19

STANDING COMMITTEE ON ENERGY (2010-2011)

FIFTEENTH LOK SABHA

MINISTRY OF POWER

DEMANDS FOR GRANTS (2011-2012)

NINETEENTH REPORT

LOK SABHA SECRETARIAT
NEW DELHI

August, 2011/*Sravana*, 1933 *(Saka)*

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Presented to Lok Sabha on 17.8.2011
Laid in Rajya Sabha on 17.8.2011

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COE No. 209

Price : Rs. 80.00

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Fourteenth Edition) and printed by National Printers, New Delhi-110 028.

CONTENTS

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@ Ceased to be member of the Committee *w.e.f.* 12th July, 2011
* Nominated *w.e.f.* 18th October, 2010 *vice* Shri Arjun Munda.
** Nominated *w.e.f.* 27th September, 2010 *vice* Shri Subhash Bapurao Wankhede.
# Ceased to be member of the Committee *w.e.f.* 28th January, 2011.

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23. Shri V.P. Singh Badnore
***24. Shrimati Shobhana Bhartia
25. Shri Shyamal Chakraborty
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3.	Shri N.K. Pandey	—	*Additional Director*
4.	Shri Manish Kumar	—	*Executive Assistant*

***Nominated *w.e.f.* 21st September, 2010.

INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Nineteenth Report on Demands for Grants of the Ministry of Power for the year 2011-12.

2. The Committee took oral evidence of the representatives of the Ministry of Power on 19th April, 2011. 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 the issues relating to the subject.

3. The Report was considered and adopted by the Committee at their sitting held on 25th July, 2011.

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;
10 *August*, 2011
19 *Sravana*, 1933 *(Saka)*

MULAYAM SINGH YADAV,
Chairman,
Standing Committee on Energy.

REPORT

PART I

NARRATION ANALYSIS

I. INTRODUCTORY

Energy is an important aspect so far as economic and social development of a country is concerned. India ranks the world's sixth largest energy consumer, which accounts for approximately 5% of the world's total energy consumption. However, per capital consumption of energy in India is as low as 631 Kvh, which needs to be increased to meet the goals of economic and social development. The installed power generation capacity has grown 94 times since independence. However, still there is a peak demands shortage of about 10.51% and an energy deficit of 8.2% in the country. In order to meet the shortage of conventional sources energy such as Thermal Hydro and Nuclear in general and electricity in particular and to augment the capacity of energy supply, its efficient use and conservation is a must. 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, hydropower generation, transmission and distribution.

1.2 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), thermal power 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, Appellate Tribunal Electricity 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);
  - (m) Bureau of Energy Efficiency(BEE);

- All matters concerning energy conservation and energy efficiency pertaining to Power Sector.

1.3 In all technical and economic matters, the Ministry of Power is assisted by the Central Electricity Authority (CEA). While the Authority (CEA) is a Statutory Body constituted under the erstwhile Electricity (Supply) Act, 1948, later replaced by the Electricity Act, 2003, where similar provisions exist, the office of the CEA is an "Attached Office" of the Ministry of Power. The CEA is responsible for technical coordination and supervision of programmes and is also entrusted with a number of statutory functions. CEA is headed by a Chairperson, who is also *ex-officio* Secretary to the Government of India and comprises six full time Members of of the rank of *Ex-officio* Additional Secretaries to the Government of India. They are designated as Member (Thermal), Member (Hydro), Member (Economic and Commercial), Member (Power System), Member (Planning) and Member (Grid Operation and Distribution) 14 subordinate offices are functioning under the control of the Central Electricity Authority.

The Ministry of Power has a monitoring system for the capacity addition programme for timely execution of the cleared projects. the monitoring mechanism operates at 3 broad levels *viz* by Central Electricity Authority, by Ministry of Power and through the Power Project Monitoring Panel (PPMP).

