion that all out efforts should he made to persuade SEBs/State Government to implement these programmes so as to achieve the target set during each year. The Committee desire that necessary arrangements may he made to include the members of panchayat as well as MLAs and MPs of the locality in finalisation and implementation of these Rural Electrification Programmes before funds are made available by Central Government/Rural Electrification Corporation.**

**2.106 The Committee feel that although Rural Electrification Corporation is a financial institution and sanctions loans for Rural Electrification Schemes which are disbursed by way of reimbursement based on reported progress of work, the Corporation cannot absolve itself of the major responsibility entrusted to it to promote actual implementation of Rural Electrification Programmes. The Committee, therefore, recommend that for proper monitoring of Rural Electrification Programme, the Government / Rural Electrification Corporation should maintain a list of villages actually electrified for whom loans have been disbursed. Regarding definition of a village declared electrified; the plea of the Government that even with the present definition, it will take a very long time to electrify all villages at the present rate of electrification cannot he accepted to he valid. The Committee are of the opinion that the plan of Government of Power on Demand by 2012 should not he restricted to Urban/ semi urban areas and it should reach the distant villages / tribal areas also. The Committee reiterate their earlier recommendation (18th Report, 11th LS) and desire that a village should he declared electrified only when at least 10% of the households of a village or hamlet have been electrified.**

**2.107 The Committee note that during Sixth and Seventh Plan periods, on an average more than one lakh villages were electrified. During Eighth Plan, the total number of villages electrified dropped to 11,540. In the current Plan- period, the rate of electrification has further dwindled to 3000 villages per year. The Committee have been informed that as many as 82,000 villages are yet to he electrified, of which 18,000 villages cannot he connected through Grid. The Committee are alarmed to note that with present rates, it will take nearly 702 years to complete the**

**electrification of all the villages in one of the States. The Committee, therefore recommend that a comprehensive strategy he evolved to electrify all the villages by the end of 10th Plan. To augment resources for rural electrification, REC should he allowed to make use of funds available under Rural Infrastructure Development Fund (RIDF) also.**

## L. Project Implementation by Damodar Valley Corporation

2.108 Against Capital expenditure target by DVC of Rs. 235.11 crore (Plan Capital expenditure Rs. 150.00 crore and non-Plan capital expenditure Rs. 85.11 crore ) actual expenditure for the year 1998-99 was Rs. 120.55 crore in aggregate of which Rs. 11 3.63 crore in respect of Plan Outlay and Rs.6.92 crore towards Non- Plan. In the year 1999-2000 the target of Plan Outlay has been kept at Rs. 133.91 crore (as against original budget estimate of Rs. 176 crore besides Non-Plan Outlay of Rs. 60.16 crore has been planned against original budget of Rs. 75.00 crore). The total capital expenditure during 2000-2001 has been estimated at Rs. 528.38 crore consisting of Plan Outlay of Rs. 459.90 crore and Non-Plan Outlay of Rs. 68.48 crore. After discussions in the Planning Commission, Plan Outlay for DVC in BE 2000 -2001 has been modified to Rs. 285.40 crore (instead of Rs. 459 crore) making a total outlay of Rs. 353.80 crore.

2.109 The Government have informed that the Budget Estimate for Maithon TPP (RE) were revised from Rs. 20 crore to Rs. 10.11 crore during 1999-2000 since zero date of the project has been deferred by one year. Maithon Right Bank Thermal Power Project (MRBTP) (4x250 MW) was approved by the Cabinet in April, 1998 as one of the mega power projects. This Project is to be implemented in a joint venture between DVC and BSES with both holding 45% of the equity each in a debt equity ratio of 70:30. Joint venture MoU has been signed on 8.2.2000 and the Promoters' Agreement is being worked out. A consultant has been hired to finalise technical specifications of the equipment and it is expected that notice inviting tenders would be released in August-September, 2000. Land acquisition is under way. There are two important issues, which need to be settled:

(a) Coal linkage given by Department of Coal is contingent upon the project providing Rs. 350 crore to M/s BCCL. Department of Coal is being requested not to insist on this and make M/s. BCCL to take up on their own investment in coal mining.

(b) Signing of Power Purchase Agreement with Power Trading Corporation and constituents of NREB is yet to be completed, as the project is export oriented considering the surplus power situation prevailing in the Eastern Region.

2.1 1 0 Asked about the decrease in plan outlay, the Committee have been informed that in case of Bokaro Thermal Power Station-B rehabilitation, the revised estimate, (1999-2000) have been decreased by Rs. 12 crore because the balance payment of the package has been considered a part payment already paid in 1998-99. Further for R&M scheme,

against a budget estimate, of Rs. 43.30 crore during 1998-99, actual were only Rs. 8.68 crore.

**2.111 Regarding implementation of Tail Pool Project, the Committee have been informed that work on Tail Pool Dam from both banks started in November, 1987 but was stopped shortly thereafter due to resistance from local people. Work on right bank was resumed afterwards but had to stop again due to persistence of local people's resistance. Work has been started from the left bank side on 7.2.1993. After several stoppages of work due to RPNN's sub contractor's labour and other problems. Ring Bundh could be completed on 15.9.1994. 58% of Cutoff wall and 7.23% of concrete work in spilway & under sluices have been**

**completed. However, the work totally stopped since 8.1.1996 due to resistance by local people. On 27 .9.1996 DVC Board accorded approval for total closure of the construction of TPD. However, an expert Committee has been constituted by Ministry of Power on 16.12.1996 to examine the viability of Tail Pool Dam Project. Chairman and nominee from CEA of the Committee in their report considered the scheme to be techno-economically viable for likelihood of shortage of peaking power and peaking energy at the end of 9th Plan, the other two members gave dissent notes disagreeing with the above. DVC Board in its meeting dated 31.5.1998 reconfirmed the decision of total closure of the construction of Tail Pool Dam. DVC incurred an expenditure of Rs. 6 crore on the construction (establishment not included).**

2.112 In a post evidence reply, the Ministry of Power further informed that in 1996, the project cost was estimated at Rs. 52 crore. The Board of DVC took a decision of total closure of the construction of Tail Pool Dam as the project was found to have become commercially unviable. The present cost of the project would be around Rs. 70 crore with tariff coming to around Rs. 4 to 5 per unit. This will increase the weighted average tariff of DVC, which supplies power to the SEBs of West Bengal and Bihar and to certain bulk consumers.

2.113 It further added,

> "If the Tail Pool Dam Project is to be taken up, the States of Bihar and West Bengal would need to commit to maintain law and order at the time of construction and buy the peaking power generated at the rate worked out to make the project viable. Since the bulk consumers get power against legally enforceable agreement, the entire increase in weighted average tariff will necessarily have to be taken by the two states. The Government have also informed that the Secretary, Ministry of Power will convene a meeting in April, 2000 calling the Energy Secretary and Chairman, SEB of Bihar and Bengal to discuss the above issues".

**2.114 The Committee observe that there is a huge variation between the Plan outlay and revised outlay of DVC during 1998-99 and 1999-2000. Although the expenditure of Rs.120.55 crore could be achieved by DVC during 1998-99 against the target of Rs.235.11 crore and for 1999-2000, these have been revised to Rs. 133.91 crore from original Budget Estimate of Rs.176 crore, the Committee fail to understand the initial proposal of DVC for an expenditure of Rs. 459 crore of Plan outlay during 2000-2001. The Committee would like to know the details of the proposals of DVC during 2000-2001 which have been curtailed after discussion with the Planning Commission and modified to Rs.285.40 crore instead of Rs. 459 crore. The Committee also expect the Government to resolve the issue of coal linkage and signing of PPA in regard to Maithon Right Bank Thermal Project at the earliest. The** Committee would like to know the action taken by the Government in this regard. Regarding R&M work undertaken by DVC, the Committee are concerned to note the reduced utilisation of budgeted provision and would like to know the reasons for utilisation of Rs. 8.68 crore against the B.E. of Rs. 43.3 crore during 1998-99.

**2.115 The Committee observe that the Tail Pool Dam Project was initially sanctioned in 1987 and after completion of some work, the work was totally stopped on 8.1.1996 reportedly due resistance by local people. Regarding implementation of Tail Pool Dam, the Committee observe that 2 members including Chairman of the expert Committee constituted to examine the techno-economic viability of Tail Pool Dam Project in 1996-97 have stated the project to be viable to meet the shortage of peaking energy at the end of 9th Plan. The Committee are, however, surprised to note the decision of DVC that even after incurring an expenditure of Rs. 6 crore on construction activities out of the total expenditure of Rs. 70 crore, the DVC Board on 31.5.1998 decided on a total stop of construction of Tail Pool Dam. The Committee desire that the Government should take up the problem of law and order with the concerned State Government and sign PP A so that the project can be taken up in right earnest. In the present circumstances, the Committee cannot but stress on the Government not to abandon projects after making investments thereon and desire that all out effort should be made to restart the project, which was sanctioned way back in 1987. The Committee would also like to know the outcome of meeting of Secretary, Ministry of Power and Energy Secretary and Chairmen, SEBs, Bihar and Bengal to be held in April, 2000 to resolve the issue.**

**M Development of Power in North-Eastern Region**

2.116 The North-Eastern Regional Power Grid comprising transmission network of seven States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura with the Central Sector Transmission System superimposed on it. The region has total installed capacity of 1714.42 MW including some isolated generation in different States. The Region has a peak demand of 926 MW at present against which 947 MW is being met resulting in surplus of 21 MW which accounts for 2.3% as compared to peaking shortage of 10% on all India basis. Per capita consumption in North-Eastern Region is 68 kwh. against the national average 227 kwh. In North-Eastern Region, there are 27 power consumer per thousand against national average of 83 per thousand.

