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**STANDING COMMITTEE
ON ENERGY
(2009-2010)**

FIFTEENTH LOK SABHA

46

Standing Committee on Energy
15th Lok Sabha
Report Nos. 5 to 8
English

**DEMANDS FOR GRANTS
(2010-2011)**

FIFTH REPORT



सत्यमेव जयते

**LOK SABHA SECRETARIAT
NEW DELHI**

April, 2010/Chaitra, 1932 (Saka)

FIFTH REPORT
STANDING COMMITTEE ON ENERGY
(2009-2010)

(FIFTEENTH LOK SABHA)

MINISTRY OF POWER

DEMANDS FOR GRANTS
(2010-2011)

Presented to Lok Sabha on 21.4.2010

Laid in Rajya Sabha on 22.4.2010



सत्यमेव जयते

LOK SABHA SECRETARIAT
NEW DELHI

April, 2010/Chaitra, 1932 (Saka)

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(i)

COMPOSITION OF THE STANDING COMMITTEE
ON ENERGY (2009-10)

Shri Mulayam Singh Yadav — *Chairman*

MEMBERS

Lok Sabha

2. Mohammad Azharuddin
3. Shri S.K. Bwiswmuthiary
4. Shri P.C. Chacko
5. Shri Adhir Ranjan Chowdhury
6. Shri Ram Sundar Das
7. Shri Paban Singh Ghatowar
8. Shri Arjun Munda
9. Shri Shripad Yesso Naik
10. Shri Sanjay Nirupam
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12. Shri Ravindra Kumar Pandey
13. Shri Nityananda Pradhan
14. Shri M.B. Rajesh
15. Shri K. Chandrasekhar Rao
16. Dr. K.S. Rao
17. Shri Ganesh Singh
18. Shri Radha Mohan Singh
19. Shri Vijay Inder Singla
20. Shri E.G. Sugavanam
21. Shri Subhash Bapurao Wankhade

Rajya Sabha

22. Shri Motilal Vora
23. Shri Santosh Bagrodia
24. Shri Rama Chandra Khuntia
25. Shri Bhagat Singh Koshyari

26. Shri Shivpratap Singh
27. Shri Shyamal Chakraborty
28. Shri Veer Pal Singh Yadav
29. Prof. Anil Kumar Sahni*
30. Shri Govindrao Wamanrao Adik
31. Shri Mohammad Shafi

SECRETARIAT

- | | | |
|----------------------|---|----------------------------|
| 1. Shri Brahm Dutt | — | <i>Joint Secretary</i> |
| 2. Shri N.K. Pandey | — | <i>Additional Director</i> |
| 3. Smt. Neena Juneja | — | <i>Committee Officer</i> |

*Nominated *w.e.f.* 26.02.2010.

INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Fifth Report on Demands for Grants of the Ministry of Power for the year 2010-11.

2. The Committee took evidence of the representatives of the Ministry of Power on 22nd March, 2010. The Committee wish to express their thanks to the representatives of the Ministry for appearing before the Committee for evidence and furnishing the information, desired by the Committee in connection with examination of Demands for Grants (2010-11).

3. The Report was considered and adopted by the Committee at their sitting held on 12th April, 2010.

4. The Committee place on record their appreciation for the valuable assistance rendered to them by the officials of the Lok Sabha Secretariat attached to the Committee.

5. For facility of reference and convenience, the observations and recommendations of the Committee have been printed in bold letters in Part-II of the Report.

NEW DELHI;
15 April, 2010
25 Chaitra, 1932 (Saka)

MULAYAM SINGH YADAV,
Chairman,
Standing Committee on Energy.

REPORT

PART-I

NARRATION ANALYSIS

I. INTRODUCTORY

The Ministry of Power started functioning independently with effect from 2nd July, 1992. Earlier it was one of the Departments under the Ministry of Energy comprising the Departments of Power, Coal and Non-Conventional Energy Sources. Electricity is a concurrent subject at entry number 38 in the 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. The Ministry is concerned with perspective planning, policy formulation, processing of projects for investment decisions, monitoring of the implementation of power projects, training and manpower development and the administration and enactment of legislation in regard to thermal, hydro 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 the Ministry of Power are as given below:

- General Policy in the electric power sector and issues relating to energy policy and coordination thereof. (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 intra-country and inter-country flows);
- All matters relating to hydro-electric power (except small/mini/micro hydel projects of and below 25 MW capacity) and transmission and distribution system network;
- Research, development and technical assistance relating to hydro-electric and thermal power, transmission system network and distribution systems in the States/UTs;
- Administration of the Electricity Act, 2003, (36 of 2003), the Energy Conservation Act, 2001 (52 of 2001), the Damodar

Valley Corporation Act, 1948 (14 of 1948) and Bhakra Beas Management Board as provided in the Punjab Reorganisation Act, 1966 (31 of 1966);

- All matters relating to Central Electricity Authority, Central Electricity Board and Central Electricity Regulatory Commission;
- Rural Electrification;
- Power schemes and issues relating to power supply/development schemes/programmes/decentralized and distributed generation in the States and Union Territories;
- Matters relating to the following Undertakings/Organizations;
 - (a) Damodar Valley Corporation (DVC)
 - (b) Bhakra Beas Management Board (except matters relating to irrigation);
 - (c) NTPC Limited;
 - (d) NHPC Limited;
 - (e) Rural Electrification Corporation Limited (REC);
 - (f) North Eastern Electric Power Corporation Limited (NEEPCO);
 - (g) Power Grid Corporation of India Limited (PGCIL);
 - (h) Power Finance Corporation Limited (PFC);
 - (i) THDC India Limited;
 - (j) SJVN Limited;
 - (k) Central Power Research Institute (CPRI);
 - (l) National Power Training Institute (NPTI); and
 - (m) Bureau of Energy Efficiency (BEE).
- All matters concerning energy conservation and energy efficiency pertaining to Power Sector.

II. 11TH FIVE YEAR PLAN—TARGETS AND ACHIEVEMENTS

1.3 As per the details furnished by the Ministry of Power regarding midterm appraisal of 11th five year plan alongwith shortfalls. The

Ministry have informed that Planning Commission has fixed a capacity addition target of 78,700 MW for the 11th Plan as per the following details:

(Figures in MW)

Sector	Hydro	Thermal	Nuclear	Total
Central	8654	24840	3380	36874
State	3482	23301	0	26783
Private	3491	11552	0	15043
Total	15627	59693	3380	78700

1.4 According to the assessment made by the Central Electricity Authority (CEA) at the time of Mid-Term Appraisal of the 11th Plan, 62,374 MW of capacity addition is likely to be commissioned with a high level of certainty during the Eleventh Plan period. The breakup of the estimated capacity addition is as under:

(Figures in MW)

Sector	Hydro	Thermal	Nuclear	Total
Central	2922	14920	3380	21222
State	2854	18501	0	21355
Private	2461	17336	0	19797
Total	8237	50757	3380	62374

1.5 Out of 62,374 MW, a capacity addition of 20,352 MW has already been achieved till 11.02.2010 and a capacity aggregating to 42,022 MW is likely with a 'high level of certainty' during the balance period of 11th Plan i.e. upto March, 2012. As per Mid-Term Appraisal organization-wise of capacity addition in the Central Sector during the 11th Plan is estimated as under:

(Figures in MW)

Organization	Target (as per 78,700 MW)	Capacity As per Mid-Term Review	Achievement
1	2	3	4
NTPC Limited	17760	9220	3730
NHPC Limited	4802	2002	510

1	2	3	4
NHDC	520	520	520
SJVNL	412	0	0
DVC	5450	4950	500
THDC India Limited	400	400	0
NEEPCO	600	0	0
ONGC	750	0	0
NPCIL	3380	3380	440
NLC	1750	750	0
Total (CPSU)	35824	21222	5700

In addition, projects totaling to 12,590 MW (Central Sector 4530 MW, State Sector 1130 MW, Private Sector 6930 MW) are being attempted for commissioning on 'best efforts basis' during the Eleventh Plan period.

1.6 Elaborating on the reasons for non-achievement of the capacity addition targets, the Ministry have stated some of the reasons for likely shortfall/delay in commissioning of projects during the 11th Plan are as follows—

- Delay in placement of orders – mainly Civil Works & BOPs;
- Delay and non-sequential supply of material for Main Plant and Balance of Plants (BoP);
- Shortage of skilled manpower for erection and commissioning;
- Contractual dispute between project developer and contractor and their sub-vendors/sub-contractors;
- Inadequate deployment of construction machinery;
- Shortage of fuel (Gas & Nuclear);
- Problem of land Acquisition;
- Delay in erection of infrastructure facilities like reliable construction power supply & roads at project sites etc.

1.7 The Ministry have further specified that the following steps have been taken by the Government to ensure that the projects are commissioned as per the schedule:

- a. Monitoring mechanism in the Ministry has been strengthened. The progress of generation projects for completion during 11th Five Year Plan is reviewed periodically by the Central Electricity Authority, Ministry of Power and Power Projects Monitoring Panel (PPMP). An Advisory Group under the chairmanship of Hon'ble Minister of Power with retired power secretaries amongst others has been set up to suggest ways and means to achieve the 11th Plan capacity addition targets.
- b. Bharat Heavy Electricals Limited (BHEL) is the major indigenous manufacturer for main plant equipment in Public Sector. BHEL has enhanced its overall capacity to deliver 10,000 MW of main plant equipment per annum, have put in place an action plan to enhance capacity to deliver 15,000 MW per annum by March, 2010 and may raise this capacity upto 20000 MW by March, 2012 depending upon the market demand.
- c. The issue of supply of equipments by BHEL has been discussed in the Committee of Secretaries chaired by the Cabinet Secretary on December 8, 2009. In pursuance of the decision taken in the meeting, a group under the Chairmanship of Secretary (Heavy Industry) to finalise a joint action plan which would lay down the schedule/ timeframe for completion of projects as per targets, has been set up. Members of the group include Secretary (Power), Chairperson, CEA, CMD, NTPC and CMD, BHEL.
- d. A Joint Venture Agreement has been signed between NTPC Ltd. and BHEL to take up work related to Engineering, Procurement and Construction (EPC) for power plants and other infrastructure projects.
- e. M/s. L&T has already formed a Joint Venture Company with MHI, Japan for manufacture of supercritical steam generator and steam turbine generators in India. Similarly, Joint Venture of Toshiba – JSW, Alstom – Bharat Forge, Ansaldo and GB Engg. are formed or in pipeline.
- f. All stakeholders have been sensitized towards enlarging the vendor base so as to meet the Balance of Plants (BoP) requirements.

- g. Pre-qualification requirement for super critical unit manufacturers has since been modified so as to qualify new Joint Venture between Indian company and the technology provider company.**
- h. Bulk ordering of 11 units of 660 MW each with supercritical technology with mandatory phased indigenous manufacturing programme has also been initiated to promote indigenous manufacturing.**
- i. To overcome the shortage of skilled manpower, 'Adopt an ITI' initiative has been taken up.**
- j. Periodical meetings are held with concerned Ministries viz. Ministry of Coal, Ministry of Petroleum and Natural Gas and Ministry of Environment and Forests and at other forums at highest level to sort out the inter ministerial issues with regard to availability of fuel and grant of Environment and Forest clearance to generation projects.**

1.8 The Ministry of Power informed that to ensure that the capacity addition targets are realized and projects are commissioned as per schedule, an Accountability System has been put in place for the Eleventh Plan central sector power projects scheduled for commissioning during the Eleventh Five Year Plan period.