II. 11TH FIVE YEAR PLAN-TARGETS AND ACHIEVEMENTS

1.4 The Planning Commission assessed an outlay of Rs. 3,09,231.38 crore for the XI Plan period for the Central Sector comprising of Rs. 2,78,779.47 crore of Internal and Extra Budgetary Resources (IEBR), to be raised by the CPSUs themselves and Rs. 30,451.91 crore of Gross Budgetary Support (GBS), (including RGGVY Rs. 26,500.00 crore). Against this total outlay, the performance during the first three years, RE 2010-11 and BE 2011-12 of XI plan period is Rs. 2,15,479.03 crore consisting of Rs. 1,80,047.16 crore as IEBR and Rs. 35,431.87 crore as GBS. The CPSU-wise and activity-wise break-up of the amount is as under:—

(Rs. in crore)

Sl. No.	Activity/ Organization		IEBR	GBS	Total
A	Investment in PSUs				
1.	NTPC Ltd.	Estimates	1,62,701.34	0.00	1,62,701.34
		Achievements	74,663.56	0.00	74,663.56
2.	NHPC	Estimates	28,230.93	1,000.00	29,230.93
		Achievements	17,353.50	1,812.61	19,166.11
3.	PGCIL	Estimates	39,999.00	0.00	39,999.00
		Achievements	55,040.52	0.00	55,040.52
4.	DVC	Estimates	20,550.00	0.00	20,550.00
		Achievements	25,394.75	0.00	25,394.75
5.	THDC India Ltd.	Estimates	4,360.34	500.00	4,860.34
		Achievements	2,819.02	70.74	2,889.76
6.	SJVNL	Estimates	10,209.70	0.00	10,209.70
		Achievements	2,866.84	0.00	2,866.84
7.	NEEPCO	Estimates	12,728.16	1,500.00	14,228.16
		Achievements	1,908.97	344.85	2,253.82
	Total (A)	Estimates	2,78,779.47	3,000.00	2,81,779.47
		Achievements	1,80,047.16	2,228.61	1,83,375.26

(Rs. in crore)

Sl. No.	Activity/Organization		GBS
B	MoP Schemes		
1.	AG&SP	Estimates	2.00
		Achievement	26.84
2.	Rural Electification Scheme	Estimates	26,500.00
		Achievement	25,413.45
3.	NPTI (Training and Human Resource)	Estimates	80.00
		Achievement	82.60
4.	CPRI (Research and Testing)	Estimates	320.00
		Achievement	363.34
5.	Programme and Infrastructure improvement of CEA	Estimates	75.00
		Achievement	40.10
6.	Other MoP Schemes	Estimates	474.91
		Achievement	7,276.93
	Total (B)	Estimates	27,451.91
		Achievement	33,203.26
	Total GBS (A) + (B)	Estimates*	30,451.91
		Achievement	35,431.87

* This does not include the provisions for schemes like R-APDRP, NMEEE and NEF (Interest Subsidy).

1.5 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	8,654	24,840	3,380	36,874
STATE	3,482	23,301	0	26,783
PRIVATE	3,491	11,552	0	15,043
TOTAL	15,627	59,693	3,380	78,700

1.6 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	2,922	14,920	3,380	21,222
STATE	2,854	18,501	0	21,355
PRIVATE	2,461	17,336	0	19,797
TOTAL	8,237	50,757	3,380	62,374

1.7 Capacity addition targets fixed for the PSUs for 11th Five year Plan period are given as under:—

Sl. No.	Name of CPSUs under Ministry of Power	11th Plan Original Target (MW)	Target as per Mid-Term Review (MW)	Achievement as on 28.02.2011 (MW)
1.	NHPC Ltd. (including NHDC)	5,322	2,522	1,150
2.	NTPC Ltd.	17,760	9,220	5,220
3.	NEEPCO Ltd.	600	0	0
4.	THDC India Ltd.	400	400	0
5.	SJVNL	412	0	0
6.	DVC	6,500	6,000	1,250
	Total	30,994	18,142	7,620

1.8 The fuel-wise details of capacity commissioned/under construction during the Eleventh Plan are given below:—

(In MW)

Type	Mid-term appraisal target	Commissioned (upto 31.1.2011) (MW)	Under construction (as on 31.01.2011)
Hydro	8,237	3,921	4316
Thermal	50,757	27,711	23,564
Nuclear	3,380	880	2,500
Total	62,374	32,512*	30,380

*This includes a capacity of 518 MW commissioned from additional projects.