2.117 Though North-Eastern Region is surplus in power, the various States resort to load shading mainly due to (a) low plant load factor in thermal plants (b) inadequate distribution system (c) operation of some generating units in isolation mode. Besides, there are certain other specific problems in the Region **such as poor communication facilities, difficulty in operation & maintenance of transmission lines and problems of insurgency.**

2.118 There is a tremendous scope for exploitation of vast hydro electric potential of 31857 MW at 60% plant load factor, assessed by CEA. The present installed capacity both Central and State sectors is 1714.42 MW which is likely to be raised to 2301.93 MW by the end of the Ninth Plan. Various schemes both in Central and State sectors of an aggregate capacity of 26015 MW have been identified for capacity addition beyond Ninth Plan period.

2.119 Government of India is giving highest priority in development the power sector of North-Eastern Region. The two on-going projects namely Doyang (75MW) in Nagaland and Ranganadi (405 MW) in Arunachal Pradesh are in advance stage of execution.

2.120 Even though the transmission and. distribution facilities in the region have been planned, existing system on account of non-implementation of the schemes suffer from inadequate capacity which is affecting efficient and reliable dispersal of power. The sub-transmission and distribution network, consistent with the demands in the various parts of the region had not been developed. During the 8th Plan period against an outlay of Rs. 653 crore, expenditure on transmission and distribution schemes was about Rs. 572 crore. 71e weakness in the transmission and distribution system particularly in sub-transmission and distribution system manifest in T&D losses which range from 25% to 37% in different States of the region and also cause problems of providing reliable supply in adequate quantity and quality with the ultimate consumers. With the general funds constraint being faced by the power sector during the Ninth Plan period, the position may worsen unless remedial measures are taken up. With a view to overcome the deficiencies in the sub-transmission and distribution system in the North-Eastern Region and Sikkim, a decision was taken that an additional allocation of Rs. 200 crore non- lapsable funds would be made available for the improvement in sub-transmission and distribution network in North-Eastern Region and Sikkim. It was also decided that CEA may formulate a scheme so that in addition to on-going works some important new works which are absolutely essential are also taken up and the primary objective during the Ninth Plan would be to complete the on-going schemes.

2.121 The proposal for strengthening and improvement of sub-transmission and distribution schemes of North-Eastern Region States and Sikkim for (i) on going projects for which the Ninth Plan provision are available but require additional funds for early completion and (ii) new projects which are identified as important and critical but not taken up due to lack of funds have been identified. For on going and important new schemes proposed by North-Eastern States and Sikkim for availing non-lapsable funds for development of transmission and distribution system, an expenditure of Rs. 452.66 crore is proposed to be involved. Additional funds requirement for these schemes has been assessed at Rs. 239.92 crore during 1999-2002 comprising of Rs. 136.23 crore for ongoing schemes and Rs. 103.69 for new schemes. The States of Tripura and Sikkim had proposed no new schemes.

2.122 Asked about the achievements, both financial and physical during the year 1999-2000 for the schemes, the Ministry of Power stated that details regarding achievements, both financial and physical during the year 1999-2000 are not available with them.

2.123 The Committee have been earlier informed that the Government/ Power Grid Corporation has-been considering one time subsidy of Rs. 790 crore for transmission projects in North-Eastern States to evacuate excess power. Against a token grant of Rs. 50 lakh in 1999-2000, grant to Power Grid for the year 2000-2001 have been increased to Rs. 50 crore. About the schemes and targets set for the year 2000-01 to he implemented from the grant of Rs. 790 crore to North- Eastern States, the Ministry of Power have informed that one time subsidy of Rs. 790 crore was earlier sought as a compensation

towards revenue loss in North Eastern Region for an investment of Rs. 1512 crore already made by Power Grid against which the payable tariff has been pegged at 35 paise/KWH on account of poor financial health of the SEBs in that region. The proposal is still under consideration by Ministry of Power.

2.124 The Ministry in a note furnished to the Committee stated that Unified Load Despatch Centre (ULDC) for North-Eastern region, was approved by Government of India in August, 97 at a cost of Rs. 167 crore and part funding also got tied up with Asian Development Bank. However the project could not be taken up for implementation as Power Grid Board decided to permit such implementation only when the beneficiaries in the NE region agree to open necessary Letter of Credit (LCs), provide Escrow cover backed by state guarantees. These have so far not been put in place by the constituents. Keeping in view the critical importance of this project for effective system operation in the region, the above issue have been discussed at length with various Government agencies including Planning Commission to arrange for necessary financial support. The Government of India has now decided to provide grant assistance to Power Grid which would enable lowering the transmission tariff for this project and thereby reduce the financial burden to the North-Eastern Region beneficiaries.

2.125 Planning Commission has recently indicated their in principle acceptance of providing 90% of the project cost i.e. Rs. 150 crore as grant starting from February 2000-01. Out of this Rs. 50 crore has been provided in the year 2000-01 and the balance Rs. 100 crore would be released subsequently during the project construction period. Based on the above, it is expected that award of contracts for this project will be placed by 412000.

2.126 The Committee have been informed that the proposal for strengthening and improvement of sub-transmission and distribution schemes of North - Eastern Region States and Sikkim for (i) on going projects for which the Ninth Plan provision are available but require additional funds for early completion and (ii) new projects which are identified as important and critical but not taken up due to lack of funds have been identified. For on going and important new schemes proposed by North-Eastern States and Sikkim for important new schemes proposed by North-Eastern S availing non-lapsable funds for development of transmission and distribution system, an expenditure of Rs. 452.66 crore is proposed to he incurred. Additional funds requirement for these schemes has been assessed at Rs. 239.92 crore during 1999-2002 comprising Rs. 136.23 crore for ongoing schemes and Rs. 103.69 crore for new schemes. The Committee are surprised to note that although schemes have been identified and funds earmarked, schemes have not been operationalised since the details regarding achievements, both financial and physical during 1999-2000 are not available with the Government. The Committee would like to know the Ninth Plan provision for the schemes and the funds disbursement / utilisation so far. The Committee desire that funds should he provided for critical & on- going projects so that these can he completed at the earliest.

2.127 Regarding implementation of ULDC scheme for North-Eastern Region, the Government have informed that the scheme was approved in August, 1997 at a cost of Rs. 167 crore. Although initially the Power Grid Corporation insisted on necessary Letter

of Credit, Escrow cover backed by State Guarantees, keeping the financial health of SEBs in the region and critical importance of the project for effective system operation in the region in view, Planning Commission has indicated in principle acceptance of the project by providing 90% of the project cost. Out of a total grant of Rs. 150 crore, Rs. 50 crore have been provided for 2000-01. The Committee expect that the award of contracts for this project would have been placed by April, 2000 as targeted. The Committee would also like to know the targeted completion period of the scheme.

## N. NEEPCO

2.128 The BE and RE for NEEPCO during 1999-2000 were Rs. 260.20 crore Budget Support Rs. 213.20, IEBR Rs. 47 crore. The BE for 2000-01 are Rs. 255.26 crore; but Plan budgetary support have been reduced to Rs. 122 crore from Rs.213.20 crore and IEBR component increased to Rs.133.26 crore from Rs. 47.00 crore of 1999-2000.

2.129 To a query about the reasons for this huge variation in the Plan an, IEBR component by NEEPCO during the two years, the Committee have been informed as under:-

> "The following are the approved and ongoing projects being executed by NEEPCO with debt equity ratio indicated against each:-

| | **Project** | **Debt Equity Ratio** |
|---|---|---|
| 1. | Assam Gas Based Combined Cycled Power Project, Kathalguri, Assam (291 MW) | 1:1 |
| 2. | Agartala Gas Turbine Power Project Tripura | (Loan being raised through External Assistance through Budget) |
| 3. | Kopili HEP (25MW) Stage-ii Assam | 1:1 |
| 4. | Tuivai HEP (60MW) Mizoram | 15:85<br>(Loan assistance from JBIC, Japan) |

> The first two projects namely; Assam Gas Based Combined Cycle Power Project and Agartala Gas Turbine Project have since been completed and hence no provisions has been made during 2000-01. The following new projects have been identified for execution during Ninth Plan:-

1. Tuivai HEP (2 1 0 MW), Mizoram
2. Kameng HEP (600 MW), Arunachal Pradesh
3. Tiapaimukh HEP (1500 MW), Manipur

The investment approval in respect of Tuivai HEP and Kameng HEP are under process. The debt portion in respect of these projects are being considered through internal extra budgetary resources".

2.130 As against the target of Rs. 47 crore under IEBR, the actual achievement during 1999-2000 (upto February, 2000) is reported to be Rs. 18.33 crores. The reasons being the completion of Assam Gas Based Combined Cycle Power Project (291 MW) and Agartala Gas Based Power Project (84 MW). The funding requirements of NEEPCO for 2000-2001 have been reviewed and based on the equity : debt ratio of the new schemes namely; Tuivai HE Project (210 MW) and Kameng HE Project (600 MW), the Gross Budgetary Support (GBS) and IEBR have been approved at Rs. 122.00 crores and Rs. 133.26 crores respectively.