1.9 To a specific query on the advisory group under the Chairmanship of the Minister of Power, the Ministry have informed that the Group has met six times. They have also identified various bottlenecks in achieving the 11th Plan targets which include delayed and non-sequential supply by BHEL for main plants and Balance of Plants (BoPs), the inadequate deployment of construction machinery, shortage of fuel, shortage of skilled manpower and shortage of commissioning teams. The issue of supply of equipments by BHEL was discussed in the Committee of Secretaries on 8th December, 2009. The group is to finalize a Joint Action Plan which would lay down scheduled time frame for completion of projects as per targets.

1.10 On being specifically pointed out by the Committee that the achievements in case of NHPC, DVC and NEEPCO were way behind the targets set for the 11th Plan, the Ministry stated:

"NHPC had originally planned to add 5322 MW through 12 hydro projects during 11th Plan. However, during midterm appraisal of 11th Plan, capacity addition target has been revised to 3272 MW through 11 hydro projects. Out of these, two projects with total

installed capacity of 1030 MW have already been commissioned. The main reasons for slippage in 11th Plan capacity addition target are due to slippage of commissioning of all units of Parbati-II project and partial units of Subansiri lower projects.

In case of NEEPCO regarding the Midterm Appraisal, the investment proposal pertaining to NEEPCO for 11th Five Year Plan (*i.e.* 2007-08 to 2011-2012) as submitted along with Annual Plan 2007-08, NEEPCO proposed an outlay of Rs. 18594.46 crs. including NBS of Rs. 5726.50 crs., MNES grant of Rs. 10.13 crs. and IEBR of Rs. 12857.83 crs. against 19 nos. of project including S&I schemes.

In the meantime the Govt. of Arunachal Pradesh invited Expression of Interest (EOI) for development of 4 (four) hydro projects under Kameng Basin *viz.* Bhareli-II HEP (600 MW), Kameng Dam HEP (600 MW), Dibbin HEP (125 MW-Revised) and Talong HEP (160 MW) on BOOT basis. Further, as desired by Govt. of Arunachal Pradesh action is being taken by NEEPCO to hand over Talong HEP and Dibbin HEP to private developers. Moreover, due to non-conclusion/non-commitment of gas allocation from GAIL/ONGC, the Tripura Gas Based Power Project (100 MW± 20%), Extension of Agartala Gas Turbine Project (42 MW) and due to non conclusion of MOA/Coal linkage etc., the coal based thermal power projects *viz.* Margherita Coal Based Thermal Power Project (250 MW), Assam, Garo Hills Coal Based Thermal Power Project (500 MW) Nangalbibra, Meghalaya, West Khasi Hills Coal Based Thermal Power Project (240 MW) Nongstoin, Meghalaya, could not be taken up, though the phasing out of expenditure was projected as mentioned above. As such, the earlier projection of expenditures during 11th FYP was revised totalling Rs. 6376.21 crs. including NBS of Rs. 2059.90 crs., IEBR of Rs. 4306.18 crs. and MNES grant of Rs. 10.13 crs.

The already revised 11th Plan proposals as above have been further revised to Rs. 4024.11 Crs including NBS of Rs. 625.97 Crs, IEBR of Rs. 3389.87 Crs and MNES grant of Rs. 8.27 Crs due to the following reasons: (i) proposed revision of commissioning schedule of ongoing Kameng HEP (600 MW) to May' 13 due to *inter alia* changes of design coupled with encountering of geological surprises (ii) Govt. of Meghalaya's intimation to NEEPCO requesting not to operationalise the MoAs signed on 20.12.07 for execution of the Mawpu HEP (90 MW) and Garo Hills Coal Based Power Project (500 MW) (iii) Non-signing of MoA with respective

State Governments for execution of Margherita (Assam) and West Khasi Hills (Meghalaya) Coal Based Projects (iv) Non-revival of Tuirial HEP etc.”

1.11 Further regarding the financial review of 11th Plan in case of DVC, the financial achievements for the year 2007-08, 2008-09 and 2009-10 upto 3rd quarter has been Rs. 12252.26 crore as against the estimates of Rs. 24,298.85 crore for the 11th Plan period.

III. ANALYSIS OF DEMANDS FOR GRANTS AND PLAN OUTLAY OF THE MINISTRY OF POWER

1.12 The Minister for Power laid on the table of the Lok Sabha, the detailed Demands for Grants (2010-11) for the Ministry of Power on 12th March, 2010. The Demands show a budgetary provision of GBS of 10,630.00 crore (net receipts) with a provision of Rs.6,201.00 crore in revenue and 4,428.84 crore in capital section. The Central Plan Outlay including IEBR however stands at 60,751.42 crore. The Head-wise Demands for Grants of the Ministry are given as per Annexure I. The Programmes and Schemes of the Ministry within the financial provisions made under the Demands/Annual Plan are briefly as under:

- (i) **Secretariat:** provision is for secretariat expenditure on establishment matters for the Secretariat.
- (ii) **Central Electricity Authority:** The Central Electricity Authority coordinates the activities of the various agencies in relation to control and utilization of national power resources. It is also responsible for carrying out the survey and studies, collection and recording of data concerning generation, distribution, utilization and development of power resources.
- (iii) **Research and Development:** Central Power Research Institute, Bangalore serves as a National Level Laboratory for applied research in the field of electrical power and also functions as an independent authority for testing, evaluation and certification of electrical equipment and components.
- (iv) **Training:** Provision has been made for expenditure on National Power Training Institute which is engaged in imparting training in various aspects of power sector including operation and maintenance of power stations.

- (v) **Joint Electricity Regulatory Commission (JERC) for Manipur and Mizoram:** A Joint Electricity Regulatory Commission (JERC) has been set up for Manipur and Mizoram. A provision has been made for incurring expenditure on establishment and other activities of the commission.
- (vi) **Central Electricity Regulatory Commission:** Under the provision of the ERC Act, 1998, the Central Government had constituted the Central Electricity Regulatory Commission (CERC). The Central Commission is a statutory body with a quasi-judicial status under the Electricity Act, 2003. A provision has been made for incurring expenditure on establishment and other activities of CERC in the form of Grant-in-Aid.
- (vii) **Rajiv Gandhi Grameen Vidyutikaran Yojana:** RGGVY, a flagship scheme and a component of the Bharat Nirman, was launched in March, 2005 with a mandate to electrify over one lakh villages and release electricity connections to 2.34 crore rural BPL households in five years. (As per census 2001, 44% of the rural households have electricity. Improvement of rural electricity infrastructure is essential to empower rural India and unleash its full growth potential. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under the scheme projects can be financed with 90% capital subsidy for provision of Rural Electricity Distribution Backbone (REDB), creation of Village Electrification Infrastructure (VEI) and Decentralized Distributed Generation and Supply. REDB, VEI and DDG would also cater to the requirement of agriculture and other activities. Under this scheme un-electrified Below Poverty Line (BPL) households will get electricity connection free of charge. The continuation of the scheme in XI Plan was sanctioned on 3rd January, 2008 with the capital subsidy of Rs.28,000 crore in Phase-I. To increase the coverage of small habitations, Government sanctioned electrification of habitations above 100 population instead of 300.
- (viii) **Funds for Evaluation Studies and Consultancy:** This provision is for conducting evaluation studies of various projects/programme/schemes.
- (ix) **Appellate Tribunal for Electricity:** Under the provisions of Electricity Act, 2003, the Central Government has set up the Appellate Tribunal for Electricity. It handles appeals against the orders of the adjudicating officer or the appropriate Commissions under the Electricity Act, 2003.

- (x) **Joint Electricity Regulatory Commission (JERC) for UTs:** One Joint Electricity Regulatory Commission (JERC) has been set up for Goa & UTs except Delhi. Provision has been made for incurring expenditure on establishment and other activities of the Commission, in the form of Grant-in-Aid.
- (xi) **Comprehensive Award Scheme:** The scheme for awarding shields/certificate is being implemented by the Ministry of Power for outstanding performance of the Thermal Power Stations and Utilities.
- (xii) **Energy Conservation:** The funds would be utilized for carrying out the Energy Conservation related activities i.e. National level awareness campaign, National Energy Conservation Awards and National level Painting competition for children. This will also fund the National Mission for Enhanced Energy Efficiency (NMEEE), which is one the Eight Missions under the National Action Plan on climate change.
- (xiii) **Restructured APDRP:** The focus of the Restructured APDRP approved in July, 2008 for the 11th Plan is on actual, demonstrable performance in terms of loss reduction. The objective of the programme is to facilitate State Power Utilities to reduce the level of AT&C losses to 15%. The programme has two major components. Part A will include projects for establishment of information technology based energy accounting and audit system leading to finalization of verifiable base-line AT&C loss levels in the project areas. Part B envisages distribution network strengthening investments leading to reduction in loss levels. Initially, funds for the projects under both the parts are to be provided through loan (100% for Part A and 25% for Part B except special category and North-Eastern States for which under Part B 90% loan will be provided) which will be converted into grant on fulfillment of conversion conditionalities. Besides, there is an enabling component namely, Part C under which grant will be provided to meet the expenditure for facilitating activities of the Programme.
- (xiv) **Assistance to Forum of Regulators for Capacity building:** The provision is for organizing full time training programmes every year to provide training to staff of the Central/State Electricity Regulatory Commissions. The Forum of Regulator will also organize orientation programmes for Chairperson/Members of the Central/State Electricity Regulatory Commissions.

(xv) **National Electricity Fund (Interest Subsidy Scheme):** In pursuance of the announcement made in the Budget (2008-09) for creation of a National Electricity Fund (NEF) for providing loan to the States for improving their distribution/transmission infrastructure, a Committee was constituted. Based on the recommendations of the committee an EFC Memo has been circulated on 9.9.2009 among the appraising agencies. Subsequently, in a meeting chaired by Secretary, Planning Commission, it was decided that the scheme needed to be reformulated with two key changes, namely (a) loan would be disbursed by Financial Institutions like PFC, REC and Commercial Banks instead of only by PFC & REC; and (b) targeting only the distribution schemes during the initial two years Revised EFC memo since circulated on 5.04.2010.

A. Plan Outlay

1.13 The Annual Plan Outlay of the Ministry of Power for the year 2010-11 is proposed as Rs. 60,751.42 crore as per the details given below:

(Rs. in crore)

Sl.No.	Organisation/ Schemes	Internal & Extra Budgetary Resources (Iebr)		
		Internal & Extra Budgetary Resources	GBS	Total Plan Outlay
A. CENTRAL PLAN				
1.	NTPC Limited	22350.00	0.00	22350.00
2.	NHPC Limited	4108.34	781.00	4889.34
3.	PGCIL	12900.00	0.00	12900.00
4.	D.V.C.	8539.78	0.00	8539.78
5.	T.H.D.C. India Limited	856.83	0.00	856.83
6.	S.J.V.N. Limited	525.17	0.00	525.17
7.	NEEPCO	841.30	45.00	886.30
8.	MOP (OTHER)	00.00	9804.00	9804.00
A. Total Central Plan		50121.42	10630.00	60751.42

Breakup of allocation of Rs. 9804 crore under Sl. No. 8 above is as under:

Rajiv Gandhi Grameen Vidyutikaran Yojana	0.00	5500.00	5500.00
R-APDRP	0.00	3700.00	3700.00
N.P.T.I. (Training & HR)	0.00	20.00	20.00
C.P.R.I. (Research & Testing)	0.00	78.18	78.18
Programme & Infrastructure improvement of CEA	0.00	15.00	15.00
Bureau of Energy Efficiency	0.00	66.92	66.92
Other MOP Schemes	0.00	423.90	423.90
Total-B	0.00	9804.00	9804.00

1.14 The total outlay approved by the Planning Commission for the year 2010-11 is Rs. 60,751.42 crore comprising IEBR of Rs. 50,121.42 crore and GBS of Rs. 10,630.00 crore as against the proposal of the Ministry of Power for Rs. 64551.92 crore. Details are as given in the table below:

(Rs. in Crore)