1.9 The Ministry of Power in a written reply stated that a capacity addition target of 78,700 MW was originally fixed for the 11th Plan. However, at the time of mid-term appraisal carried out by Planning Commission, the capacity addition target for 11th Plan was revised to 62,374 MW. Against this target, capacity totaling to 34,462 MW has already been commissioned during the first four years of the 11th Plan and the balance capacity of 28,430 MW is under execution.

1.10 The Committee, pointed out the pace of capacity addition, has been very slow and enquired from the Ministry whether the remaining target of 28,430 MW will be fully achieved in the terminal year of 11th Plan itself. In reply, the Ministry of Power stated as under:—

> "A capacity addition target of 17600 MW including 2000 MW of Nuclear Power has been fixed for the year 2011-12. The balance capacity is likely to slip to 12th Plan."

1.11 When the Committee desired to know the reasons for the non-achievement of capacity addition targets fixed for 11th Plan, the Ministry stated:—

> "The broad reasons for delay in commissioning of power projects during the 11th plan are as follows:—
>
> - Delay and non-sequential supply of material for main plant
> - Delay in placement of order for BoPs
> - Shortage of skilled manpower for erection and commissioning
> - Contractual dispute between project developers and their sub-vendors/sub-contractors
> - Inadequate deployment of construction machinery
> - Shortage of fuel
> - Delay in erection of infrastructure facilities like reliable construction power supply, roads at project site etc.
> - Law and order problems
> - Flash flood
> - Poor geology
> - Slow progress of civil works."

1.12 The Ministry have further stated that following steps have been taken to expedite capacity addition programme:—

- The manufacturing capacity of BHEL is being increased from 10,000 MW in December, 2007 to 20,000 MW by 2012.
- Several new joint venture companies have been formed to manufacture supercritical boilers and turbine-generators for thermal power plants. These joint ventures have been formed between M/s. L&T and MHI, Japan; Alstom and Bharat Forge; Toshiba and JSW; Ansaldo and GB Engineering; and Thermax and Babcock and Wilcox.
- To augment the Balance of Plants capacity, international conclave on "Key Inputs for Power Sector" has been held to sensitize the stakeholders to enlarge the vendor base to meet Balance of Plants requirements.
- A strong review and monitoring mechanism has been put in place. Rigorous monitoring of projects is held at different levels including by Ministry of Power, Central Electricity Authority (CEA), Power Project Monitoring Panel and Advisory Group under the chairmanship of the Hon'ble Minister of Power.
- Intensive reviews are held by the Ministry of Power to review the critical milestones associated with each on-going project. Meetings with the leading equipment manufacturers, especially BHEL, are organized to review the status of critical supplies to the projects. Quarterly Performance Reviews (QPRs) are also organized separately for each CPSU to review the status of the Central Sector projects.
- An Advisory Group under the chairmanship of the Hon'ble Minister of Power has been set up to suggest the ways and means to achieve the 11th Plan capacity addition target. Twelve meetings of the Advisory Group have taken place, so far.
- Issues related to the supply of power equipment from BHEL are reviewed periodically by a Group under the chairmanship of Secretary (Heavy Industry).
- As a follow-up to the decision in the Conference of Chief Ministers' held on May 28, 2007, the Ministry of Power has set up a "Power Project Monitoring Panel" (PPMP) for monitoring of thermal and hydro generation projects targeted for commissioning during the 11th Plan along with the

associated transmission schemes. The PPMP, at present, comprises six independent project monitoring consultants. Each consultant is given specific projects. Each consultant visits the project sites and furnishes progress report which is compiled by the coordinating consultant and along with the Exception Report is submitted to the Secretary. The progress of implementation of the projects is accordingly reviewed by the Ministry on the basis of the report received from the Monitoring Panel.