2.131 The Ministry of Power have informed that Assam Gas Based Combined Cycle Power Project (291 MW) has been completed and is being operated to its full capacity. The Agartala Gas Turbine Power Project (84 MW) has also been commissioned. Out of four Units of 21 MW each, three Units are generating to their full capacity while 4th Unit is under breakdown due to some mechanical fault. This Unit is under repair by the suppliers at their workshop. This machine is under guarantee period and repairing requires no additional cost, hence no funds are allocated during the year 2000-2001.

2.132 Regarding the target vis-a-vis actual generation of power by NEEPCO during the year 1999-2000 (up to February 2000), the Ministry of Power informed that against the target of 1 155 MU of Hydel and 1314 MU of thermal during 1999-2000, the actuals up to February 2000, were 719 MU of Hydel and 1293 MU, of Thermal. The generation from hydel generating stations is stated to he affected mainly due to constraint in water availability and grid demand as well as constraint in associated transmission network. The Power Grid Corporation of India is reported to be taking action for completion of critical transmission line namely; 132 KV Single Circuit Line for Kumarghat Sub-Station in Tripura. This line could not be completed by the Power Grid mainly because of adverse law and order situation in the area. Power Grid have indicated that works are likely to be completed by December, 2000.

**Tipaimukh Dam Project**

2.133 Tipaimukh Dam Project was initiated by the Brahmaputra Board, Ministry of Water Resources. The Technical Advisory Committee on Irrigation, Flood Control and Multi-Purpose Project under Ministry of Water Resources found the project viable at an estimated cost of Rs. 2899 crores (July, 1995 price level), subject to Environment & Forest clearance from the Ministry of Environment & Forests and also subject to agreement reached amongst the State Governments of Assam, Manipur and Mizoram regarding sharing of cost and benefit from the project. The project was envisaged to offer firm power benefit of 401 MW with an installed capacity of 1500 MW and annual energy generation of 3516 GWH on 90% dependable year basis. The scheme, in addition to hydel power generation, would provide flood moderation.

2.134 In the Power Minister's Conference of North-Eastern Region held in Shillong on 19.1.99, it was decided that Tipaimukh Project would be executed as a Central Sector Project by North-Eastern Electric Power Corporation (NEEPCO) provided all the components of the project conform to the scheme of Multi- Purpose Project. NEEPCO authorities have made a presentation before the State Government of Manipur and as a result of this, Manipur Legislative Assembly at its sitting held on 15.12.1999, resolved to rescind its earlier resolution adopted on 14.3.1997 in relation to the objection of implementation of the Tipaimukh High Dam Multi-Purpose Project. They have also authorized NEEPCO to go ahead with further survey & investigation of the project and that the final Project Report be submitted to the Government of Manipur for approval 1 clearance. The draft MoU sent to the State Government of Manipur is expected to be signed soon between the State Government and NEEPCO.

2.135 After getting the MoU signed by Manipur Government. NEEPCO have to seek the concurrence of the concerned State Government where ever submergence will take place. Thereafter, NEEPCO will initiate action to award the job of Environment Impact Assessment & Preparation of Environment Management Plan as per provisions of the new guidelines issued by the Ministry of Environment and Forests. Earlier Environment & Forest clearance by Ministry of Environment & Forests were held up due to failure in resolution of inter-State aspects of the project. Now that the project has since been transferred to NEEPCO for execution, the Committee have been informed that NEEPCO has initiated the action for revision of the Detailed Project Report and preparation of Environment Management Plan after fresh study of Environment Impact Assessment as well as Catchment Area Treatment Plant including R&R Plan. Award of these studies by NEEPCO is also awaiting signing of MoU with the State Government of Manipur.

2.136 The scheme could not be cleared by the CEA in the absence of an agreement amongst the State Governments of Assam, Manipur and Mizoram at that time. Manipur Government was also averse to taking up of the project because of large scale submergence. Central Electricity Authority has not given the techno- economic clearance to this project so far. On the basis of 47 different studies, the DPR was submitted to CEA in February, 1995. However, the TEC to this project was held up because of the failure in resolution of the inter-state aspects. At this stage NEEPCO will submit a revised DPR to CEA for TEC.

2.137 When pointed out that Central Electricity Authority takes long period in according Techno-Economic Clearance for Power Development Schemes. The Ministry of Power have stated that the time taken for according Techno-Economic Clearance to a power project depends upon the completion of DPR and tying up of all the essential inputs / clearances required for Techno-Economic Clearance by the power project developers. Central Electricity Authority has made a programme of about 6 months for appraisal of the power projects from the date of receipt of DPR in CEA.

2.138 In this connection, Chairman, Central Electricity Authority informed the Committee during evidence,

> "We have developed an internalised system whereby from the date when the

detailed project report is received by us, the total time taken when the Techno-Economic Clearance is given is about 150 to 170 days. Out of that, we are keeping 120 days for the project developer. Then, about 50 days or so are taken by the staff and by the experts of the CEA"

2.139 Asked about the funding of the project and the amount spent so far as pre-construction activities of the project, the Ministry of Power in a written reply stated that since the investment approval to the Tipaimukh Project is still to be processed, the question of release of funds does not arise at this stage. However, a proposal of NEEPCO for the re-reimbursement of a sum of Rs. 4.48 crore towards the expenditure incurred by Brahmaputra Board on various infrastructural facilities etc. is being processed in the Ministry of Power. A token provision of Rs. 7 crore in respect of Tipaimukh HE Project has been made for the year 2000-2001.

2.140 Regarding Relief and Rehabilitation plan for land oustees of the Tipaimukh Project, various packages for compensation against residential houses and transportation, displacement grant for birds, animals and trees and economic rehabilitation for promoting agriculture, horticulture, animal husbandry & poultry farming etc. for uplifting of economic conditions of the displaced persons were proposed, in addition to providing other civic facilities. The proposals were submitted by Brahmaputra Board to Ministry of Environment & Forest as part of the Environment Management Plans. These have since been kept in abeyance by Ministry of Environment & Forest due to non resolution of inter-State aspects involved in the project as well as consent of the State Governments involved.

2.141 The Committee have been apprised that NEEPCO proposes to initiate action only after signing the MoU with State Government of. Manipur after conducting fresh field studies in association with the concerned State Governments. However, NEEPCO has conducted a preliminary studies regarding the submergence of the villages alongwith the officials from the Government of Manipur. During these field survey it was observed that the data provided by the Brahmaputra Board in its project report needs to be modified / updated based on the present ground conditions. Preparation of Environment Management Plan including R&R is expected to take at least one year after signing the aforesaid MoU. About the time of completion, the Committee have been informed that it would require 12 years inclusive 2 years of pre-construction activities from the date of accord of CCEA clearance.

**2.142 Regarding ongoing projects of NEEPCO during 1999-2000, the Committee have been informed that Assam Gas Based combined Power Project at Kathalguri, Assam has been completed and is being operated at its full capacity of 291 MW. Another project, Agartala Gas Turbine Power Project (84 MW) has also been reported to be completed and commissioned during 1999-2000. Out of four units of 21 MW each, three units are generating to their full capacity while the fourth unit broke down due to some mechanical fault. The unit is stated to he under repair by the suppliers at their workshop which do not require additional cost. The Committee desire to know about the nature of mechanical fault which could not he rectified at the project forcing the suppliers to repair it at their workshop. The**

**Committee desire that the revenue loss, as a result of non-operation of this unit, may he recovered from the vendor. They desire that the 132 KY single circuit line for Kumarghat Sub-Station in Tripura, completion of which was reportedly affected due to adverse law and order problem, should he completed with the assistance from State Government and by obtaining the services of Central law enforcing agencies. The Committee recommend that this critical line he completed as per revised targets by December, 2000.**

**2.143 The Committee have been informed that Tipaimukh Dam Project was initiated by Brahamputra Board and approved at an estimated cost of Rs. 2899 crore in July, 1995 with an installed capacity of 1500 MW. The Project has been entrusted to NEEPCO for execution as decided by the Power Ministers, Conference of North-Eastern Region held on 19.1.99. The Committee have been informed that the Manipur Legislative Assembly at its sitting held on 15.12.99 authorised NEEPCO to go ahead with further survey and investigation of the project and to submit final project report to the Government of Manipur for approval / clearance. But the same has not been done by NEEPCO so far. The Committee desire that the NEEPCO should approach the Government of Manipur at the earliest to sign the MoU. The Committee also recommend that CEA should take minimum time to accord approval of the revised DPR than the normal time of 5-6 months taken by it as the project has been delayed since February, 1996 when DPR was originally submitted to CEA. The Government have informed the Committee that it will take 12 years to commission the project from the date of CCEA approval. The Committee, therefore, also recommend that the project should be implemented by NEEPCO as a fast-track project which will benefit 3 North-Eastern States and an possible efforts should he made to clear / sanction the project, from all angles at the earliest.**

NEW DELHI;
11 April, 2000
22 Chaitra, 1922 (Saka)

SONTOSH MOHAN DEV,
Chairman,
Standing Committee on Energy.