Sl. No.	Organisations/ projects/schemes	Proposed Annual Plan 2010-11		Approved by Planning Commission/ Min. of Finance	
		GBS	IEBR	GBS	IEBR
1.	NTPC Ltd.	0.00	22350.00	0.00	22350.00
2.	NHPC Ltd.	786.05	4108.33	781.00	4108.34
3.	PGCIL	0.00	12900.00	0.00	12900.00
4.	DVC	0.00	8539.79	0.00	8539.78
5.	THDC India Limited	0.00	856.83	0.00	856.83
6.	SJVNL	0.00	525.17	0.00	525.17
7.	NEEPCO	45.00	841.30	45.00	841.30
8.	MOP's Schemes	13599.45	0.00	9804.00	0.00
	Total	14430.50	50121.42	10630.00	50121.42

NON-PLAN

Sl.No.	Organizations/ schemes/Projects	Net Budgetary Support proposed	Approved by Min. of Finance
1.	MOP (Secretariat)	21.79	21.79
2.	CEA	65.64	65.64
3.	NPTI	6.40	6.40
4.	ATE	6.95	6.95
5.	CERC	4.00	4.00
6.	JERC for Goa & UTs	4.00	4.00
7.	BTPS	37.20	24.80
Total		145.98	133.58

1.15 Explaining the reasons for a lower allocation than the proposed the Ministry have informed that under National Electricity Fund (NEF) of Ministry of Power, a provision of Rs. 5063 crore was sought as interest subsidy for loans disbursed from National Electricity Fund for Transmission and Distribution Schemes. The Expenditure Finance Committee Memorandum was circulated among the appraising agencies. Subsequently, in a meeting Chaired by Secretary, Planning Commission, it was decided that the scheme needed to be reformulated with two key changes, namely (a) loan would be disbursed by Financial Institutions like PFC, REC and Commercial Banks instead of only by PFC & REC; and (b) targeting only the distribution schemes during the initial two years. EFC memo since circulated on 05.04.2010. Hence, the size of the subsidy element got reduced and an amount of Rs. 227.64 crore only was asked for and provided in the Annual Plan 2010-11.

1.16 The actual utilization of plan outlay for the last three years as against the Budget Estimates in shown below:

Year	BE (Rs. in crore)	RE (Rs. in crore)	Rs. in crore (Actual utilization)	% of Budget Estimate
2007-08	33,153.26	30,690.38	25,647.87	77.36%
2008-09	40,460.10	36,306.47	35,231.44	87.08%
2009-10	53,126.27	45269.60	26621.43*	50.10%*
2010-11	60,751.42			

*Upto 31.01.2010

1.17 It may be seen from the above that the Ministry were not able to utilize the Budgetary Allocations/Annual Plan Outlays during last three years and the BE for the current year has been kept at Rs. 60,751.42 crore.

1.18 Giving further details on the revised estimates and variations with the Budget Estimates, the Ministry of Power stated:

“The budgetary allocation of the Ministry of Power for 2009-10 was Rs. 9230.00 crore. The Revised Estimates were kept at Rs. 6814.00 crore and an allocation of Rs. 10630.00 crore has been kept for 2010-11. The details of the specific heads under which there was reduction in allocation are given below:-

(Rs. in crore)

Sl.No.	Name of the Schemes/Projects	BE 2009-10	RE 2009-10	Variations between BE & RE	Remarks
1	2	3	4	5	6
1.	RGGVY	7000.00	5000.00	2000.00	Allocation reduced due to slow pace in expenditure.
2.	R-APDRP	1730.00	1430.00	300.00	Allocation reduced due to slow pace in expenditure.
3.	CPRI	55.00	41.50	13.50	As per actual requirement and due to non-approval of new projects.
4.	Consultancy Charges for APDRP project	30.00	10.52	19.48	The approval of scheme in EFC meeting held in Dec'09 i.e. after finalization of RE in November 2009.
5.	Funds for evaluation studies and consultancy	1.00	0.10	0.90	Due to non-receipt of claims, a token amount of Rs. 0.10 crore only kept in RE for the current year.

1	2	3	4	5	6
6.	Energy Conservation	56.00	18.00	38.00	Non-approval of NMEEE scheme by competent authority.
7.	BEE	82.00	57.84	24.16	Price bids received in DSM Projects were much lower than what was estimated and procurement of meter was no longer required for monitoring under Bachat Lamp Yojana.

The reduction in RE in respect of GBS is primarily due to low utilization of funds especially in schemes like RGGVY and R-APDRP. The reduction in IEBR is similarly based on projections by PSUs due to slower pace in expenditure for projects. The remaining funds are likely to be fully utilized upto 31st March, 2010."

1.19 In reply to a question about quarterly utilization of funds by the Ministry of Power (cumulative) during 2009-10 comprising of GBS of Rs. 9230 crore and IEBR of Rs. 43,896.27 crore, the Ministry have given the following data:

	(Rs in crores)			
	GBS	IEBR	Total	% Utilization in financial year 2009-10 (w.r.t. BE)

Plan Expenditure during 1st quarter	7.58	3,914.59	3,922.17	7.38%
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Non-Plan (excluding BTPS) Expenditure during 1st quarter	24.07	0.00	24.07	18.93%
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	(Rs in crores)			
	GBS	IEBR	Total	% Utilization in financial year 2009-10 (w.r.t. BE)

Plan Expenditure upto 2nd quarter	2009.48	10383.51	12392.99	23.32%
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Non-Plan (excluding BTPS) Expenditure upto 2nd quarter	50.77	0.00	50.77	39.93% (cumulative)
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(Rs in crores)

	GBS	IEBR	Total	% Utilization in financial year 2009-10 (w.r.t. BE)
Plan Expenditure upto 3rd quarter	5261.92	18499.30	23761.22	44.72%
Non-Plan (excluding BTPS) Expenditure upto 3rd quarter	84.60	0.00	84.60	66.54%

1.20 The above figures are cumulative; the quarter-wise figures for plan expenditure are 7.38% in 1st quarter, 15.94% in 2nd quarter and 21.40% in 3rd quarter.

1.21 Enquired about the reasons for substantial increase sought for allocation for the year 2010-11 alongwith the targets set for the same, the Ministry have informed:-

"There is an enhanced Outlay of Rs. 15481.82 crore over RE 2009-10. Out of this amount, there is an increase of Rs. 11665.82 crore in the Internal & Extra Budgetary Resources (IEBR) which forms a part of Internal Resources/Borrowings of the PSUs. The remaining increase of Rs. 3816 crore which is a part of Gross Budgetary Support is for the implementation of the important schemes of Ministry of Power, mainly R-APDRP, RGGVY, National Electricity Fund, NTPC Ltd. (AG&SP Scheme) and NHPC Ltd. as detailed below:-

Under the **Revenue & Capital Section**, the details of increase in the Budget Estimate of 2010-11 over BE 2009-10 are given below:-

(Rs. in crore)

Sl. No.	Name of the Scheme	BE 2009-10	RE 2009-10	BE 2010-11	Remarks
1	2	3	4	5	6
1.	APDRP	1650.00	1364.00	3600.00	The projects under R-APDRP scheme have to be sanctioned in the XI-Plan. This increase is due to increase in number of projects.

1	2	3	4	5	6
2.	NHPC	185.00	185.00	781.00	Major work in projects of Nimboo Bazgo, Chutak and Kishanganga.
3.	Energy Conservation	56.00	18.00	143.94	National Mission for Enhanced Energy Efficiency (NMEEE) is one of the 9 missions announced by PM as a part of National Action Plan on Climate Change, newly included with a provision of Rs. 125 crore.
4.	Subsidy to NTPC under AG&SP scheme	0.00	0.00	26.84	It is a claim pertaining to X-Plan and provision made for final payment.
5.	National Electricity Fund	0.00	0.00	227.64	New scheme.
6.	RGGVY	7000.00	5000.00	5500.00	Total 567(235 for X Plan and 332 for XI Plan) projects have been sanctioned for execution. These projects cover electrification of 1.18 lakh un-electrified villages and providing free connections to 2.46 crore BPL households. This task is to be completed by 2012.

The reduction in RE in respect of GBS is primarily due to low utilization of funds especially in schemes like RGGVY and R-APDRP. The reduction in IEBR is similarly based on projections by PSUs due to slower pace in expenditure for projects. The remaining funds are likely to be fully utilized upto 31st March, 2010."

B. Capacity Addition for 2009-10 & 2010-11

1.22 The details of Capacity commissioned/expected to be commissioned during 11th Plan (Fuel-wise) as given by the Ministry are:

	Commissioned as on 01.04.2009	Target during 2009-10	Achievement during 2009-10 upto 18.03.2010	Target during 2010-11
HYDRO	3392	845	39	1346
THERMAL	9105	13002	7706	17793
NUCLEAR	220	660	220	1220
ALL-INDIA	12717	14507	7965	20359

1.23 The Ministry have stated that they have made the following preparation for achieving the capacity addition during 2010-11.

- All projects have achieved financial closure.
- Main plant orders for all the projects have been placed and projects are in advance stage of commissioning.
- Fuel linkage for all the projects are tied up and available.
- Project developers and equipment suppliers have signed a commitment with CEA for commissioning of these units as per programme.
- Monitoring of the programme is being done at Minister of Power level.

1.24 Explaining the capacity addition programme, in his submission during evidence, the Secretary stated:

“The Ministry of Power produced 9263 MW in 2007-08. This is about the target of the year 2009-10. You may ask me why I have not done 14,000 MW. 4000 MW was being produced in the private sector and some Chinese technicians were working there; the Government of India have discontinued those services in August-September which caused some delay, but we are trying to make up the delay of the first quarter of 2010-11 by May-June. In 2009-10, we will try to achieve 10,000 MW capacity. We are very much hopeful of it. With the addition of 220 MW being arranged through nuclear field it would become 9600 MW work is going on at three to four stations on full scale, it is going on in BHEL, Chandrapura, Basingar, Suratgarh and we would like to achieve

10,000 MW in this way. This is about capacity addition. You have asked about the target in 2010-11. We have the target of 20,000 MW. In India, work on 1,10,000 MW is going on. We are hopeful that with the present tempo, present management and spirit, we will achieve 20,000 MW during 2010-11. The only thing is that we have to pursue it vigorously. More than 10,000 private companies are involved in the rest of work of 40,000 MW in the 11th Plan and the Government of India, State Governments and PSU's are involved in 20,000 MW."

1.25 Elaborating on various problems engulfing the power sector, the Secretary, Ministry of Power informed:

"Our biggest and the most important issue pertains to the problem which we may have to face with regard to coal. We are facing difficulty with respect to the coal that we want to have for the 11th and 12th Plans because there is a tremendous opposition from the Ministry of Environment and Forests. Whatever capacity we enhance, whatever machinery we plant in place, that is of no use because there much difficulty is likely to be faced without coal. Unless the Ministry of Environment and Forests interested a helping hand, there would be difficulty. I would like to bring this to the notice of our Chairman and the Hon. Members. About ten lakh tones of coal is being burnt everyday to operate more than 80,000 MW of coal based plants. If we want to enhance the power generation about 40,000 or 50,000 MW with in a period of two years, then, for this purpose, 15 to 16 lakh tones of coal is likely to be consumed per day."

C. Hydro Power Generation

1.26 The Committee pointed out that power generation from hydro sector came down to 85471 MU in April to December, 2009 as against 92365 MU in the same period of previous year. The above generation includes generation from Hydro stations less than 25 MW also.

1.27 The Ministry in their reply stated that decrease over the previous corresponding period is mainly due to lesser inflows on account of weak monsoon experienced in the country.