- Lack of project management capability and skills in the Central and State utilities have been an area of serious concern. Therefore, Web Miles *i.e*. web-based milestone monitoring system has been introduced in NTPC to bridge this gap. It has yielded encouraging results and some of the recent generation projects of NTPC like. Dadri Thermal Power Project (2x490 MW) have been commissioned well in time. It has been decided to implement this monitoring system in all our thermal and hydel CPSUs.

- In respect of ITI trained skilled workers, it has been noticed that there are shortages in certain power related trades and in some geographical areas; shortcomings in the skill set of ITI trained workers and the skills of the in-service skilled workforce need to be upgraded through training. To address these issues, some of the actions taken include "Adopt an ITI" scheme wherein State Government ITIs are being adopted by the Central Power Sector Undertakings (CPSUs) and private project developers. So far, CPSUs have adopted 61 ITIs, 3 State PSUs and 12 private sectors.

III. ANALYSIS OF DEMANDS FOR GRANTS AND ANNUAL PLAN OUTLAY

1.13 The Minister for Power laid on the table of the Lok Sabha, the detailed Demands for Grants (2011-12) for the Ministry of Power on 14th March, 2011. The Demands show a budgetary provision of GBS of Rs. 9,642.00 crore with a provision of Rs. 6,779.84 crore in revenue and Rs. 2,862.16 crore in capital section. The Central Plan Outlay including IEBR however stands at Rs. 66,382.73 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 there for expenditure on establishment matters for the Secretariat of the Ministry of Power, under various schemes.

(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 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:** National Power Training Institute 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:** Pursuant to a Memorandum of Agreement signed by the State Governments of Manipur and Mizoram, authorizing the Central Government to constitute a Joint Electricity Regulatory Commission (JERC), the Central Government has constituted a JERC for these States under section 83 of the Electricity Act, 2003. The Central Government has also approved a plan scheme of financial assistance

of Rs. 6.60 crore for meeting the recurring and non-recurring expenditure of the Commission during the first five years.

(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 continues as a statutory body under the Electricity Act, 2003, which has come into force with effect from 10th June, 2003.

(vii) **Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY):** This scheme of rural Electricity Infrastructure and Household Electrification has been introduced in April, 2005 for providing access to electricity to all rural households. As per census 2001, 44% of the rural households had 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 are financed with 90% capital subsidy for provision of Rural Electricity Distribution Backbone (REDB), creation of Village Electrification Infrastructure (VEI) and Decentralised 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. To increase the coverage of small habitations, Government allowed electrification of habitations upto 100 population instead of earlier limit of 300.

(viii) **Funds for Evaluation Studies and Consultancy:** This provision is for conducting evaluation studies of various projects/programmes/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 hears appeals against the orders of the adjudicating officer or the Appropriate Commissions under the Electricity Act, 2003. Under the provisions of the Petroleum and Natural Gas Regulatory

Board Act, 2006, APTEL is the Appellate Tribunal for the purpose of that Act.

(x) **Joint Electricity Regulatory Commission (JERC) for UTs:** The Central Government has set up a Joint Electricity Regulatory Commission (JERC) for Goa and all Union Territories except Delhi. Expenditure of the Joint Commission shall be borne by the Central Government and the Government of Goa in the ratio of 6:1.

(xi) **Comprehensive Award Scheme;** Shields and Certificates are given away by the Ministry of Power to the generating stations, transmission and distribution utilities as well as rural distribution franchisees for recognizing meritorious performance in operation, project management and environmental protection.