**STATEMENT OF CONCLUSIONS / RECOMMENDATIONS CONTAINED IN THE REPORT Reference Para No of the Report**

| Sl. No. | Reference Para No. of the Report | Conclusions / Recommendations |
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| 1. | 2. | 3. |
| 1. | 2.7 | The Committee note that Central Plan Outlay for the Ministry of Power,during 1999-2000 was budgeted at Rs. 9600.27 crore. The Revised Plan Estimates is Rs. 8049.92 crore. The plan, thus fell short by Rs. 1550.35 crore against the budgeted expenditure. The budgetary support for Central Power Research Institute and National Power Training Institute have been reduced by Rs. 15 crore during the year. Similarly, there has been reduction of Rs. 16.25 crore for energy conservation due to slow progress of the scheme during the first half of 1999-2000. The Committee are also dismayed to note the under- utilisation of external assistance through budget by PGCIL to the tune of Rs. 74.52 crore in respect of Nathpa Jhakri Transmission line and Unified Load Despatch & Communication facilities - Northern Region (ULDC - NR) due to deferment of supplies and erection to ensure that transmission project is in tune with generation project which has been delayed. The IEBR component of Plan outlays of Ministry of Power was reduced to Rs. 4519.44 crore from Rs. 6786 crore during 1998-99. These were again revised downward to Rs. 5280 crore from Rs. 6660.27 crore budgeted during 1999-2000. The Committee further observe that the IEBR component with respect to National Thermal Power Corporation and Power Grid Corporation could not he mobilised during 1998-99 and 1999-2000 due to inability of PSUs to raise bonds/debentures to the extent of approved target. Similarly, NTPC, a Navratan, could neither mobilise the targeted Internal Resources, nor could it meet the target of ECB supplier credit. Although, the Government have stated that different task forces have been setup to monitor Thermal, Hydro and transmission Projects, the low utilisation of IEBR component is reported to be mainly on account of delays in major projects like Ramagundam, Rihand II, Sipat, Simhadari and Talcher-II in case of NTPC and Talcher II, NERLDC and WRLDC in case of Power Grid. The Committee are perturbed to note that in spite of their (Committee's) repeated recommendation to step up investment in Power sector by the Government as private sector has failed to respond as expected, the Ministry have not been able to utilise Plan outlays as approved during 1998-99 and 1999- 2000. The Committee do not concur with the views of the Government that variations in IEBR, between BE and RE stages do not indicate the inability of PSUs to mobilise resources but is on account of non- availability of statutory clearances. In the opinion of the Committee, the reasons advanced by the Ministry are such which should have been visualised in advance and sufficient cushion should have been provided in the physical & financial targets. Even if the argument put forth by the Ministry is accepted that it does not indicate the inability of PSUs to mobilise resources, it does prove the lack of understanding of the ground realities on the part of planners/policy framers in fixing over- ambitious targets and faulty project formulation and implementation machinery which tend to frustrate the IEBR targets. The Committee, therefore, recommend that Government should take into consideration the ground realities, while projecting targets for IEBR. At the same time, they should strengthen project formulation and implementation machinery lest IEBR target should go haywire. The Committee hope and trust that the Ministry of Power will take concerted efforts to utilise fully, the enhanced Central Plan Outlay of Rs.9720.18 crore, during 2000-0 1. The Committee also desire that the Government should leave no stone unturned, in mobilising the projected IEBR of Rs. 7079.21 crore during the year. |
| 2. | 2.21 | The Committee are dismayed to note that the capacity addition during Ninth Plan has been |

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| | | drastically reduced to 28097.2 MW from 40245.2 MW during mid-term appraisal conducted in July, 1999. The Committee note the dismal performance in achieving hydel power generation by Central schemes during 1998-99 and 1999-2000 where no additional capacity has been installed against the targets of 95 MW. The hydel capacity addition in State sector is also not satisfactory in 1999-2000 where against the set target of 1493 MW, the achievement (upto December, 1999) is only 739 MW. The Committee note that the Government have announced a National Hydel Policy to exploit the untapped hydro potential of the country and also step up the investment in Hydel sector during the last 3 years as compared to the investment in thermal sector. The Committee feel that the ideal ratio of 60:40 thermal-hydel mix of power generation is unlikely to be achieved in near future. Instead, the ratio of thermal-hydel mix is showing a decreasing trend during the last 3 years and at present it is 75:25. The new policy initiative by the Government to generate more hydel power so as to improve ratio of thermal-hydel mix and stabilise the grid has not yet achieved the pace that is required since no hydel power has been added in the Central sector during the last 2 years. The Committee expect the Government to make all out efforts to at least achieve the revised targets fixed in hydel power during the remaining years of Ninth Plan and for which it should provide sufficient budgetary support to the programme especially to the ongoing projects like Tehri-Hydro Electric project and remaining Teesta project, etc., The Committee also desire that special care should be taken to rehabilitate project affected people. |
| 3. | 2.26 | Taking note of the below target capacity addition of power during 8th Plan and first three years of 9th Plan, the Committee find the goal of the Government of achieving "The power on demand by 2012" as over-optimistic. The Committee find that against the annual increment capacity of 10000 MW to 12000 MW required to achieve 'Power on Demand' target by 20121 the Government have set targets of capacity addition of 2125.5 MW of thermal and 1219.5 MW of Hydro during 2000-01. The Committee apprehend<br>that the much hyped 'Power on Demand by 2012' might witness the same fate, as of capacity addition programmes during 8th Plan and first three years of 9th Plan. The Committee, therefore, recommend that to achieve 10th & 11th Plan target of 20590 MW capacity addition of NTPC project and hydro electric capacity additions of 2415 MW during 10th Plan and hydro projects of 26581 MW where advance action has been taken, should be supported by higher budgetary support. The Committee also desire that the Government should explore the possibility of various pending / abandoned projects like Nabinagar Super Thermal Power Project etc. to ensure that the objective of "The Power on Demand by 2012" can be achieved. |

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| 4. | 2.38 | The Committee observe that the major reason for reduction in the capacity addition was the deep shortfall in the target set for private sector. Only 8 private power projects with a total capacity of 3474 MW of power generation are reported to be under construction. The dismal performance in achieving power generation targets by the private sector can be gauged from likely capacity addition of only 8300 MW against the original target of 17588 MW including the liquid fuel sector target of 6000 MW. The refusal of Counter Guarantee by the Central Government and failure on the part of State Governments to provide letter of credit and State Guarantees alongwith their inability to provide Escrow Cover to IPPs in view of the poor health of SEBs/Electricity Departments have resulted in checking the flow of private investment in the power sectors. Although, the Government have taken a number of steps to encourage the States to undertake power sector reforms so that SEBs can become financially strong to attract private investment on their own, the Committee feel that too much reliance on the private sector at this stage is not justified. As such while fixing targets for private sector, the Government should give due consideration to the financial position and Escrow capacity of the SEBs/State Governments so that an accurate estimate can be made of the targets to be realised by the private sector. The Committee therefore desire that based on the Present escrow capacity, etc. of each State to attract the private investment in power sector, the Government should redraw the targets for 9th, 10th and 11th Plans for the private sector and to find corrective and pragmatic steps to encourage private sector. The difficulties experienced by the private sector in getting various clearances like environment and forest etc. also need to be gone into urgently to ensure that private sector can play a positive and meaningful role in the development of power sector. It will be desirable, if a 'Single Window Clearance Scheme' is introduced for clearing the project expeditiously. |
| 5. | 2.43 | The Committee are happy to note that as per their recommendation in the 11th Report of the Standing Committee on Energy on Renovation & Modernisation of Power Plants, the Central Electricity Authority constituted a Steering Committee to deliberate in detail about R&M and life extension programmes of Thermal Power Stations in the country. A perspective plan is under advanced stage of finalisation and as a broad assessment, a capacity of about 1 1000 MW is presently due for Remnant Life Assessment (RLA) / life extension programme with an investment of about Rs. 8500 crore. The Committee, therefore, welcome the new scheme of Accelerated Power Development Programme(APDP) to finance schemes of Renovation and Modernisation / Life Extension Programme and upgradation / strengthening of sub-transmission and distribution system. The Committee hope that the details of the new scheme would be worked out by the Planning Commission at the earliest. The Committee are further of the opinion that concerted efforts should be made by different planning agencies/ implementing agencies to make the perspective plan for R&M and strengthening distribution systems a real success. The Committee would also like to be informed about details of the perspective plan for R&M being finalised by the Steering Committee and the APDP scheme by Planning Commission within three months. |
| 6. | | The Committee take a serious note of the Government's proposal to replace the Gadgil formula for power sharing by the new guidelines to he observed while setting up new power projects. Although, the Secretary, Ministry of Power has informed the Committee that the formula for allocation of 10% thermal power to the States and 12% of power from hydel projects to a State where these projects will be set up is not being tampered with, the Committee feel that guidelines for the signing of the Power Purchase Agreement (PPA) by the concerned State Government may bind the State Government to comply with the terms and conditions of PPAs which may adversely affect their rights as per the existing Gadgil formula. The Committee desire that before implementing these guidelines, Government should take the State Governments into confidence so as to protect the interest of the States where new power projects are to be set up. The Committee would like the Ministry to draw up a model Power Purchase Agreement and circulate it to all State Governments and invite their comments. |
| 7. | 2.58 | The Committee are dismayed to note that transmission and distribution sector has been a |