1.28 In connection with Hydro Power Generation which was particularly poor last year regarding the same the Ministry of Power have stated that:

"The generation from hydro power projects is linked to availability of water/reservoirs level as well as water release requirement. The main reasons for shortfall in hydro generation in the country during the current year is insufficient rainfall in the catchments areas of reservoirs during monsoon."

1.29 The hydro power generation in the country proposed to be stepped up mainly through new hydro capacity addition. During the 11th Plan, a total of 15,627 MW hydro capacities is envisaged to be added, out of which capacity aggregating 3,341 MW have already been commissioned and the balance capacity of 12,196 MW is presently under construction. Further, to meet the requirement of additional capacity during the 12th Plan (2012-17), a shelf of 87 candidate hydro projects having aggregate capacity of 20,334 MW has been prepared.

1.30 In addition, the following steps have been taken by the Government to promote hydro power generation in the country are as under:

- National Electricity Policy announced in February, 2005, lays emphasis on harnessing hydro potential.
- A 50,000 MW hydro electric initiative was launched in 2003.
- The minimum qualifying capacity of hydro power plants located in special category States of J&K, Sikkim and the seven States of North East reduced from 500 MW to 350 MW to avail mega project benefits.

Hydro Power Policy, notified in March, 2008 to give a boost to hydro power development in the country.”

1.31 The Ministry of Power have stated that they have taken the following measures for increasing the hydro capacity:

(i) Creation of Power Corporations

Government has taken many steps and measures to boost Hydro Power Development. Hydro Power Corporations in the central sector and the joint sector (Central and State) viz., National Hydro-electric Power Corporation (NHPC), North-Eastern Electric Power Corporation (NEEPCO), Nathpa-Jhakri Power Corporation (NJPC—Now SJVNL), and Tehri Hydro Development Corporation (THDC) have been created. Besides, NTPC has also taken up a number of hydro projects. Narmada Hydro Development Corporation (NHDC), a joint venture of NHPC and MP Government has been constituted to implement Narmadasagar (1000 MW) and Omkareshwar (520 MW) HE projects. Government of MP has agreed to NHDC for setting up of a thermal power project of 1320 MW capacity on super critical technology based Reva Thermal Power Project (RTPP) in the periphery of Indira Sagar reservoir.

(ii) **Three stage clearance procedure**

The Government has also approved a Three Stage Clearance procedure for hydel projects to be executed by CPSUs in consultation with Ministry of Finance and Ministry of Environment and Forests. Under Stage-I, the CPSUs will incur expenditure on survey, investigation and preparation of pre-feasibility report. Under Stage-II, the CPSUs will undertake activities relating to detailed investigation and preparation of Detailed Project Report. During this Stage, pre-construction activities and infrastructure development including land acquisition will also be undertaken. Under Stage-III, the investment decision will be accorded after obtaining the approval of PIB/CCEA.

(iii) **Ranking study by CEA**

With an objective of expediting hydro power development in a systematic manner, Central Electricity Authority completed ranking study of the balance hydro potential sites for all the basins in the country during 2001-02. The Ranking of hydro sites has been carried out based on weightage criteria for various aspects involved in the development of hydro schemes. Considering these aspects, the schemes have been graded in A, B and C categories in order of their priority for development. The basin-wise details of ranking study are given below:

Sl. No.	River system	Category A		Category B		Category C		Total	
		No.	MW	No.	MW	No.	MW	No.	MW
1.	Indus	11	4088	51	8811	17	6080	79	18979
2.	Ganga	20	2023	54	9616	1	600	75	12239
3.	Central Indian	3	283	9	1425	1	186	13	1894
4.	East Flowing	11	1412	26	6469	2	88	39	7969
5.	West Flowing	1	35	10	958	14	1508	25	2501
6.	Brahmaputra	52	7800	97	42574	19	12954	168	63328
Total		98	15641	247	69853	54	21416	399	106910

(vi) **50,000 MW Hydro-electric Initiative**

Under the 50,000 MW Initiative, 162 hydro-electric projects spreading across in 16 States for the purpose of preparation of Preliminary Feasibility Reports (PFRs) in the

year 2003-04 were taken up by CEA as a nodal agency with the CPSUs/State agencies as Consultants. CEA's role included overall coordination, facilitating collection of data, and quality control by vetting conceptual planning, assessment of power benefits and selection of project parameters, evacuation of power and monitoring of works. NHPC Limited, WAPCOS, NEEPCO, SNVN Limited and number of State Power Utilities were associated to complete these feasibility studies. The PFRs were completed in Sept., 2004 for all these projects with an aggregating capacity of 47,930 MW. As a follow up of preparation of PFRs, it has been decided to take up implementation/preparation of DPRs for commercially viable schemes selected from the shelf of projects for execution in the near future. Out of 162 schemes (47930 MW) for which PFRs have been prepared, initially, based on preliminary techno-economic analysis, 78 schemes (34020 MW) with first year tariff below Rs. 2.50/kWh have been taken up for detailed survey & investigation and preparation of DPRs. Action has been initiated for 77 of these schemes for S&I and preparation of DPR by CPSUs/ SPSUs/SEBs/IPPs.

1.32 The Ministry have stated that they have taken certain steps to increase the investment in hydel sector in the North Eastern Region. In addition to the various measures taken by the Government to tap the balance unexploited hydro potential expeditiously, 129 HE Projects with aggregate capacity of 36123 MW have been allotted or identified for implementation in Private Sector mainly due to financial constraints. This includes 103 H.E. Projects with aggregate capacity of 31834 MW—in N.E. Region & Sikkim as summarized below:

Name of State	Private Sector	
	No.	I.C. (MW)
Arunachal Pradesh	74	27512
Assam	—	—
Manipur	—	—
Meghalaya	7	1745
Mizoram	—	—
Nagaland	—	—
Total (NER)	81	29257
Sikkim	22	2577
Total (NER+Sikkim)	103	31834

D. Ultra Mega Power Projects (UMPPs)

1.33 The Ministry have informed that three UMPPs namely, Sasan in Madhya Pradesh, Mundra in Gujarat and Krishnapatnam in Andhra Pradesh had already been transferred to the identified developers. The fourth UMPP at Tilaiya in Jharkhand has been transferred to M/s Reliance Power Limited, the identified developer on 7.8.2009 at a levelled tariff of Rs. 1.77 per KWh. Other Ultra Mega Power Projects (UMPPs) have been discussed in subsequent paragraphs:

UMPP IN TAMIL NADU

1.34 The site at Cheyyur has been finalised and approved by the State Government during the meeting of Chief Ministers held on 4.8.2008. Consultants have been appointed by the SPV of PFC and site investigation work has been initiated. The site offered by GOTN for captive port at Paramankeni has not been cleared by the Expert Appraisal Committee of infrastructure of MOEF and the Committee desired that alternative site be explored. The alternative site at Panaiyur village has been jointly inspected by CEA, PFC, Department of Environment (GOTN) and other concerned agency. TOR for port site at Panaiyur has been cleared by Expert Committee on 21.12.2009. PFC is taking steps for EIA study.

UMPP IN CHHATTISGARH

1.35 The site in Salka and Khamaria villages near Udaipur in district Sarguja has been identified. Government of Chhattisgarh has allocated 135 MCM of water. An SPV named, Chhattisgarh Sarguja Power Ltd.(CSPL) has been created by PFC. Ministry of Coal has allocated Pindarakhi and Puta Parogia coal blocks to the CSPL. Consultants have been appointed by the SPV and site investigation work has been initiated. The RFQ for this UMPP has been issued on 15.03.2010.

UMPP IN KARNATAKA

1.36 Under the Central Government initiative, Ultra Mega Power Plants (UMPPs) are to be located either at pit-head locations or at coastal locations. Accordingly, initially a coastal location at Tadri in Karnataka was identified. Subsequently, the State Government had recommended another site Ghataprabha in Belgaum District, which is not a coastal location. The State Government has been continuously advised that the UMPP should be located at a coastal location, and since imported coal is being used, the sites should be located as close as possible to a port in order to maintain the viability of the project.

In the Ministers' meeting with State Governments held on 4th August, the State Government had thereafter suggested locating a UMPP at either Kudgi or Mannur, which are inland locations about 320-350 Kms. away from the coast. In respect of these sites, in the same meeting, it was decided that neither Kudgi nor Mannur appeared feasible to be taken up under the UMPP initiative as they were neither pit-head nor a coastal site being over 300 km. from the coast.

1.37 As requested by the State Government and decided in the 4th August meeting, a CEA/PFC team visited the two sites *i.e.* Kudgi and Mannur on 27th August, 2008. In their report, CEA had recommended that considering the various constraints such as railway movement for coal, the Kudgi site could support a plant only of 2000 MW capacity.

1.38 CMD, PFC has requested Chief Secretary, Government of Karnataka to suggest new site(s). In response, Chief Secretary, Government of Karnataka *vide* his letter dated 12.8.2009 addressed to PFC has intimated that Tadri is best suited for an UMPP Project considering its topography, minimum problems in resettlement and proximity. Confidence building measures in order to clear the doubts of local residents and all concerned with the impact of the project are in process. The response of the State Govt. is awaited.

UMPP IN MAHARASHTRA

1.39 The site originally identified at Girye could not be taken up due to agitation by local people. Subsequently, a number of different sites identified by the Government of Maharashtra were explored. A site near Munge village in Devgarh taluka was identified by CEA/PFC team along with the Maharashtra Government officials. But the site could not be firmed up due to resistance from local people. Govt. of Maharashtra is to sort out the issues with local people before the development of the project could be taken up. Recently, in a meeting on Maharashtra issues Power Minister on 17.12.2009, it was decided that Govt. of Maharashtra would sort out the issues related to setting up of this UMPP. The response of the State Govt. is still awaited.

UMPP IN ORISSA

1.40 The site near Bhedabahal village in Sundergarh district has been identified. Government has approved the drawl of water from Hirakud reservoir *vide* letter dated 15.1.2009. PFC has appointed the consultants and the site related studies are in progress. Section 4 Notification of project land is to be issued for which the State Government has been requested so that the Request for Quotation (RfQ) could be issued.

IV. Schemes funded through Gross Budgetary Support

A. Rural Electrification

1.41 Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY): The Ministry have stated that the scheme was targeted to electrify 17,500 villages and to provide free electricity connections to 47 lakh BPL households during 2009-10. As on 15.2.2010, 13,475 villages have been electrified and 40.76 lakh connections have been released. Subsequently in a presentation before the Committee on 22.3.2010, the Ministry have given the figures of village electrification as 15,186 villages and 43.02 lakh BPL Households. It is expected to achieve the target for the year. Financial outlay of Rs. 7000 crore was provided for 2009-10 at BE stage, which was reduced to Rs. 5000 crore. Which was fully utilized as per the figures given on 31.3.2010.

1.42 As on 15th February 2010, 73,357 villages of total targeted 118,499 have been electrified. Similarly, 94.54 lakh BPL households have been electrified of total 246.06 lakh. It is targeted to electrify 1 lakh villages and to provide free connections to 175 lakh BPL households by March 2012.

1.43 The following details have been given regarding the targets and achievements of RGGVY Scheme during the 11th Plan period (as on 22.3.2010):

Year	Villages			BPL Households		
	Target	Achmt.	% Achmt.	Target.	Achmt.	% Achmt.
2007-08	10,500	9,301	88.60%	40 lakh	16.21	40.50%
2008-09	19,000	12,056	63.50%	50 lakh	30.85	61.70%
2009-10	17,500	15,186	76.78%	47 lakh	43.02	91.53%
Upto 31.3.2010*		18,374	105.00%		47.18	100.5%

*As on 31.3.2010, 78,256 villages have been electrified and 100.97 Lakh connections have been released to BPL households.