(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. National Action Plan on Climate Change contains 8 (eight) National Missions representing multi-project, long term and integrated strategies for achieving key goals in the context of climate change. One of the Missions is National Mission for Enhanced Energy Efficiency. This is being pursued by MoP and Bureau of Energy Efficiency (BEE). National Mission for Enhanced Energy Efficiency (NMEEE)

To enhance energy efficiency, four new initiatives have been introduced in the NMEEE. These are:—

- A market based mechanism to enhance cost effectiveness of improvements in energy efficiency in energy-intensive large industries and facilities, through certification of energy savings that could be traded.

- Accelerating the shift to energy efficient appliances in designated sectors through innovative measures to make the products more affordable.

- Creation of mechanisms that would help finance demand side management programmes in all sectors by capturing future energy savings.

- Developing fiscal instruments to promote energy efficiency.

(xiii) **Bureau of Energy Efficiency (BEE):** Funds would be provided to BEE for implementation of its various plan schemes. A number of Demand Side Measures (DSM) have been initiated by the Government to reduce the overall power consumption, improving efficiencies of ground water extraction, to reduce the subsidy burden of the States and energy cost incurred by the municipalities. Government has approved Bachat Lamp Yojana (BLY) scheme that seeks to promote energy efficient and high quality Compact Fluorescent Lamps (CFLs) as replacement of incandescent bulbs in households. A Standard and Labeling programme has been launched to promote to reduce end use consumption by applying standards and labeling for equipments/appliances and mandatory labeling. Further, the Energy Conservation Building Code (ECBC) has been launched to reduce energy consumption in commercial buildings. Government has also approved a scheme for the strengthening of State Designated Agencies (SDAs) for empowering the SDAs as partners of BEE at States level to implement Energy Conservation Act, 2001 (EC Act, 2001). Government has launched schemes for the Designated consumers and Small and Medium Enterprises (SMEs) programme for targeting energy consumption reduction of designated consumers and SMEs, capacity building of Energy Auditors and Managers and Contribution to SECF. The SECF is a statutory requirement and under EC Act. It is also one of the deliverables of SDAs Energy Conservation Action Plan (ECAP).

(xiv) **Re-structured Accelerated Power development Reforms Programme:** 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. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction. Projects under the scheme would be taken up in two parts in urban areas-towns and cities with population of more than 30,000 (10,000 in case of special category States). The objective of the programmes is to facilitate State Power Utilities to reduce the level of AT&C losses to 15%. Projects execution under the scheme to be taken up in Two Parts. Part-A shall include the projects for establishment of baseline data and IT applications for

energy accounting/auditing and IT based consumer service centres. Part-B shall include regular distribution strengthening projects. 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 fulfilment of conversion conditionalties. 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.

(xv) **Assistance to Forum of Regulator for Capacity building:** The Government had approved a plan assistance of Rs. 10.0 crore to Forum of Regulators for capacity building and availing consultancy. The assistance is spread over the 11th Five Year Plan period with a maximum expenditure of Rs. 2.0 crore in any particular year.

(xvi) **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 under the chairmanship of the Member (Power), Planning Commission was constituted on 29.04.2008. The proposal was revised on the basis of decision taken in the meeting held under Secretary (Planning Commission) to provide interest subsidy on loan by Financial Institutions like PFC, REC and commercial banks for distribution schemes not covered by R-APDRP and RGGVY. The EFC meeting held on 18.10.2010 decided interest subsidy aggregating to Rs. 9217 crore for loan disbursement amounting to Rs. 25,000 crore by PFC, REC and commercial banks spread over 2011-12 and 2012-13 for distribution schemes. The scheme may be reviewed thereafter. A CCEA note is under preparation accordingly.

(xvii) **Investment in Public Enterprises:** Provision under the scheme is towards capital investment in the generation/ transmission projects taken upon in the Central Sectors through CPSUs like National Thermal Power Corporation Limited, NHPC Limited, NEEPCO, THDC India Ltd., SJVN Limited and POWERGRID.