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| | | neglected area. The Committee are surprised to note that although the budgetary support for Generation has been increased from Rs. 896.11 crore in 1997-98 to 2554.36 crore in 2000-2001, the investment for transmission has declined from Rs. 309.61 crore in 1997-98 to Rs.118.10 crore in 2000-2001. With the consistent increase in power generation, the Committee fail to understand the decreasing investment in evacuation of power. The Committee recommend that the Government should take up the matter with the Planning Commission and ensure adequate investments in Generation and T&D from the year 2000-2001 itself. The Committee are perturbed to note that funds provided for T&D are mostly used for meeting normal work comprising giving new connections and reinforcement needed therefor. The Committee observe that although PFC accord high priorities to improve system such as installation of capacitor, meters, etc. and provide loans at lower rate of interest, the overall investment in T&D Sector remain much below the desired level of equal investment as compared with that in generation sector. The Committee have been informed that unmetered supplies are provided to subsidised consumers belonging to agriculture sector and also low income groups, which emerge from State Government policies. At present only 50% of National Electricity Consumers are metered and only 60% revenue is collected from 50 per cent of population. For the Committee consider this to be a big national loss. The Metering and Energy Audit Scheme supported by PFC, a fund of Rs. 280.95 crore has been sanctioned to SEBs/ EDs, but only a sum of Rs. 88.37 crore have been disbursed. The Committee would therefore like the PFC to complete the disbursement and ensure that the scheme is carried out as targeted. Similar efforts should also be made by PFC to speed up grants/loan agreements for studies to he carried out by SEBs/EDs to activate speedy completion of studies. The Committee also recommend that PFC itself should install meters and collect a part of revenue, from the consumer to meet the cost in this regard. The Government should make all out efforts to make equal investment in T&D Sector, so that the generation capacity existing and added can reach the consumers and they may not have to back down their plants for lack of evacuation facilities as is now done by NTPC in the eastern region. |
| 8. | 2.68 | The Committee have been informed that consequent on the introduction of incentive scheme, All India Plant Load Factor (PLF) has increased from 53.90% in 1990-91 to 65.6% in April-December, 1999. However, the Committee are constrained to note that despite the incentive scheme, the T&D losses during the last 3 years could not be brought down. The Committee also note that Grants-in-aid, which were instrumental in motivating the power utilities to achieve high level of performance have been reduced. The Committee fear that as a result of this, the prospects of reduction in energy losses may further deteriorate. The point put forth by the Government that the Budget provision of Rs.2.25 crore each for meritorious awards for better performance of Thermal Power Station (TPS) and reduction of secondary fuel consumption etc. for the year will be reviewed at the Revised Estimates stage is not acceptable to the Committee. The Committee feel that enough Grants-in-aid should have been provided at Budget Estimate stage itself |
| 9. | 2.69 | The Committee are further perturbed to note that in spite of the reform process under way, there is no significant improvement in T&D losses. The T&D losses for Orissa are at 5 1 %, for Andhra Pradesh after reform it has increased from 25% to 45% as compared to 15% losses to 19.9% losses where private companies are engaged in the distribution of power such as Mumbai, Calcutta, etc. lie contention of the Government that reporting of such losses has become more realistic, is also not acceptable to the Committee. The Committee, while urging the Government to ensure the correct reporting of T&D losses by SEBs/ EDs also desire that they should take necessary steps to reduce the T&D losses by upgrading equipment etc. in a phased manner. The Committee would also like the Government to ensure reimbursement of power bills on subsidised/free power by SEBs/EDs from the State Plan assistance or any other receivable. |
| 10. | 2.75 | Training is one of the most important tools of human resource development in any |

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| | | organisation and its importance can hardly he over emphasised in a technical field like power sector. But the Committee is unhappy to note that budgetary allocations for the purpose have declined at an alarming rate indicating Governments apathy towards this important HRD activity. The Committee observe that the targets fixed have never been achieved during the last three years. Although long-term course for technicians and for operators and short-term training programme for Engineers have been successful, targets for long-term training course for Engineers and short-term course for the operators by NPTI could not be achieved during 1999-2000. The Committee feel that one of the reasons for failure of the Institute to meet the targets in respect of long term training programmes for Engineers may he the inability of SEBs to relieve their staff for a long period ranging from- 26 to 52 weeks. Such a long absence of employees from their work is likely to adversely affect the already weak financial performance of SEBs and hence their reluctance to send their employees for the training courses. The Committee suggest that such programmes should be restructured and divided into a series of shorter duration courses in consultation with SEBs for the duration for which they can easily depute their employees for training. |
| 11. | 2.85 | The Committee observe that the Budget Estimate of Dulhasti Project of NHPC was reduced from Rs. 391 crore to Rs. 289.54 crore and that of Chamera-II revised to Rs. 285 crore from Rs. 100 crore initially projected. The Committee are concerned to note that although for Dulhasti Project, the low utilisation of funds has been attributed to slow progress in the tunnel upstream face and non-utilisation of Tunnel Boring Machine since June, 1999, the Budget Estimate for Chamera-II project has been revised from Rs. 100 crore to Rs. 285 crore even though the project could not be sanctioned by the Government till June, 1999. The Committee are concerned at the casual manner in which the Government / NHPC has made budgetary provision for the ongoing / future project and revising it later on. The Committee would like to know the utilisation of revised estimate for the project during 1999-2000. The Committee have been informed that steps have been taken to minimize the intensity and impact of geological surprise by taking intensive survey and investigation. These will be completed in two phases, the first phases will include Survey & Investigation, pre-construction activities and development of infrastructure facilities. Active construction work would be taken up in the second phase. The Committee would like to know the implementation schedule of the two new projects viz Parbati Hydro Electric Project Stage-I (1800 MW) in Himachal Pradesh and Dehang (13400 MW) and Subansiri (7300) Hydro Electric Project in Arunachal Pradesh<br>planned in this manner. The Committee desire that NHPC should make realistic estimates of the fund requirements for its various projects and should make all efforts to utilise the same to avoid cost and time over- runs of the projects. |
| 12. | 2.86 | The Committee are surprised to note the dismal performance of the Government in commissioning Hydel power projects. The Koel Karo Hydro Project (770 MW) was originally approved in June, 1981 at an estimated cost of Rs. 446.67 crore. The Government of India revised the cost estimates to Rs. 1338.81 crore in November, 1991. Although, Rs. 31.68 crore have already been spent on the project, the Committee have been informed that the Central Empowered Committee constituted to review slow progress making Central Sector Projects has recommended to freeze further expenditure on the project. The project has been reconsidered and identified as Mega Power Project on 8.10.98. The Committee note that despite the fact that the project has been identified as Mega Power Project entitled for certain concessions and an outlay of Rs. 422.25 crore has been proposed for Ninth Plan, the project is still held up for want of Environment & Forest clearance and consent of the concerned States to purchase power from the project. In view of fact that the project has been allowed to linger on for a period of 20 years, the revised cost estimates have gone up to Rs. 2368.41 crore and tentative higher tariff amounts to Rs. 7.13 per unit. The Committee strongly urge the Government to pursue with the Government of Bihar to conduct a fresh survey of Project Affected Persons (PAP) to enable NHPC to formulate Environment Management Plan (EMP) in accordance with the guidelines of the Supreme Court so that the project could he taken up expeditiously. |

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| 13. | 2.105 | The Committee are distressed to note that Rural Electrification Programmes like Tribal sub-plan, Special component plan, village electrification and pump set energization are not progressing as per the targets fixed for each of them. Against a target of 415 Tribal villages to he electrified during 1999- 2000, only 33 tribal villages have been electrified upto December, 1999. The Committee have been informed that under Kutir Jyoti Programme, a single point light connection is released to the households of rural poor, including Dalit and Adivasi families falling below poverty line. This is given as grant. The Committee are constrained to note that under Kutir Jyoti Programme, the actual achievement at macro-level was just 27% (upto December, 1999). States like Assam, Haryana, J&K, Manipur, Sikkim and West Bengal have not electrified any of Dalit and Adivasi families, in spite of projecting hefty targets. The Committee are surprised to find that some of the SEBs are reluctant to implement Kutir Jyoti Programme, as they stand to lose financially. The Government should initiate action with the State Govts. regarding implementation of Kutir Jyoti Programme. The Committee desire that changes in guidelines, proposed by REC, i.e. cent per cent advance payment of grant amount to implementing agencies and enhancement of amount of grant per Kutir Jyoti connection, be implemented forthwith. The Committee have been informed that the targets for village electrification and pump sets energisation under REC funded programme of rural electrification are arrived at in consultation with SEBs/Power Departments of the State Governments, taking into account their priorities for taking up the programme and their past performance. The Committee feel that some of State Governments may be reluctant to implement the programme mainly due to the unremunerative nature of the programme and because of inadequate power infrastructure to support the scheme. The Committee therefore, are of the opinion that all out efforts should be made to persuade SEBs/ State Government to implement these programmes so as to achieve the target set during each year. The Committee desire that necessary arrangements may be made to include the members of Panchayat as well as MLAs and MPS of the locality in finalisation and implementation of these Rural Electrification Programmes before funds are made available by Central Government/Rural Electrification Corporation. |
| 14. | 2.106 | The Committee feel that although Rural Electrification Corporation is a financial institution and sanctions loans for Rural Electrification Schemes which are disbursed by way of reimbursement based on reported progress of work, the Corporation cannot absolve itself of the major responsibility entrusted to it to promote actual implementation of Rural Electrification Programmes. The Committee, therefore, recommend that for proper monitoring of Rural Electrification Programme, the Government/Rural Electrification Corporation should maintain a list of villages actually electrified for whom loans have been disbursed. Regarding definition of a village declared electrified; the plea of the Government that even with the present definition, it will take a very long time to electrify all villages at the present rate of electrification cannot be accepted to be valid. The Committee are of the opinion that the plan of Government of power on demand by 2012 should not be restricted to Urban/ semi-urban areas and it should reach the distant villages/tribal areas also. The Committee reiterate their earlier recommendation (18th Report, 11th LS) and desire that a village should be declared electrified only when at least 10% of the households of a village or hamlet have been electrified. |
| 15. | 2.107 | The Committee note that during Sixth and Seventh Plan periods, on an average more than one |