1.44 To a particular query on availability of funds for the RGGVY Scheme, the Ministry have stated:

"Ministry, while proposing continuation of RGGVY in XI Plan had requested for Rs. 42000 crore subsidy. However, only Rs. 28,000 crore subsidy was allocated. Ministry has now tentatively estimated a subsidy requirement of additional Rs. 28,000 crore at present

cost estimates for electrification of balance areas and requested Planning Commission and Ministry of Finance for in-principle-approval for starting the process of RGGVY phase-II. However, Ministry has been advised to concentrate on implementation of existing sanctioned project.”

B. Accelerated Power Development and Reforms Programme (APDRP)

1.45 The Ministry of Power were asked to give details of the restructured APDRP Scheme. In response, the Ministry have stated that Cabinet Committee on Economic Affairs (CCEA) approved the “Re-structured APDRP” for XI Plan as a Central Sector Scheme in its meeting held on 31.07.2008.

1.46 Projects under the scheme are to be taken up in two parts. Part-A is the projects for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centres and Part-B is regular distribution strengthening projects. The programme size is Rs. 51,577 crore. Expected investment in Part-A (Baseline System) would be Rs. 10,000 crore and that in Part-B would be Rs. 40,000 crore. PFC is the nodal agency for operationalising the programme. 1387 projects at the cost of Rs. 5130.68 crore have been approved to twenty four States under Part-A of the scheme. So far Rs. 1682.72 crore has been released under the R-APDRP as on 31.3.2010, out of which Rs. 1656.46 crore is the loan to PFC to disburse the same to utilities and Rs. 26.26 crore is grant to PFC as fee to the nodal agency.

1.47 The Ministry have given the details of Projects sanctioned under Part-A of R-APDRP as below:

Sl.No.	State	No of Projects Sanctioned	Sanctioned Project Cost (Rs. Cr.)
1	2	3	4
1.	Andhra Pradesh	113	388.02
2.	Bihar	71	194.60
3.	Chhattisgarh	20	122.45
4.	Goa	4	110.72
5.	Gujarat	84	225.36

1	2	3	4
6.	Haryana	36	165.63
7.	Himachal Pradesh	14	81.07
8.	Jharkhand	30	160.61
9.	Karnataka	98	391.14
10.	Madhya Pradesh	82	228.09
11.	Maharashtra	130	324.42
12.	Manipur	13	31.55
13.	Meghalaya	9	33.99
14.	Punjab	47	272.85
15.	Rajasthan	87	381.74
16.	Sikkim	2	26.30
17.	Tamil Nadu	110	417.00
18.	Uttarakhand	31	125.82
19.	Uttar Pradesh	168	636.53
20.	West Bengal	62	159.98
21.	Assam	66	173.18
22.	Kerala	43	214.40
23.	Tripura	16	34.36
24.	Jammu and Kashmir	30	134.49
25.	Puducherry	4	27.53
26.	Mizoram	8	34.26
27.	Nagaland	9	34.56
Total		1387	5130.68

*Including three SCADA projects worth Rs. 65.81 crore.

1.48 Regarding the fund requirement of APDRP, the Ministry have informed that the amount projected for the year 2010-11 is Rs. 3700 crore (Rs. 3600 crore loan to PFC for disbursement to Utilities and Rs. 100 crore grant for enabling activities). The Ministry of Power has

appointed PFC as nodal agency for operationalisation of the re-structured APDRP during the 11th Plan. Total 1366 projects worth Rs. 4925.15 crore have been sanctioned till now. As per action plan for the year 2010-11 projects worth Rs. 6,600 cr. (cumulative) for Part-A including projects for SCADA and Rs. 11,000 cr. for Part-B will be sanctioned. The disbursement plan for the fund will be as follows:

Part A: 2nd (30% of Rs. 4,600 cr.)	—	Rs. 1,380 crore
1st tranche (30% of Rs. 2,000 cr.)	—	Rs. 600 crore
Total	—	Rs. 1,980 crore
Part B: 1st tranche (15% of Rs. 11,000 cr.)	—	Rs. 1,650 crore

Total Part A + B = Rs. 3,630 cr. round it to Rs. 3,600 cr. is expected to be disbursed as loan.

Grant: Part C — Rs. 100 cr. grant is estimated against various enabling activities such as service charges to various consultants, nodal agency, capacity building etc.

So, the total funds disbursement for 2010-11 will be as under:—

Loan (Part-A & B)	:	Rs. 3,600 crore
Grant (Part-C)	:	Rs. 100 crore
Total (Loan & Grant) A+B+C	:	Rs. 3,700 crore

To expedite the sanction of SCADA and Part-B projects model DPRs have been finalized and SCADA consultants have been empanelled.

1.49 As per the report on performance of the State Power Utilities prepared by Power Finance Corporation Ltd. the AT&C losses during 2007-08 is 29.24% at national level. The Re-structured APDRP has been launched by the Government of India with a sole objective to achieve the AT&C Loss level to the extent of 15% in project areas and reduction in AT&C loss by 3% and 1.5% per year at Utility level, having AT&C loss above 30% and AT&C loss below 30% respectively on sustainable basis, through establishment of base line data, fixing of accountability, strengthening & upgradation of sub-transmission and distribution network and adoption of Information Technology.

1.50 On being pointed out by the Committee that transmission and distribution losses were very high, the Power Secretary stated during evidence:

“It is a fact that the T&D loss was 34 per cent. We have brought it down to 29 per cent in three four years. We have sanctioned

APDRP for 1370 towns. Already, this scheme has been sanctioned. We have earmarked Rs. 10,000 crore in Part-A and Rs. 40,000 crore in Part-B. This, the project altogether costs around Rs. 50,000 crore. We would like to complete this scheme within three years. By the time, we complete the APDRP projects; hopefully we would bring it down. Our target is to bring it down to 15 per cent. If we can achieve that, it will be a great benefit to our country. Whatever money we spend, will be beneficial to the common people.”

C. Funds for Research and Development

1.51 Central Power Research Institute (CPRI) was provided with a budget allocation of Rs. 55.00 crores for the year 2009-10. After review of the progress of the various capital schemes and the expenditure incurred, it was revised to Rs. 41.50 crores during February 2010. Budget estimate for 2010-11 has been fixed at Rs. 78.18 crores.

Thrust Areas for Research

1.52 The rapid growth of power industry in India has opened up challenging opportunities for innovation and creation not only in technical areas but also in the area of operational management. At the same time, it has brought a lot of challenges to power engineers and researchers to handle bulk power transmission from remote areas, security problems for the grids and environmental issues. The system planning and operation is mainly concerning major thrust areas such as: Generation, Transmission, Distribution, New & Renewables, Materials Technology and Energy Efficiency. For reliable and secure operation of the system, and to be in phase with the technological developments, research in these areas is required in phased manner.

1.53 The Ministry have informed that the major areas of R&D include:

- (a) In Generation, important aspects that needs special attention is on improving the performance of existing thermal power plants, solving problems related to diagnostic measures for condition monitoring of equipment, improving the plant availability, reliability, efficiency & safety, beneficiation of coal and fly ash utilization. It is also essential to develop new materials for Supercritical and Ultra-Super critical power generation, Green technology approaches to thermal generation *viz.*, Integrated Gasification Combined Cycle (IGCC) and Gasification of solid and liquid fuels for power generation. There is also a need for addressing parasitic

losses, auxiliary losses and also gain in the thermodynamic efficiency.

- (b) The Hydro power base available in the country has grown commensurate with the requirements so far and has been geared to take up all types of hydro-electric power development. For obtaining high reliability operation of the forthcoming large hydro electric power projects, it is essential to keep pace with the technological development and improvements taking place in the developed countries. Also, considering the problems of silt erosion damages, which is typical for Indian conditions, corrosion etc. in the existing hydro power stations, the required technology development and support R&D for mini, small and pumped hydro in hydro power generation needs a big thrust.
- (c) The Transmission system requires adequate and timely investment and also efficient and coordinated action to develop a robust and integrated system. The Indian Power System is growing steadily. Network expansion should be planned and implemented keeping in view the anticipated transmission needs. To match with the growing demand, transmission system is also expanding with an over lay of 765 kV AC lines on existing 400 kV System, high capacity long distance High Voltage Direct Current (HVDC) system, high capacity long distance HVAC system, adoption of Flexible AC Transmission System (FACTS) devices, such as Thyristor Controlled Series Compensation (TCSC) wherever feasible on 400 kV and 220 kV lines etc. With the formation of regional grid and interregional ties to form ultimately the National Grid, the Power System is becoming more and more complex. Side by side with this growth, requirement of high security and reliable operation of large generating plants with Extra High Voltage (EHV) and UHV transmission network assumes tremendous importance in maintaining Power System Stability for better grid management. The severe cascading blackouts that have been seen in many parts of the world highlight the vulnerability of large AC systems. Instances of grid failure due to: pollution flashover have come to notice on 400 kV single circuit lines during fog conditions, inadequate reactive power support, voltage instability, power swings etc. A firewall preventing the spread of such disturbances can be accomplished using measures to avoid voltage instability, relay coordination, design transmission line insulators

suitable for varied environmental and pollution conditions, adopting FACTS controls, HVDC connections, which makes an important contribution in controlling power transmission, safeguarding stability and containing disturbances. Technologies such as FACTS and HVDC transmission have played a crucial role in alleviating transmission system constraints. It is required to attempt on planning, operational and control problems of large scale systems, application of polymer insulators, design of compact transmission lines in EHV systems, development of new control strategies for FACTS devices etc.

- (d) Distribution system needs careful attention in the areas such as reduction in losses, metering, distribution automation, planning, harmonic pollution, custom power devices, demand side management etc. High Voltage Distribution System is an effective method for reduction of technical losses and improved voltage profile. Encourage Low Tension (LT)/High Tension (HT) ratio keeping in view techno economic considerations. Application of IT has great potential in reducing technical & commercial losses. Integrated resource planning and demand side management also needs special attention and implementation. Substantial efforts are required for capacity building, so that the present day Distribution system would be transformed into a modern day distribution system namely Smart grid. Smart grid represents a vision for a digital upgrade of Power Distribution system to both optimize current operation as well as open up new avenues for alternative energy production. Design and development of High Temperature Superconducting transformers, and compact transformers in distribution systems needs careful attention and applied research in this area in phased manner is proposed.
- (e) Energy storage technologies that have been developed or are under development for electric power applications include pumped hydropower, compressed air energy storage, batteries, super capacitors, flywheels, and superconducting magnetic energy storage. Design, Development, Testing & Evaluation of Short Term and Long Term Response of Energy Storage Devices, is important aspect. At a discrete level, flywheel energy storage modules offer unique performance characteristics suitable for many applications. It is technically feasible to combine the best feature of high-speed flywheel energy storage with proven developments

in high-power electronics. Energy storage technologies such as Redox Flow Batteries have a large role to play in the electricity grid of the future. There is a need for development of novel storage technologies, to meet requirements associated with (i) The effective production and delivery of electric power (ii) The provision of secure, high-quality power at end-user sites and (iii) Support of renewable and distributed energy resources. Super capacitors represent one of the latest innovations in the field of storage of electrical energy. The most important advantage of Super Conducting Magnetic Energy Storage (SMES) is that the time delay during charge and discharge which is quite short.

- (f) **New and Renewable Energy Sources:** Technologies related to Wind, Biomass, Solar, Geo thermal, Fuel Cells are identified under this thrust area. Research focus is on grid connectivity of large wind mills, self healing wind connected micro grids, distributed generation and large use of ethanol for energy products. Development of micro & mini grids and larger penetration of renewable energy is an important area for research.
- (g) **Energy and Environment:** Considerable amount of energy can be saved through energy efficiency and demand side management measures. Periodic energy audits have to be made for power intensive industries under the Energy Conservation Act. Emphasis on standards and labelling of appliances needs to be given priority. Thus the topics that require careful attention are: (i) Demand Side Management (ii) Standards and Labelling and (iii) Load Management and Environment Management.