A. Plan Outlay

1.14 The Annual Plan Outlay of the Ministry of Power for the year 2011-12 is proposed as Rs. 66,391.75 crore as per the details given below:—

(Rs. in crore)

Sl. No.	Organisation/Schemes	Internal and Extra Budgetary Resources	GBS	Total Plan Outlay
A.	CENTRAL PLAN			
1.	NTPC Limited	26,400.00	0.00	26,400.00
2.	NHPC Limited	4,277.39	812.61	5,090
3.	PGCIL	17,700.00	0.00	17,700.00
4.	D.V.C.	5,890.59	0.00	5,890.59
5.	T.H.D.C. India Limited	389.85	0.00	389.85
6.	S.J.V.N. Limited	1,141.72	0.00	1,141.72
7	NEEPCO	949.77	87.50	1,037.27
8.	MOP (OTHER)	0.00	8,742.32	8,742.32
	A. TOTAL CENTRAL PLAN	56,749.32	9,642.43	66,391.75

1.15 Breakup of allocation of Rs. 8742.32 crore under Sl. No. 8 above is as under:—

Sl. No.	Organisation/Schemes	Internal and Extra Budgetary Resources	GBS	Total Plan Outlay
1	2	3	4	5
1.	Computerization and Office Equipment	0.00	1.00	1.00
2.	Central Electricity Authority	0.00	16.23	16.23
3.	Central Power Research Institute	0.00	163.40	163.40
4.	National Power Training Institute (NPTI)	0.00	16.89	16.89

1	2	3	4	5
5.	Setting up of JERC for Manipur and Mizoram	0.00	2.38	2.38
6.	Subsidy for Rural Electrification–RGGVY	0.00	6,000.00	6,000.00
7.	Funds for Evaluation Studies and Consultancy	0.00	1.00	1.00
8.	Comprehensive Award Scheme for power sector	0.00	0.82	0.82
9.	Energy Conservation	0.00	130.80	130.80
10.	Bureau of Energy Efficiency	0.00	123.80	123.80
11.	Assistance to FOR for Capacity Building	0.00	2.00	2.00
12.	R-APDRP	0.00	2,034.00	2,034.00
13.	National Electricity Fund (NEF)	0.00	250.00	250.00
	(B) Total	0.00	8,742.32	8,742.32

1.16 The total outlay approved by the Planning Commission for the year 2011-12 is Rs. 66,382.73 crore comprising IEBR of Rs. 56,740.73 crore and GBS of Rs. 9,642.00 crore as against the proposal of the Ministry of Power for Rs. 66,391.75 crore. Details are as given in the table below:—

(Rs. in crore)

Sl. No.	Organisations/ projects/schemes	Proposed Annual Plan 2011-12		Approved by Planning Commission/Min. of Finance	
		GBS	IEBR	GBS	IEBR
1.	NTPC Ltd.	0.00	26,400.00	0.00	26,400.00
2.	NHPC Ltd.	812.61	4,277.39	812.61	4,277.39
3.	PGCIL	0.00	17,700.00	0.00	17,700.00
4.	DVC	0.00	5,890.59	0.00	5,890.59
5.	THDC India Limited	0.00	389.85	0.00	389.85
6.	SJVNL	0.00	1,141.72	0.00	1,133.13
7.	NEEPCO	87.50	949.77	87.50	949.77
8.	MOP's Schemes	8,742.32	0.00	8,741.89	0.00
	Total	9,642.43	56,749.32	9,642.00	56,740.73

Non Plan

Sl. No.	Organisations/ schemes/projects	Net Budgetary Support proposed	Approved by Min. of Finance
1.	MOP (Secretariat)	25.74	24.10*
2.	CEA	79.09	77.03*
3.	NPTI	6.40	6.40
4.	ATE	8.50	8.50
5.	JERC for Goa and UTs	4.00	4.00
6.	BTPS	37.67	17.65*
	Total	161.40	137.68

1.17 Explaining the reasons for a minor difference between the allocation than proposed by the Ministry, the Ministry informed that the difference between proposed and approved Annual Plan by Planning Commission is mainly because of Rs. 8.59 crore proposed by SJVNL as the equity support from Government of Himachal Pradesh has been denied by Planning Commission since this is not considered to be part of IEBR.