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| | | lakh villages were electrified. During Eighth Plan, the total number of villages electrified dropped to 11,540. In the current Plan-period, the rate of electrification has further dwindled to 3000 villages per year. The Committee have been informed that as many as 82,000 villages are yet to he electrified, of which 18,000 villages cannot be connected through Grid. The Committee are alarmed to note that with present rates, it will take nearly 702 years to complete the electrification of all the villages in the one of the States. The Committee, therefore recommend that a comprehensive strategy be evolved to electrify all the villages by the end of 10th Plan. To augment resources for rural electrification, REC should be allowed to make use of funds available under Rural Infrastructure Development Fund (RIDF) also. |
| 16. | 2.114 | The Committed observe that there is a huge variation between the Plan outlay and revised outlay of DVC during 1998-99 and 1999-2000. Although the expenditure of Rs. 120.55 crore could be achieved by DVC during 1998-99 against the target of Rs. 235.1 1 crore and for 1999-2000, these have been revised to Rs. 133.91 crore from original Budget Estimate of Rs. 176 crore, the Committee fail to understand the initial proposal of DVC for an expenditure of Rs. 459 crore of Plan outlay during 2000-2001. The Committee would like to know the details of the proposals of DVC during 2000-2001 which have been curtailed after discussion with the Planning Commission and modified to Rs. 285.40 crore instead of Rs. 459 crore. The Committee also expect the Government to resolve the issue of coal linkage and signing of PPA in regard to Maithon Right Bank Thermal Project at the earliest. The Committee would like to know the action taken by the Government in this regard. Regarding R&M work undertaken by DVC, the Committee are concerned to note the reduced utilisation of budgeted provision and would like to know the reasons for utilisation of Rs. 8.68 crore against the BE of Rs. 43.3 crore during 1998-99. |
| 17. | 2.115 | The Committee observe that the Tail Pool Dam Project was initially sanctioned in 1987 and after completion of some work, the work was totally stopped on 8.1.1996 reportedly due to resistance by local people. Regarding implementation of Tail Pool Dam the Committee observe that 2 Members including Chairman of the expert Committee constituted to examine the techno-economic viability of Tail Pool Dam Project in 1996-97 have stated the project to be viable to meet the shortage of peaking energy at the end of 9th Plan. The Committee are, however, surprised to note the decision of DVC that even after incurring an expenditure of Rs. 6 crore on construction activities out of the total expenditure of Rs. 70 crore, the DVC Board on 31.5.1998 decided on a total stop of construction of Tail Pool Dam. The Committee desire that the Government should take up the problem of law and order with the concerned State Government and sign PPA so that the project can be taken up in right earnest. In the present circumstances, the Committee cannot but stress on the Government not to abandon projects after making investments thereon and desire that all out effort should be made to restart the project, which was sanctioned way back in 1987. The Committee would also like to know the outcome of meeting of Secretary, Ministry of Power and Energy, Secretary and Chairmen, SEBS, Bihar and Bengal to he held in April, 2000 to resolve the issue. |
| 18. | 2.126 | The Committee have been informed that the proposal for strengthening and improvement of |

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| | | sub-transmission and distribution schemes of North-Eastern Region States and Sikkim for (i) on going projects for which the Ninth Plan provision are available but require additional funds for early completion, and (ii) new projects which are identified as important and critical but not taken up due to lack of funds have been identified. For on going and important new schemes proposed by North-Eastern States and Sikkim for availing non-lapsable funds for development of transmission and distribution system, an expenditure of Rs. 452.66 crore is proposed to be incurred. Additional funds requirement for these schemes has been assessed at Rs. 239.92 crore during 1999-2002 comprising Rs. 136.23 crore for ongoing schemes and Rs. 103.69 for new schemes. The Committee are surprised to note that although schemes have been identified and funds earmarked, schemes have not been operationalised since the details regarding achievements, both financial and physical during 1999-2000 are not available with the Government. The Committee would like to know the Ninth Plan provision for the schemes and the funds disbursement / utilisation so far. The Committee desire that funds should be provided immediately for critical & on-going projects so that these can be completed at the earliest. |
| 19. | 2.127 | Regarding implementation of ULDC scheme for North- Eastern Region, the Government have informed that the scheme was approved in August, 1997 at a cost of Rs. 167 crore. Although initially the Power Grid, Corporation insisted on necessary Letter of Credit, Escrow cover backed by State Guarantees, keeping the financial health of SEBs in the region and critical importance of the project for effective system operation in the region in view, Planning Commission has indicated in principle acceptance of the project by providing 90% of the project cost. Out of a total grant of Rs. 150 crore, Rs. 50 crore have been provided for 2000-01. The Committee expect that the award of contracts for this project would have been placed by April, 2000 as targeted. The Committee would also like to know the targeted completion period of the scheme. |
| 20. | 2.142 | Regarding ongoing projects of NEEPCO during 1999- 2000, the Committee have been informed that Assam Gas Based combined Power Project at Kathalguri, Assam have been completed and is being operated at its full capacity of 291 MW. Another project, Agartala Gas Turbine Power Project (84 MW) has also been reported to be completed and commissioned during 1999-2000. Out of four units of 21 MW each, three units are generating to their full capacity while the fourth unit broke down due to some mechanical fault. The unit is stated to be under repair by the suppliers at their workshop which do not require additional cost. The Committee desire to know about the nature of mechanical fault which could not be rectified at the project forcing the suppliers to repair it at their workshop. The Committee desire that the revenue loss, as a result of non-operation of this unit, may be recovered from the vendor. They desire that the 132 KV single circuit line for-Kumarghat Sub- Station in Tripura, completion of which was reportedly affected due to adverse law and order problem, should be completed with the assistance from State Government and Central law enforcing agencies. The Committee recommend that this critical line be completed as per revised targets by December, 2000. |
| 21. | 2.143 | The Committee have been informed that Tipaimukh Dam Project was initiated by |

Brahamputra Board and approved at an estimated cost of Rs. 2899 crore in July, 1995 with an installed capacity of 1500 MW. The Project has been entrusted to NEEPCO for execution as decided by the Power Ministers, Conference of North-Eastern Region held on 19.1.99. The Committee have been informed that the Manipur Legislative Assembly at its sitting held on 15.12.99 authorised NEEPCO to go ahead with further survey and investigation of the project and to submit final project report to the Government of Manipur for approval / clearance. But the same has not been done by NEEPCO so far. The Committee desire that the NEEPCO should approach the Government of Manipur at the earliest to sign the MoU. The Committee also recommend that CEA should take minimum time to accord approval of the revised DPR than the normal time of 5-6 months taken by it as the project has been delayed since February, 1996 when DPR was originally submitted to CEA. The Government have informed the Committee that it will take 12 years to commission the Project from the date of CCEA approval. The Committee, therefore, also recommend that the project should he implemented by NEEPCO as a fast track project which will benefit 3 North- Eastern States and all possible efforts should he made to clear / sanction the project, from all angles at the earliest.

**PART II**

APPENDIX

(Vide Para 1.6 of the Report)

CONSOLIDATED FINANCIAL REQUIREMENTS

The financial requirements (Gross Budget Support) for the various programmes of the Ministry of Power for 2000-01 as also the Actuals for 1998-99, the Budget Estimates 1999-2000 & Revised Estimates 1999-2000 are given below:

(Rs. in lakhs)

| S1. No. | Name of the Scheme | Actuals 1998-99 | | | BUDGET ESTIMATES 1999-200c | | | REVISED ESTIMATES 1999-2000 | | | BUDGET ESTIMATES 2000-01 | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Plan | Non-Plan | Total | Plan | Non-Plan | Total | Plant | Non-Plan | Total | Plan | Non-Plan | Total |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| I. | POLICY FORMULATION | | | | | | | | | | | | |
| | DIRECTION & ADMINISTRATION | 0.00 | 588.88 | 588.88 | 50.00 | 906.00 | 656.00 | 0.00 | 675.00 | 675.00 | 25.00 | 744.00 | 769.00 |
| | | | | | | | | | | | | | 0.00 |
| II. | TECHNICAL CONTROL | | | | | | | | | | | | 0.00 |
| | COORDINATION& SUPERVISION | 342.46 | 1879.27 | 2221.73 | 901.00 | 1939.70 | 2390.70 | 651.10 | 1843.78 | 2497.88 | 863.00 | 2096.96 | 2959.96 |
| Ill. | SURVEY & INVESTIGATION | 0.00 | 89.42 | 89.42 | 115.00 | 98.00 | 213.00 | 1.30 | 92.03 | 93.33 | 57.00 | 105.61 | 162.61 |
| IV. | POWER GENERATION | 198635.10 | 57620.03 | 256255.13 | 200048.00 | 55100.00 | 255140.00 | 194020.00 | 80800.00 | 274829.00 | 186901.00 | 70100.00 | 257061.00 |
| V. | POWER TRANSMISSION | 1833515 | 443.68 | 18778.83 | 30084.00 | 477.45 | 30561.45 | 23080.00 | 420.25 | 23518.25 | 6810.00 | 516.12 | 17026.12 |
| VI. | RURAL ELECTRIFICATION | 56500.00 | 0.00 | 56500.00 | 72875.00 | 0.00 | 72875.00 | 70200.00 | 0.00 | 70200.00 | 71400.00 | 0.00 | 71400.00 |
| VII. | RESEARCH & DEVELOPMENT | 2388.51 | 0.25 | 2388.76 | 2830.00 | 0.35 | 2830.35 | 1580.00 | 0.32 | 1580.32 | 1470.00 | 0.35 | 1470.35 |
| VIII. | TRAINING | 281.26 | 526.37 | 807.63 | 1064.00 | 586.70 | 1650.70 | 445.85 | 523.22 | 969.07 | 978.00 | 539.67 | 1517.67 |
| IX. | CONSULTANCY | 0.00 | 744.05 | 744.00 | 0.00 | 772.80 | 772.80 | 0.00 | 783.40 | 783.40 | 0.00 | 821.29 | 821.29 |
| X. | ENERGY POLICY | 355.09 | 0.00 | 355.09 | 2033.00 | 0.00 | 2033.00 | 400.75 | 0.00 | 400.75 | 1533.00 | 0.00 | 1533.00 |
| Xl. | POWER FINANCE CORPORATION | .14000.00 | 0.00 | 34000.00 | 30000.00 | 0.00 | 30000.00 | 29600.00 | 0.00 | 29600.00 | 30000.00 | 0.00 | 30000.00 |
| XII | CENTRAL ELECTRICITY. | | | | | | | | | | | | |
| | REGULATORY COMMISSION | 0.00 | 150.99 | 150.99 | 0.00 | 550.00 | 550.00 | 0.00 | 504.00 | 504.00 | 0.00 | 650.00 | 650.00 |
| | GRAND TOTAL | 310838.17 | 62042.94 | 372881.11 | 340000.00. | 60181.00 | 400181.00 | 320000.00 | 85651.00 | 405651.00 | 310097.00 | 75574.00 | 385671.00 |

*ANNEXURE.-I*

(Vide Para 2.59 of the Report)

PERCENTAGE TRANSFORMATION, TRANSMISSION AND DISTRIBUTION

LOSSES (INCLUDING COMMERCIAL LOSSES SUCH AS PILFERAGE ETC.)

IN SEBs/EDs

| REGION | SEBs/EDs | 1992-93 | 1993.94 | 1994.95 | 1995-96 | 1996.97 | 1997-1998* |
|---|---|---|---|---|---|---|---|
| NORTHERN | 1 HARYANA | 26.78 | 25.00 | 30.80 | 32.39 | 32.77 | 33.04# |
| REGION | 2 HIMACHAL PRADESH | 19.51 | 18.31 | 18.21 | 16.09 | 18.02 | 19.20 |
| | 3 JAMMU&KASHMIR | 48.28 | 45.69 | 48.74 | 47.52 | 48.27 | 47.48$ |
| | 4 PUNJAB | 19.24 | 19.37 | 16.70 | 18.49 | 19.10 | 17.90 |
| | 5 RAJASTHAN | 22.74 | 25.00 | 24.78 | 29.27 | 26.28 | 26.46 |
| | 6 UTTAR PRADESH | 24.43 | 24.08 | 21.69 | 21.84 | 24.84 | 25.00 |
| | 7 CHANDIGARH | 26.21 | 27.27 | 28.44 | 33.72 | 21.88 | 14.95 |
| | 8 DVB(DELHI) | 23.56 | 31.79 | 34.56 | 48.57 | 49.08 | 46.86# |
| WESTERN | 1 GUJARAT | 22.03 | 20.34 | 20.02 | 20.08 | 17.14 | 19.66 |
| REGION | 2 MADHYA PRADESH | 21.35 | 20.26 | 19.61 | 17.84 | 19.24 | 19.08 |
| | 3 MAHARASHTRA | 17.83 | 16.22 | 16.33 | 16.95 | 16.55 | 17.73 |
| | 4 D&N HAVELI | 17.98 | 12.64 | 11.35 | . 9.31 | 8.80 | NA |
| | 5 GOA | 21.85 | 24.50 | 26.87 | 26.06 | 23.50 | 23.39 |
| .... | 6 DAMAN & DIU | 15.67 | 22.34 | 16.30 | 12.80 | 8.15 | 11.27 |
| SOUTHERN | 1 ANDHRA PRADESH | 19.88 | 19.91 | 17.95 | 19.34 | 33.19 | 31.76 |
| REGION | 2 KARNATAKA | 19.55 | 19.55 | 19.41 | 19.06 | 18.73 | 18.56 |
| | 3 KERALA | 21.95 | 20.00 | 20.05 | 21.12 | 20.59 | 17.87 |
| | 4 TAMIL NADU | 17.50 | 17.18 | 17.11 | 16.19 | 17.65 | 17.00 |
| | 5 LAKSHADWEEP | 18.72 | 16.99 | 17.84 | 17.23 | 15.11 | 15.83 |
| | 6 PONDICHERRY | 15.31 | 15.80 | 15.00 | 16.54 | 17.38 | 13.79 |
| EASTERN | I BIHAR | 22.00 | 20.35 | 19.76 | 15.91 | 25.31 | 25.41 |
| REGION | 2 ORISSA (GRIDCO) | 25.25 | 22.43 | 23.03 | 24.17 | 50.15 | NA |
| | 3 SIKKIM | 22.55 | 22,60 | 21.22 | 16.47 | 29.24 | 20.13 |
| | 4 WEST BENGAL | 24.87 | 20.82 | 21.51 | 19.26 | 18.01 | 20.34 |
| | 5 A&N ISLS | 23.62 | 23.71 | 22.38 | 19.25 | 19.15 | 20.51 |
| NORTH- | 1 ASSAM | 21.41 | 22.44 | 24.18 | 26.91 | 25.97 | 30.05 |
| EASTERN | 2 MANIPUR | 22.35 | 23.92 | 25.30 | 24.85 | 22.95 | 21.50$ |
| REGION | 3 MEGHALAYA | 11.79 | 18.03 | 18.47 | 12.55 | 19.75 | 17.93 |
| | 4 NAGALAND | 27.26 | 33.45 | 36.12 | 35.17 | 26.81 | 29.50$ |
| | 5 TRIPURA | 30.64 | 30.53 | 31.96 | 30.86 | 30.11 | 29.75 |
| | 6 ARUNACHAL PRADESH | 32.32 | 42.04 | 45.30 | 37.12 | 32.62 | 30.99$ |
| | 7 MIZORAM | 29.04 | 31.89 | 29.76 | 25.18 | 34.35 | 47.00$ |
| ALL INDIA (UTILITIES) | | 21.80 | 21.41 | 21.13 | 22.27 | 24.53 | 24.44 |

SOURCE DMLF DIVISION, CEA (GENERAL REVIEW)

* DATA IS TENTATIVE AS REPORTED BY SEB/EDs

\# COMPUTED FIGURES

$ AS REPORTED IN THE ANNUAL PLAN RESOURCES PAPER SUBMITTED TO PLANNING COMMISSION

NA INFORMATION NOT YET FURNISHED BY THE SEB / ED

ANNEXURE-II

(Vide Para 2.94 of the Report)

STATE WISE POSITION OF VILLAGES REMAINING *TO* BE ELECTRIFIED AND NUMBER OF VILLAGES ELECTRIFIED

ANNUALLY DURING THE LAST FIVE YEARS IN THE REMAINING 13 STATES

| S. No. | State | Total Villages As per 1991 census | Villages Electrified as on 31.3.1999 | Balance unelectrified villages as on 1.4.1999 | Villages electrified (annually) during | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 |
| 1. | Arunachal Pradesh | 3.649 | 2.147 | 1,502 | 310 | 121 | 111 | 100 | - |
| 2. | Assam | 24,685 | 19,019 | 5,666 | 170 | 222 | 130 | 20 | 0 |
| 3. | Bihar | 67.513 | 47,845 | 19,668* | 59 | 43 | 27 | 5 | 8 |
| 4. | J&K | 6,477 | 6,315 | 162 | 50 | 43 | 27 | 14 | 0 |
| 5. | Madhya Pradesh | 71.526 | 68,259 | 3,267 | 1,019 | *503* | 400 | 463 | 300 |
| 6. | Manipur | .2.182 | 1,990 | 192 | 71 | 163 | 140 | 52 | 50 |
| 7. | Meghalaya | 5,484 | 2,510 | 2,974 | 0 | 0 | 60 | 27 | 16 |
| 8. | Mizoram | 698 | 687 | II | 65 | 45 | 9 | 12 | 3 |
| 9. | Orissa | 46,989 | 34,442 | 12,547 | 223 | 740 | 737 | 800 | 817 |
| 10. | Rajasthan | 37,889 | 34,937 | 2,952 | 699 | 750 | 654 | 698 | 685 |
| 11. | Tripura | 855 | *806* | 49 | 150 | 62 | 60 | 15 | 3 |
| 12. | Uttar Pradesh | 112,803 | 88,641 | 24,162 | 428 | 1,305 | 1,422 | 851 | 711 |
| 13. | West Bengal | 37,910 | 29,402 | 8.508 | 310 | 89 | 66 | 48 | 83 |
| | Total (13 States) | | | 81,660 | 3,554 | 4,086 | 3,843 | 3,105 | 2,676 |

* Does Not take into account the de- electrified villages.