1.54 As far as NTPC is concerned, NTPC is a technology driven company and is fully aligned to the needs of adapting to emerging technologies and upgrading the technologies through R&D and renovation and modernization. Accordingly, "NTPC Energy Technology Research Alliance (NETRA)" has been created in NTPC. Presently NETRA's Focus areas are:

- (a) Climate change such as studies on CO₂ capture & storage; fixation of CO₂ through microalgae, CO₂ sequestration through mineralization of fly ash & reducing alkalinity; etc.
- (b) New & renewable Energy such as setting up of 1 MW solar thermal R&D plant; setting up of solar based HVAC plant; setting up of integrated biodiesel pilot plant, Thermoelectric generation; etc.

- (c) Efficiency improvement and Cost reduction such as establishment of 5 KW test set up for MALAE cycle; Recovery of waste heat from flue gas for running HVAC system; extraction of moisture from flue gas & reducing ID fan loading; robotic inspections of boiler tubes; development of nano hydrophobic coatings; for high voltage insulators.
- (d) Scientific Support to utilities such as failure investigations; condition monitoring of high voltage transformers & rotating equipment; corrosion analysis & control; Environmental appraisal of operating plants; health assessment and life extension; etc.

NETRA is working on 21 projects under networking with IITs, BARC, CSIR labs, etc.

D. Energy Conservation

1.55 To a query as to why the funds allocated to BEE could not be utilized during 2009-10, the Ministry have informed that the Revised Estimates (RE) for BEE were reduced from Rs. 82.00 crores (BE) to Rs. 57.84 crores on account of the following:

- (a) In DSM programmes namely SME, Agriculture and Municipal, the price bids received for various projects were much lower than what were estimated earlier in the EFC note.
- (b) In Bachat Lamp Yojana, the UNFCCC has allowed deemed savings methodology (AMS II J). This has obviated the need for monitoring and therefore the amount originally projected in the EFC Memo for procurement of meters would no longer be required.

1.56 A total of 2127 MW were achieved in the first two years of the 11th Plan. The target for the current year is 2600 MW which is also likely to be achieved as per the information furnished by the Ministry. Giving details of energy conservation and efficiency, the Ministry of Power have given the following details:

- Energy Conservation: — 20,000 MW of avoided potential assessed capacity
- Potential harnessed during — 377 MW
10th Plan
- Target for 11th Plan period — 10,000 MW

- Achievement during 07-08 & 08-09 — 2127 MW (Savings of electricity – 10259.65 Mu)
- Target 09-10 — 2600 MW (1348 MW achieved upto 30.09.09) (provisional)

1.57 The Major Schemes specified during the 11th Plan by the Ministry are:

- Bachat Lamp Yojana : Targeted avoided capacity – 4000 MW
- Standards & Labelling Scheme : Targeted avoided capacity – 3000 MW
- Existing Buildings : Targeted coverage 600 Government buildings.
- Agricultural and Municipal DSNM : Targeted avoided capacity – 2000 MW
- Small and Medium Industries : Targeted avoided capacity 500 MW
- Operationalising EC ACT by Strengthening Institutional Capacity of State Designated Agencies (SDAs)
- Awareness Schemes
- Recent Initiatives
- State Energy Conservation Fund (SECF)
- National Mission for Enhanced Energy Efficiency

1.58 In all the projects undertaken by BEE, the Ministry have informed that the work is being done through private sector agencies like Energy Service Companies (ESCOs), empanelled agencies for Bachat Lamp Yojana, executing agencies for SME programme etc. Further, in order to give a fillip to energy efficiency services in private sector, BEE has accredited over 80 ESCOs through CRICIL and ICRA to enhance the credibility in the market. The private sector has been playing a key role in implementing the energy efficiency programmes and the achievements has been the result of the partnership between the Government and the private sector.

PART-II

OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE

The Committee note that the detailed Demands for Grants (2010-11) of the Ministry of Power were laid in Lok Sabha on 12th March, 2010. The Central Plan Outlay of the Ministry of Power stands at Rs. 60,751.42 crore which include an IEBR (Intra & Extra Budgetary Resources) of Rs. 50,121.42 crore and GBS (Gross Budgetary Support) of Rs. 10,630.00 crore. The Committee have examined the Demands for Grants of the Ministry of Power for the year 2010-11 in detail. The Committee endorse the Demands for Grants of the Ministry of Power for the year 2010-11. Recommendations of the Committee are detailed in succeeding paragraphs.

11th Five Year Plan – Targets and Achievements

2.1 The Committee note that the Planning Commission had fixed a capacity addition target of power generation at 78,700 MW for the 11th Plan period (2007-12). According to the assessment made by the Central Electricity Authority (CEA) at the time of Mid-Term Appraisal of the 11th Plan, 62,374 MW of capacity addition is likely to be commissioned with a high level of certainty during the 11th Plan period. Going by the achievements made so far, the Committee are not fully convinced about the Government's claims of achieving even the reduced target of 62374 MW as the term 'high level of certainty' itself exposes the very fact that Government itself is not very sure for achieving the set targets. Out of 62374 MW a capacity addition of only 20352 MW which is merely 32.62% of the target has been achieved till 11.02.2010 i.e. during the first three years of the Plan period. The main problems brought out before the Committee for this abysmal performance has been the delay in placement of orders – mainly civil works and Balance of Plants (BoP), delay in supply of material for main plant, shortage of fuel, problems of land acquisition and contractual dispute between project developer and contractor and their sub-vendors etc. The Ministry of Power have stated that they have taken steps to overcome the problems. The Ministry have also constituted an advisory group under Chairmanship of Minister of Power with retired Power Secretaries as Members to suggest ways and means to achieve the capacity addition target. Similarly a Group has been constituted under Secretary (Heavy Industry) to finalize an action plan which

would lay down the schedule/time frame for completion of projects as per targets. This Group under Secretary (Heavy Industry) also includes the Secretary (Power), Chairperson (CEA), CMDs of NTPC and BHEL. Also the Committee have been informed that meetings are held periodically with concerned Ministries viz. the Ministry of Coal, the Ministry of Petroleum and Natural Gas and the Ministry of Environment and Forest. The Committee would like to be informed of the action Plan suggested by the above advisory groups and implementation thereof to achieve the capacity addition targets for the 11th Plan. The Committee are of the strong view that prospective planning has not been done and executed properly in the case of the 11th Plan period by the Ministry of Power because the factors stated for delay in capacity addition could not have cropped up suddenly. The Committee therefore, strongly recommend that to achieve the revised target of capacity addition during the remaining period of the 11th Plan a thoughtful time bound, coordinated and accountable action plan taking in to account all the contingencies experienced hitherto in execution of the Plan should be chalked out. The implementation of such programme should be closely monitored on monthly basis for target achievement.

(Recommendation Sl. No. 1, Para No. 2.1)

2.2 The Committee's examination has revealed that some of the Central Sector PSUs are lagging way behind the targets set for them in the 11th Plan period despite the fact that funds were available for the same. NHPC had originally planned to add 5322 MW through 12 hydro projects during the 11th Plan. However, during Mid-Term Appraisal of 11th Plan, the capacity addition was revised to 3272 MW. Against this, actual commissioned has been only 1030 MW in the first three years of the Plan period. Similarly, NEEPCO had proposed an outlay of Rs. 18594.46 crore for the 11th Plan period which was revised to Rs. 6376.21 crore. The already revised 11th Plan proposals have been further reduced to Rs. 4024.11 crore due to reasons like Geological surprises, non-signing of MoA with the State Governments and non-revival of certain projects like Turial HEP etc. in the ongoing projects. The Committee also note with dismay the financial performance of DVC as the achievements upto third quarter of the third year i.e. 2009-10 of the Plan has been only Rs. 12252.26 crore as against the estimates of Rs. 24,298.85 crore in the 11th Plan. The Committee are unable to comprehend the reasons given for non-performance of NHPC, NEEPCO and DVC. The Committee therefore, strongly recommend that in due discharge

of their assigned responsibilities, the Ministry should not only monitor the progress in the target achievements of various PSUs under their administrative control, but should also play a pro-active role by giving meaningful guidance and supplementing the efforts of PSUs wherever required in interacting with State Governments or other agencies in the pursuit of the timely execution of the schemes of the capacity addition so that avoidable bottlenecks do not hinder the progress of schemes. Needless to point out that MoUs signed between PSUs and the Ministry take care of all such factors and there should not be further excuses for non-performance.

(Recommendation Sl. No. 2, Para No. 2.2)

Demands for Grants and Plan Outlay of the Ministry of Power

2.3 The Committee note that the Ministry of Power have in their Demands for Grants 2010-11 sought Gross Budgetary Support (GBS) of Rs. 10,630.00 crore (net receipt) with a provision of Rs. 6,201.16 crore in revenue and Rs. 4,428.84 crore in capital section. The Annual Plan Outlay of the Ministry for the year 2010-11 approved by the Planning Commission was Rs. 60,751.42 crore against a proposal of Rs. 64,551.92 crore. The reasons for lower allocation than the proposed has been attributed to the, fact that funds under the National Electricity Fund (NEF) Rs. 227.64 crore as against the proposed outlay of Rs. 5063 crore only on the ground of re-casting the scheme so as to make it applicable to loans from banking sector and other financial institutions for distribution work along with non-APDRP as against Transmission and Distribution in earlier proposals. The Committee are concerned at the fact that modalities of the scheme for generation of funds and disbursement as loans for the important sector of transmission and distribution have not been worked out so far. The Committee recommend that the schemes under National Electricity Fund may be finalized at the earliest so that work on this important sector can progress early.

(Recommendation Sl. No. 3, Para No. 2.3)

2.4 The Committee are dismayed to note that during the year 2009-10 funds to the tune of Rs. 53,126.27 crore were available with the Ministry of Power and the same were revised to Rs. 45,269.60 crore. However, the actual utilization upto 31st January, 2010 has only been Rs. 26,621.43 crore which is only 50.10% of the Budget Estimates for the year 2009-10. Admittedly the reduction in RE in respect of outlay has primarily, been due to low utilization of funds in schemes like RGGVY and R-APDRP. Going by the quarterly

utilization of funds during the year 2009-10, the plan expenditure in the first quarter was 7.38% in first 1st quarter, 15.94% in 2nd quarter and 21.40% in 3rd quarter. On being asked by the Committee about proposed hefty increase in allocation for the year 2010-11 despite the fact that the earlier funds could not be utilized, it has been informed that allocation has been increased for the APDRP scheme and for the National Mission for Enhanced Energy Efficiency and for grant to NHPC for major works for projects of Nimboo Bazgo, Chutak and Kishanganga. The increase under APDRP from Rs.1364 crore to Rs.3600 crore, from Rs.185 crore to Rs.781 crore for NHPC (GBS) and from Rs.18 crore to Rs.144 crore to energy conservation should be matched with proper planning. The pace of expenditure has also not been as per the guidelines for every quarter and at times frantic efforts are made to rush the money in the last quarter which may not be backed by the corresponding physical achievements. The Committee, therefore, recommend that there should be logical and reasonable co-relation between the funds allocation and vis-à-vis funds utilization and physical achievement of the last year with the proposed allocation for the next financial year. Simply fixing higher target which may be un-realistic result in futile exercise and non-utilization and blocking of scare resources which could be utilized more gainfully elsewhere. This reflects the poor planning and ill-conceived management on the part of the Government. With a view, to save time, energy and gainful utilization of resources it is imperative to draw a plan which is realistic and attainable. The Committee would like that the Ministry to take necessary action accordingly.