1.18 The actual utilization of plan outlay for the last three years as against the Budget Estimates is shown below:—

(Rs. in crore)

Year	BE	RE	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	45,269.60	39,677.92	74.68%
2010-11	60,751.42	45,668.03	43,144.16	71.02%
2011-12	66,382.73	-	-	-

1.19 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. 66,382.73 crore. When the Committee asked for the reasons, the Ministry in reply stated as below:—

> "The Central Plan Allocation comprises of GBS and IEBR. Internal Extra Budgetary Resources are the resources raised by CPSU themselves to meet their capex requirements. The provision of Rs. 10,630 crore was kept under GBS during the year 2010-11 and

the provision of Rs. 9642 crore has been kept under GBS during the year 2011-12.

The IEBR has been fixed at Rs. 56,740.73 crore for the year 2011-12 against Rs. 50,121.42 in 2010-11. This is based on figures furnished by the PSUs in the format prescribed by the Ministry of Finance and approved by the Planning Commission. The estimates are given by the CPSUs."

1.20 The details for the year 2010-11 in regard to utilization of GBS are as under:—

(Rs. in crore)

	Plan	Non-Plan	Total
BE	10,630.00	133.58	10,763.58
RE	8,725.22	114.69	8,839.91
Actuals	8,494.23	106.98	8,601.21

1.21 Explaining the reasons for gap between Budget Estimates and actual utilization of funds, the Secretary, Ministry of Power while deposing before the Committee stated as below:—

"We had made provision of Rs. 10,630 crore while preparing Budget Estimates for the scheme. This provision was reduced to Rs. 8725.22 crore while preparing revised estimates. The provision of Rs. 5500 crore was reduced to Rs. 5000 crore for Rajiv Gandhi Grameen Vidyutikaran Yojana.

This reduction has been done because the States, the institution which are supposed to undertake the work of rural electrification are paid grants in proportion to the work done by them. Their works progressed in a slow pace due to certain reason. As a result, Rs. 500 crore were reduced.

Besides, we had to reduce about Rs. 1000 crore for R.A.P.D.R.P. programme also. It is because in the beginning the estimate for each town project was on the higher side and when tender process was started to sanction projects or while awarding the projects, at that time it was found that project cost for each town was for less. This is why we had to reduce allocation for it.

You must be aware that RAPDRP projects are in two stages. In part 'A' IT based infrastructure is used to fix AT&C loss. In the beginning we had estimated that it would cost Rs. 10,000 crore but later we come to know that this work can be completed in Rs. 7000 crore

only. We have got this assessment. Part 'B' covers work of strengthening distribution sector for which grant of 25% is given by the Union Government. The remaining amount has to be raised from financial institutions. The 25% which is given from the Central Budget under part 'B' in the beginning we provide only 15% out of that amount and after the completion of the work. Keeping in view the above, we prepared revised estimate as to how much amount would be spent in part 'B'. Due to this, we had to bring reduction in revised estimate of RAPDRP programme.

It can be seen that plan provision for the previous year was Rs. 10,000 crore and this year too. We propose to provide approximately the same amount. It has four major components which require expenditure. The first is RGGVY, second is RAPDRP and the third is Central Public Undertakings to whom we provide funds for setting up projects and the fourth item is energy conservation and energy efficiency programmes which are also provided funds.

We had to effect reduction in only two items *i.e*. RGGVY and RAPDRP out of them. As I have said there was no change and money was spent as per the provision."