*ANNEXURE-III*

(Vide Para 2.95 of the Report)

STATE WISE AVERAGE NUMBER OF VILLAGES ELECTRIFIED IN THE LAST FIVE YEARS AND AT THIS RATE NUMBER OF YEARS TO ELECTRIFY THE BALANCE VILLAGES

| S. No. | State | Balance unelectrified villages as on 1.4.1999 | Average No.of villages annually electrified in last 5 years | Number of years to electrifying the villages |
|---|---|---|---|---|
| 1. | Arunachal Pradesh | 1502 | 126 | 12 |
| 2. | Assam | 5666 | 108 | 52 |
| 3. | Bihar | 19668# | 28 | 702 |
| 4. | J&K | 162 | 27 | 6 |
| 5. | Madhya Pradesh | 3.267 | 537 | 6 |
| 6. | Manipur | 192 | 95 | 2 |
| 7. | Meghalaya | 2974 | 21 | 142 |
| 8. | Mizoram | II | 27 | I |
| 9. | Orissa | 12547 | 663 | 19 |
| 10. | Rajasthan | 2952 | 697 | 4 |
| 11. | Tripura | 49 | 58 | 1 |
| 12. | Uttar Pradesh | 24162 | 943 | 26 |
| 13. | West Bengal | 8508 | 119 | 71 |

# Does not take into account the de-electrified villages.

ANNEXURE IV

MINUTES OF THE FIFTH SITTING OF THE STANDING COMMITTEE ON ENERGY (1 999-2000) HELD ON 28TH MARCH, 2000

The Committee met from 11.00 hours to 13.30 hours & 14.30 hours to 16.30 hours

PRESENT

Shri Sontosh Mohan Dev - Chairman

MEMBERS

Lok Sabha

2. Shri Basudeb Acharia
3. Shri Prakash Yashwant Ambedkar
4. Shri Rajbhar Babban
5. Shri Vijayendra Pal Singh Badnore
6. Shri Lal Muni Chaubey
7. Shri C.K. Jaffer Sharief
8. Shri Sanat Kumar Mandal
9. Shri Ravindra Kumar Pandey
10. Shri Dalpat Singh Parste
11. Shri Amar Roy Pradhan
12. Shri Chada Suresh Reddy
13. Shri Harpal Singh Sathi
14. Shri Chandra Pratap Singh
15. Shri Tilakdhari Prasad Singh
16. Shri Manoj Sinha
17. Prof. Ummareddy Venkateswarlu
18. Shri P.R. Khunte
19. Shri Aimaduddin Ahmad Khan (Durru)
20. Shri E. Balanandan
21. Dr. Alladi P. Rajkumar
22. Shri Jalaludin Ansari
23. Shri Rama Shanker Kaushik

24. Shri Gandhi Azad
25. Shri Santosh Bagrodia

SECRETARIAT

| | | | |
|---|---|---|---|
| 1. | Shri John Joseph | - | Joint Secretary |
| 2. | Shri P.K. Bhandari | - | Deputy Secretary |
| 3. | Shri R.S. Kambo | - | Under Secretary |

WITNESSES

1. Shri V.K. Pandit, Secretary (Power)
2. Shri A.H. Jung, Special Secretary (Power)
3. Shri J. Vasudevan, Additional Secretary
4. Shri P.I. Suvrathan, Joint Secretary (IPC)
5. Shri Anil Razdan, Joint Secretary
6. Shri BTheshwar Rai, Joint Secretary
7. Shri Ajay Shankar, Joint Secretary
8. Shri R. Ramanujam, Joint Secretary & Financial Advisor
9. Shri R.N. Srivastava, Chairman, CEA
10. Shri D.V. Khera, Member, CEA
11. Shri K.N. Sinha, Member, CEA
12. Shri V.V.R.K. Rao, Member, CEA
13. Shri Sethvedhantham, Member, CEA
14. Shri T.J. Srinivasan, Member, CEA
15. Shri C.P. Jain, Director (Finance) NTPC
16. Shri R. Natarajan, Director (Finance)
17. Shri R.P. Singh, CMD, PGCIL
18. Shri V.K. Garg, Director (Finance), PGCIL
19. Shri M.L. Gupta, CMD, THDC
20. Shri P.D. Tuteja, Director (Finance), THDC
21. Dr. Uddesh Kohli, CMD, PFC
22. Shri T.N. Thakur, Director (Finance), PFC
23. Shri Diwakar Dev, CMD, (REC)
24. Shri Arun Gupta, CMD, NJPC
25. Shri O.N. Singh, Director (Finance), NJPC
26. Shri P.K. Kotoky, CMD (NEEPCO)

2. At the outset, the Chairman, Standing Committee on Energy welcomed the representatives of the Ministry of Power to the sitting of the Committee and apprised them of the provision of Direction 58 of the Directions by the Speaker.

3. The Committee then took oral evidence of the representatives of the Ministry of Power in connection with the examination of the Demands for Grants (2000-2001) of the Ministry.

4. The following important points were discussed by the Committee:-

(i) Mis-match between plan outlay and revised budget projection of unrealistic targets of IEBR.

(ii) Private Sector participation in power projects.

(iii) Projects affected due to reduced plan outlay

(iv) Perspective Power Plan Power on Demand by 2012 Capacity addition of 2,40,000 MW by 2012. 2000-01 - capacity addition-2125 MW (thermal) 1219 (hydel) against required target of 10000 MW to 12000 MW. Poor power generation during last two years. Disproportionate investment in generation and transmission.

(v) Delay in implementation of Power Grid project due to various administrative reasons. Transmission projects in North-East ; strengthening of Sub-Transmission and Distribution System.

(vi) Need to achieve 60:40 of thermal hydel mix

(vii) Training-reasons for variation in target and achievements

(viii) Implementation of APDP-reforms process in power sector

(ix) Strengthening of SEBs

(x) Metering and Energy Audit Schemes supported by PFC

(xi) R&M of Loktak Project.

(xii) REC-Targets and Achievements; especially Kutir Jyoti Programmes, target for electrification-Tribal/Dalit Bastis correct and proper reporting and implementation, definition of electrified village.

(xiii) Abandoned Project - Tailpool Project of DVC

(xiv) Requirement and availability of funds for North-Eastern Region Action Plan to bridge the resource gap. Unified Load Despatch Scheme for North-East, including Kumarghat Agartala Transmission Project.

(xv) Tipaimukh Hydel Project-Kumarghat-Agartala Transmission Project.

(xvi) Change of guidelines for power projects-Paying capacity of States to determine the entitlement for quantum of power.

5. A copy of the verbatim proceedings of the sitting of the Committee has been kept on record.

The Committee then adjourned.

ANNEXURE V

MINUTES OF THE SEVENTH SITTING OF THE STANDING COMMITTEE ON ENERGY (1 999-2000) HELD ON 11TH APRIL, 2000 IN COMMITTEE ROOM 'C' PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 11.30 hours to 13.00 hours

PRESENT

Shri Sontosh Mohan Dev - Chairman

MEMBERS

Lok Sabha

2. Shri Prakash Yashwant Ambedkar
3. Shri Rajbhar Babban
4. Shri Vijayendra Pal Singh Badnore
5. Shri M. Durai
6. Shri Sanat Kumar Mandal
7. Shri Amar Roy Pradhan
8. Shri Ravindra Kumar Pandey
9. Shri Dalpat Singh Parste
10. Shri Chada Suresh Reddy
11. Shri Harpal Singh Sathi
12. Shri Chandra Pratap Singh
13. Shri Tilakdhari Prasad Singh
14. Shri Ramji Lal Suman
15. Shri Gandhi Azad
16. Shri E. Balanandan
17. Shri Brahamakumar Bhatt
18. Shri Manohar Kant Dhyani
19. Shri Aimaduddin Ahmad Khan (Durru)
20. Shri Ananta Sethi
21. Shri Vedprakash P. Goyal
22. Shri Rama Shanker Kaushik
23. Shri Santosh Bagrodia

SECRETARIAT

| | | | |
|---|---|---|---|
| 1. | Shri John Joseph | - | Joint Secretary |
| 2. | Shri P.K. Bhandari | - | Deputy Secretary |
| 3. | Shri R.S. Kambo | - | Under Secretary |

2. At the outset, the Chairman welcomed the Members to the sitting of the Committee

3. The Committee considered and adopted the following Draft Report with some modification:

(i) Draft Report on Demands for Grants (2000-01) of the Ministry of Power

(ii) Draft Report on Demands for Grants (2000-01) of the Ministry of Non -Conventional Energy Sources.

(iii) Draft Report on Demands for Grants (2000-01) of the Department of Atomic Energy

4. The Committee authorised the Chairman to finalise the Reports after making consequential changes arising out of factual verification by the concerned Ministries/Department and to present these reports to both the Houses of Parliament during the current Session.

5. The Committee decided to meet again on 28th April, 2000.

The Committee then adjourned.