(Recommendation Sl. No.4, Para No. 2.4)

Capacity Addition During 2009-10 & 2010-11

2.5 The Committee note that the target for capacity addition during 2009-10 was 14507 MW against which the achievement as on 18th March, 2010 has been only 7965 MW, from all sources viz. hydro, thermal and nuclear. The target for 2010-11 has been kept at 20359 MW. Although, the Government has assured that they have taken certain steps to adhere to the targets fixed like financial closure of projects and orders for main plants of the projects and tying-up fuel linkages etc, however, certain difficulties like supply of coal and non-availability of clearances from the Ministry of Environment and Forest have been highlighted. The Committee are of the view that Ministry of Environment and Forest should give time bound clearances to projects concerning the power sector. The

Committee observe that target fixed for 2010-11 is 20,359 MW whereas it was 14,507 MW in 2009-10 against which only 7965 MW could be achieved by 18th March, 2010. Despite the reported pro-active action taken by the Government for achievement of target, problems in supply of coal, the mainstay for thermal generation continue to affect the generation. Besides taking up with the Ministry of Coal, the Government should focus on alternative sources like hydel and nuclear to achieve the targets set for 2010-11 as well as for the 11th Plan period.

(Recommendation Sl. No. 5, Para No. 2.5)

Hydro Power Generation

2.6 The Committee are anguished to note that hydro power generation has declined during April to December, 2009 as compared to the same period last year by about 7% i.e. to 85471 MU from 92365 MU. The main reason attributed by the Ministry for the negative growth is insufficient rainfall in the catchments areas of reservoirs during monsoon. Although, the reason of insufficient rain seems to be reasonable one however, it does not absolve the Government for poor planning without taking into consideration the contingencies involved therein. The Ministry of Power have stated that hydro power generation in the country is proposed to be stepped up mainly through new hydro capacity addition. During the 11th Plan, a total of 15,627 MW hydro capacity is envisaged to be added, out of which capacity aggregating 3,341 MW has been commissioned and remaining 12,196 MW is under construction. The performance in this regard is far from satisfactory as only about 22% of 11th Plan target has been achieved in the first three years. The remaining target of 12,196 MW in the two years seems highly unlikely to materialize. Despite this, performance, the proposed 20334 MW comprising 87 projects in the 12th Plan is highly unrealistic. The Committee have been informed that various steps have been taken to increase hydro generation in the country which include creation of Hydro Power Corporations in the Central Sector and Joint Sector (Central and State), three stage clearance procedure for power projects etc. The Committee also observe that private participation in hydro generation has been encouraged considerably, presumably on the ground of financial constrains as 129 hydro projects aggregating a capacity of 36123 MW have been allotted or identified for implementation in private sector this includes 103 projects aggregating capacity of 31834 MW in the North-East Region. The Committee strongly recommend that hydro potential of

the country should be identified and exploited expeditiously. The participation of private sector though essential for achievement of targets, yet the necessary safeguards like timely completion of projects, cost of power, benefit to end-user should be made the guiding factors. The private sector should be made accountable for any lapses, professional misconduct and deviation from agreement.

(Recommendation Sl. No. 6, Para No. 2.6)

Ultra Mega Power Projects (UMPPs)

2.7 The Committee note that three UMPPs had already been transferred to the identified developers in Madhya Pradesh, Gujarat and Andhra Pradesh. The fourth UMPP was transferred to the identified developer on 7.8.2009 at Tilaiya in Jharkhand. The Committee also learn that the site for an UMPP in Tamil Nadu at Cheyyur has been approved by the State Government. PFC is taking steps for Environmental Impact Assessment study. In regard to the UMPP in Chhattisgarh, the Ministry have informed that a Special Purpose Vehicle (SPV) named Chhattisgarh Sarguja Power Limited (CSPL) has been created by PFC and the Request for Quotation (RfQ) for this has been issued on 15.3.2010. The UMPP in Karnataka originally was to be located at Tadri, finding the other sites at Kudgi and Munnar as unsuitable, the PFC requested the Chief Secretary, Government of Karnataka to suggest new sites. The Government of Karnataka has intimated that Tadri is most suited site for the UMPP. The Committee have been informed that confidence building measures have been initiated by the Minister of Energy to clear doubts of local residents about the impact of project. However, in regard to the UMPP in Madhya Pradesh, the site has still not been finalized due to various reasons relating to agitation by the local people etc. The Committee once again stress on the fact that the UMPPs will form the back bone of power generation in 12th Plan and therefore, all sites need to be finalized at the earliest and handed over to the respective developers so that they can develop the site in the next five to seven years to make power available at low and competitive rates in the future. The Committee would await conclusive action in the matter.

(Recommendation Sl. No. 7, Para No. 2.7)

Rural Electification—Rajiv Gandhi Grameen Vidyutikaran Yojana

2.8 The Committee note that to achieve the targets of rural electrification in the year 2009-10, Rs. 7000 crore was allocated to

the scheme at the BE stage. However, it was reduced to Rs. 5000 crore. The physical target of electrification of 17500 villages and 47 lakh BPL households could also not be achieved. As on 15.2.2010 only 13475 villages and 40.76 lakh BPL connections could be realized. The Committee are concerned to find that out of the Rs.42000 crore subsidy sought for continuing the RGGVY scheme in the 11th Plan only an outlay of Rs. 28000 crore was allocated. The Ministry have also requested the Planning Commission and the Ministry of Finance for in-principal-approval for starting the process of RGGVY Phase-II. However, the Ministry has been advised by the Planning Commission to concentrate on implementation of the existing sanctioned projects. The Committee feel that RGGVY is most important scheme funded by Gross Budgetary Support by the Ministry of Power and rural up-liftment can be achieved only if all people living in rural areas have access to electricity. The Committee, therefore, recommend that the Ministry of Power expeditiously complete all the sanctioned projects in Phase-I so that they can take up projects sanctioned in the various States under Phase-II of the scheme. The Committee also feel that lower utilization of funds leading to lower revised estimates is an indicator that targets are being achieved slowly and there are time overruns in the process. The Committee feel that greater monitoring of the projects as well as expenditure need to be taken up for effective implementation of the scheme.

(Recommendation Sl. No. 8, Para No. 2.8)

Accelerated Power Development and Reforms Programme (APDRP)

2.9 The Committee note that the Re-structured APDRP scheme is an ambitious programme of the Ministry of Power to bring down transmission and distribution losses which are about 29% at present. The target of the scheme is to bring down the T&D losses to 15% over the years which would greatly benefit the supply position of power in the country. The scheme was sanctioned on 31.7.2008 with an estimated cost of Rs. 51577 crore, however, as on date only Rs. 5130.68 crore has been approved for disbursing to States under part A of the scheme. The amount released so far has been only Rs. 1682.72 crore. In the financial year 2010-11 projects worth Rs. 6600 crore (cumulative) for Part A and Rs. 11000 crore for capacity Part B are proposed to be sanctioned. The Committee would like the Government to utilize the funds progressively for implementation of the scheme in the various States and also sanction projects and release funds for other states like Orissa etc. which

have not been covered under the scheme. The Committee would like to be informed of the work taken up in connection with establishment of base line data, fixing accountability, strengthening and up-gradation of sub-transmission and distribution network and for adoption of information technology.

(Recommendation Sl. No. 9, Para No. 2.9)

Research and Development

2.10 The Committee note that the Central Power Research Institute (CPRI) was provided a budget allocation of Rs. 55.00 crore for the year 2009-10. However, it was revised to Rs. 41.50 crore. The budget estimate for 2010-11 has been fixed at Rs. 78.18 crore. The Committee are, however, concerned at slow pace of expenditure by the institute. The Committee hope that the funds sanctioned for year 2010-11 which is almost two times of the expenditure of 2009-10 will be gainfully utilized by the institute.

(Recommendation Sl. No. 10, Para No. 2.10)

2.11 The Committee learn that key areas of research have been identified by the Government which include aspects of thermal generation, super critical and ultra super critical technologies etc. In the hydro sector attention needs to be paid to silt erosion damages which are typical for Indian conditions. R&D for mini, small and pumped hydro power generation also needs to be developed as a thrust area. In the transmission sector, development of planned regional grid and ultimately sustainable National Grid is the requirement. Instances of grid failure during fog conditions, voltage instability power swings needs to be controlled. High voltage distribution system is an effective method for reduction of technical losses and improved voltage profile. Energy storage technologies need to be developed to store the additional energy generated. The Committee hope that the Government will take up projects of R&D in the energy sector for developing cleaner technologies so that the environmental impact of power projects is reduced. The Committee have also learnt that NTPC has formed Energy Technology Research Alliance (NETRA) to focus on specific areas of climate change, New and Renewable Energy, efficiency improvement and scientific support to utilities. The Committee would like to be informed of the 21 projects taken up by NETRA under networking with IITs, BARC and CSIR labs.

(Recommendation Sl. No. 11, Para No. 2.11)

2.12 The Committee find that the Bureau of Energy Efficiency were allocated an amount of Rs. 82 crore during 2009-10 and these were revised to Rs. 57.84 crore. This has been attributed to the reasons that under some schemes the price bids were lower than that anticipated earlier and also in Bachat Lamp Yojana, the need for monitoring has been obviated and hence the saving. The Committee find that saving as a result of energy conservation methods during 2007-08 and 2008-09 was 2127 MW. The target for 2009-10 has been kept at 2600 MW. However, the achievement upto 30.9.2009 was only 1348 MW. The Ministry have stated ambitious figures for achievement of savings during the 11th Plan. These include Bachat Lamp Yojana - 4000 MW, standards and labeling scheme - 3000 MW etc., existing buildings - 600 Government Buildings, small and medium industries—500 MW. The Committee recommend that more steps need to be taken by the Government to achieve the above targets envisaged for the 11th Plan period. The Committee hope that the Government will look into various aspects of building code to make it mandatory to look into energy conservation while designing buildings both in the Government and other sectors.

(Recommendation Sl. No. 12, Para No. 2.12)

NEW DELHI;
15 April, 2010
25 Chaitra, 1932 (Saka)

MULAYAM SINGH YADAV,
Chairman,
Standing Committee on Energy.

(Vide Para No. 1.12 of the Report)

DEMANDS FOR GRANTS OF THE MINISTRY OF POWER, 2010-2011

DEMAND NO. 74

Ministry of Power

A. The Budget allocations, net of recoveries, are given below:

(In crores of Rupees)

Major Head	Budget 2009-2010		Revised 2009-2010		Budget 2010-2011					
	Plan	Non-Plan	Plan	Non-Plan	Plan	Non-Plan				
	Total	Total	Total	Total	Total	Total				
1	2	3	4	5	6	7	8	9	10	
Revenue	7341.00	-28.00	7313.00	5226.70	-163.67	5063.03	6201.16	-155.13	6046.03	
Capital	1889.00	--	1889.00	1587.30	--	1587.30	4428.84	--	4428.84	
Total	9230.00	-28.00	9202.00	6814.00	-163.67	6650.33	10630.00	-155.13	10474.87	
1. Secretariat—Economic Services	3451	2.00	23.00	25.00	1.00	22.30	23.30	1.00	21.79	22.79
2. Waiver of Guarantee fee										
2.01 National Hydro Electric Power Corporation Ltd.	2075	--	--	--	--	75.74	75.74	--	--	--

	1	2	3	4	5	6	7	8	9	10
2.02 Less Receipts Netted	0075	—	—	—	—	-75.74	-75.74	—	—	—
Net		—	—	—	—	—	—	—	—	—
Power General										
3. Central Electricity Authority	2801	11.00	86.14	97.14	8.07	72.80	80.87	12.16	65.64	77.80
4801		4.00	—	4.00	3.30	—	3.30	2.84	—	2.84
Total		15.00	86.14	101.14	11.37	72.80	84.17	15.00	65.64	80.64
4. Research and Development										
4.01 Central Power Research Institute, Bengaluru	2801	55.00	—	55.00	41.50	—	41.50	78.18	—	78.18
5. Training										
5.01 National Power Training Institute (NPTI)	2801	20.00	2.00	22.00	20.00	6.40	26.40	20.00	6.40	26.40
6. Setting up of JERC for Manipur & Mizoram	2801	1.25	—	1.25	0.82	—	0.82	1.25	—	1.25
7. Central Electricity Regulatory Commission	2801	—	7.00	7.00	—	4.00	4.00	—	4.00	4.00

	1	2	3	4	5	6	7	8	9	10
8. Transfer to National Investment Fund (NIF)	2801	—	—	—	3158.00	—	3158.00	5052.00	—	5052.00
8.1 Amount met from NIF										
8.1.01 Subsidy for Rural Electrification— RGGVY	2801	—	—	—	-3100.00	—	-3100.00	-5000.00	—	-5000.00
8.1.02 APDRP	28.01	—	—	—	-58.00	—	-58.00	-52.00	—	-52.00
Net		—	—	—	—	—	—	—	—	—
9. Subsidy for Rural Electrification—RGGVY	2801	6300.00	—	6300.00	4496.60	—	4496.60	4852.00	—	4852.00
10. Consultancy Charges for APDRP Projects	2801	30.00	—	30.00	10.52	—	10.52	19.48	—	19.48
11. Funds for Evaluation Studies and Consultancy	2801	1.00	—	1.00	0.10	—	0.10	1.00	—	1.00
12. Appellate Tribunal for Electricity	2801	—	6.00	6.00	—	5.49	5.49	—	6.95	6.95
13. Setting up of Joint SERC for UTs and Goa	2801	—	3.00	3.00	—	3.50	3.50	—	4.00	4.00
14. Comprehensive Award Scheme for Power Sector	2801	0.74	—	0.74	0.65	—	0.65	0.75	—	0.75
15. Energy Conservation	2801	56.00	—	56.00	18.00	—	18.00	143.94	—	143.94
16. Bureau of Energy Efficiency	2801	82.00	—	82.00	57.84	—	57.84	66.92	—	66.92
17. APDRP	2801	80.00	—	80.00	66.00	—	66.00	100.00	—	100.00

	1	2	3	4	5	6	7	8	9	10
18. Assistance to Forum of Regulator Capacity Building	2801	2.00	—	2.00	2.00	—	2.00	2.00	—	2.00
19. World Bank grant under PHRD to THDC	2801	0.01	—	0.01	0.20	—	0.20	—	—	—
20. Loan to PFC for APDRP	6801	1477.00	—	1477.00	1221.00	—	1221.00	3230.00	—	3230.00
21. Interest Subsidy National Electricity Fund	2801	—	—	—	—	—	—	227.64	—	227.64
22. Interest Subsidy to NTPC (AGNSP)	28.01	—	—	—	—	—	—	26.84	—	26.84
Total-General		8120.00	104.14	8224.14	5946.60	92.19	6038.79	8785.00	86.99	8871.99
Thermal Power Generation										
23. Badarpur Thermal Power Station										
26.01 Revenue Expenditure	2801	—	149.59	149.59	—	26.57	26.57	—	24.80	24.80
26.02 Less Revenue Receipts	0801	—	-304.73	-304.73	—	-304.73	-304.73	—	-288.71	-288.71
Net Expenditure		—	-155.14	-155.14	—	-278.16	-278.16	—	-263.91	-263.91
Transmission and Distribution										
24. Lumpsum provision for Projects/ Schemes for the benefit of NE region & Sikkim										
24.1 Subsidy for Rural Electrification— GGVY	25552	700.00	—	700.00	503.40	—	503.40	648.00	—	648.00

	1	2	3	4	5	6	7	8	9	10
2402 Loan to PFC under APDRP	6552	173.00	—	173.00	143.00	—	143.00	370.00	—	370.00
2403 Investment in Public Enterprises in N.E. Region	4552	50.00	—	50.00	35.00	—	35.00	45.00	—	45.00
Total		923.00	—	923.00	681.40	—	681.40	1063.00	—	1063.00
Total-Power		9043.00	-51.00	8992.00	6628.00	-185.97	6442.03	9848.00	-176.92	9671.08
25. Investments in Public Enterprises other than NE Region										
25.01 Loans for Power Projects	6801	185.00	—	185.00	185.00	—	185.00	781.00	—	781.00
Grand Total		9230.00	-28.00	9202.00	6814.00	-163.67	6650.33	10630.00	-155.13	10474.87
B. Investment in Public Enterprises	Head of Dev.	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total
25.01 National Thermal Power Corporation Ltd.	12801	—	17700.00	17700.00	—	14760.00	14760.00	—	22350.00	22350.00
25.02 National Hydro Electric Power Corporation Ltd.	12801	185.00	4482.99	4667.99	185.00	3577.74	3762.74	781.00	4108.34	4889.34
25.03 Damodar Valley Corporation	12801	—	8313.34	8313.34	—	8109.45	8109.45	—	8539.78	8539.78
25.04 North Eastern Electric Power Corporation Ltd. (North Eastern Region Component)	12801	50.00	774.70	824.70	35.00	411.67	446.67	45.00	841.30	886.30

	1	2	3	4	5	6	7	8	9	10
25.05 Satluj Jal Vidyut Nigam Ltd.	12801	—	580.06	580.06	—	466.85	466.85	—	525.17	525.17
25.06 Tehri Hydro Development Corporation Ltd.	12801	—	535.18	535.18	—	629.89	629.89	—	856.83	856.83
25.07 Power Grid Corporation of India Ltd.	12801	—	11510.00	11510.00	—	10500.00	10500.00	—	12900.00	12900.00
Total		235.00	43896.27	44131.27	220.00	38455.60	38675.60	826.00	50121.42	50947.42
C. Plan Outlay										
Central Sector Plan										
1. Power	12801	8307.00	43896.27	52203.27	6132.60	38455.60	44588.20	9567.00	50121.42	59688.42
2. North Eastern Areas	22552	923.00	—	923.00	681.40	—	681.40	1063.00	—	1063.00
Total		9230.00	43896.27	53126.27	6814.00	38455.60	45269.60	10630.00	50121.42	60751.42

STANDING COMMITTEE ON ENERGY

MINUTES OF THE TWELFTH SITTING OF THE STANDING
COMMITTEE ON ENERGY (2009-10) HELD ON 22ND MARCH,
2010 IN COMMITTEE ROOM '62' PARLIAMENT HOUSE,
NEW DELHI

The Committee met from 1100 hrs. to 1320 hrs.

PRESENT

Shri Mulayam Singh Yadav — *Chairman*

MEMBERS

Lok Sabha

2. Shri P.C. Chacko
3. Shri Adhir Ranjan Chowdhury
4. Shri Ram Sundar Das
5. Shri Paban Singh Ghatowar
6. Shri Arjun Munda
7. Shri Shripad Yesso Naik
8. Shri Sanjay Nirupam
9. Shri Jagdambika Pal
10. Shri Ravindra Kumar Pandey
11. Shri Nityananda Pradhan
12. Shri M.B. Rajesh
13. Shri Radha Mohan Singh
14. Shri Vijay Inder Singla
15. Shri Subhash Bapurao Wankhade

Rajya Sabha

16. Shri Motilal Vora
17. Shri Santosh Bagrodia
18. Shri Rama Chandra Khuntia

19. Shri Bhagat Singh Koshyari
20. Shri Shyamal Chakraborty
21. Shri Veer Pal Singh Yadav
22. Shri Govindrao Wamanrao Adik

SECRETARIAT

1. Shri Brahm Dutt — *Joint Secretary*
2. Shri N.K. Pandey — *Additional Director*
3. Shri Rajesh Ranjan Kumar — *Deputy Secretary*

REPRESENTATIVES OF THE MINISTRY OF POWER

Ministry of Power

1. Shri Hari Shankar Brahma — **Secretary**
2. Shri Anil Kumar — **Special Secretary**
3. Shri Rakesh Jain — **Joint Secretary**
4. Shri Devender Singh — **Joint Secretary**
5. Shri M. Ravi Kanth — **Joint Secretary**

Central Electricity Authority

1. Shri Gurdial Singh — **Chairperson**
2. Shri S.M. Dhiman — **Member**

Public Sector Undertakings/Autonomous Bodies/Statutory Bodies

1. Shri S.K. Garg — **CMD, NHPC**
2. Shri S.K. Chaturvedi — **CMD, PGCIL**
3. Shri R.S.T. Sai — **CMD, THDC**
4. Shri I.P. Barooah — **CMD, NEEPCO**
5. Shri Ajay Mathur — **DG, BEE**
6. Shri Alok Kumar — **Secretary, CERC**

At the outset, the Chairman welcomed the Members of the Committee and representatives of the Ministry of Power to the sitting of the Committee and apprised them of the provisions of Direction 58 of the Directions by the Speaker.

2. The representatives of the Ministry made a power-point presentation on the demands for Grants (2010-11) focussing on the targets and achievements under various programmes and particularly on the capacity addition targets.

3. The Committee *inter-alia* discussed with the representatives of the Ministry of Power the following important points:—

- (i) Low utilization of funds/low achievement of targets by the Ministry.
- (ii) Need to accelerate Capacity Addition Programme.
- (iii) Delay in obtaining clearances for power projects from the Ministry of Environment and Forests.
- (iv) Impact of shortage of coal on power generation.
- (v) Slow pace of implementation of the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).
- (vi) Ultra Mega Power Projects (UMPPs).
- (vii) Transmission and Distribution losses and progress on R-APDR² Scheme.
- (viii) Energy conservation.
- (ix) Supply of power generation equipment.

The Member sought clarifications on various issues relating to the subject and the representatives of the Ministry responded to the same. The Committee directed the representatives of the Ministry to furnish written replies to the queries which could not be responded to by them.

4. A verbatim record of the proceedings of the sitting of the Committee has been kept.

The Committee then adjourned.

MINUTES OF THE FOURTEENTH SITTING OF THE STANDING
COMMITTEE ON ENERGY (2009-10)

The Committee sat on Monday, the 12th April, 2010 from 1015 hrs. to 1100 hrs. in Committee Room '53', Parliament House, New Delhi.

PRESENT

Shri Mulayam Singh Yadav — *Chairman*

MEMBERS

Lok Sabha

2. Shri Ram Sundar Das
3. Shri Arjun Munda
4. Shri Shripad Yesso Naik
5. Shri Ravindra Kumar Pandey
6. Shri Nityananda Pradhan
7. Shri M.B. Rajesh
8. Shri Ganesh Singh
9. Shri Vijay Inder Singla

Rajya Sabha

10. Shri Motilal Vora
11. Shri Santosh Bagrodia
12. Shri Rama Chandra Khuntia
13. Shri Bhagat Singh Koshyari
14. Shri Shyamal Chakraborty
15. Prof. Anil Kumar Sahani
16. Shri Govindrao Wamanrao Adik
17. Shri Mohammad Shafi

SECRETARIAT

1. Shri Brahm Dutt — *Joint Secretary*
2. Shri N.K. Pandey — *Additional Director*
3. Shri Rajesh Ranjan Kumar — *Deputy Secretary*

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

3. The Committee then took up for consideration the following draft Reports:

- (i) Draft Report on the Demands for Grants (2010-11) of the Ministry of Power.
- (ii) Draft Report on the Demands for Grants (2010-11) of the Ministry of New and Renewable Energy.

The Committee adopted the draft Reports with slight modifications.

4. The Committee also authorized the Chairman to finalize the above-mentioned Reports taking into consideration the modifications suggested by the Members and consequential changes arising out of factual verification, if any, by the concerned Ministries and also to present the same to both the Houses of Parliament.

The Committee then adjourned.

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