1.22 Giving further details on the revised estimates and variations with the Budget Estimates, the Ministry of Power in their written reply have furnished the following information:—

(Rs. in crore)

Sl. No.	Name of the Schemes/ Projects	BE 2010-11	RE 2010-11	Variations between BE & RE	Remarks
1	2	3	4	5	6
1.	RGGVY	5,500.00	5,000.00	500.00	• Slow progress of works particularly in respect of North Eastern Region (NER) and other states like Orissa and Jharkhand wherein the concentration of village electrifica-tion works is comparatively more. • No progress from the States on closing of projects sanctioned during 10th Plan, due to non-appointment of

1	2	3	4	5	6
					franchisees, mandatory condition for closure. • Conformance to the model code of conduct on account of Legislative elections in Bihar States and consequent effect on RGGVY works. • Delay in energisation of completed villages due to non-availability of back-up sub-transmission infrastructure, forest / railway clearance, etc. and consequent fund consumption in States like Bihar and Jharkhand. • In view of the above the BE is revised to Rs. 5000 crore.
2.	R-APDRP	3,700.00	2,571.00	1,129.00	At the time of fixing the target for sanction and disbursement, it was assumed that the per town cost for Part-A (IT), Part-A (SCADA) and Part-B project would be around Rs. 3.50 cr, Rs. 30 cr and Rs. 25 cr respectively; 2nd tranche of 20% of the entire Part-A sanctioned projects would be disbursed in the current financial year and all the States would draw the 1st tranche of the GoI loan for Part-B (15% of the sanctioned cost). But at the RE stage it was observed that actual average per town cost of Part-B was coming around Rs. 15 crs. to Rs. 17 crs. and 2nd tranche for Part-A Projects was drawn by 4 States

1	2	3	4	5	6
					only in the financial year and all the States were not willing to draw the GoI loan for Part-B, as R-APDRP guidelines (only up-to 25% GoI loan for Part-B at GoI interest rate of 11.5%) permit them to take the cheaper loan from other sources. At RE stage it was expected that GoI loan will be disbursed to only 70% of the sanctioned projects for Part-B. Part-A(IT) projects had been sanctioned for almost all the eligible towns in the country and no more DPRs for Part-A(IT) was expected.
3.	CPRI	78.18	61.52	16.66	CPRI had earmarked Rs. 16.66 cr., towards equity participation of CPRI in the Joint Venture project M/s. NHPTL for implementation of Online test facilities for large power transformers. The proposal was still under consideration.
4.	Energy Conservation	143.94	127.94	16.70	There is an estimation that the funds earmarked for NMEEE in the current financial year possibly could not be spent pending certain clearances for the scheme. Accordingly, the allocation was reduced.
5.	BEE	66.92	61.84	5.08	The main scheme wise reasons for savings compared to BE is due to: **SME Scheme:** The competitive bids received for the first 7 clusters were much less than the initial estimate. Moreover, most of the subsequent

1	2	3	4	5	6
					activities are linked to the completion of energy use and technology Gap analysis which has taken more time than estimated. This resulted to revising BE of Rs. 6.49 crore to Rs. 5.25 crore. **Ag DSM and MuDSM Scheme:** Since the preparation of DPRs depends on the consent of the utilities as well as linked to segregation of feeders and HVDS system, the utilities have taken longer time than scheduled, which resulted the delay. The processes have now picked up and work in 92 municipalities and 8 states for AgDSM are in the final stage of completion. The BE of Rs. 8.37 crore has been reduced to Rs. 3.66 crore.
6.	Central Electricity Authority	15.00	8.43	6.57	Non-approval of new scheme *viz*. "Upgradation of IT facilities in CEA Phase-II". The approved scheme "Optimisation of National Grid Programme" was held up as MoP has appointed M/s Booz and Co. as consultants for preparation of National Strategy document for electricity transmission sectors, and it is felt that it will be financially prudent to wait for the report of the consultant; andUnder the approved scheme "Computerisation of PTCC Process", the physical target for 2010-11 was to appoint a consultant for which

1	2	3	4	5	6
					Expression of Interest (EoI) was published but the same was extended due to poor response received.
7.	National Power Training Institute	20.00	17.00	3.00	Due to non-availability of clearance for construction works from HUDA, Haryana in respect of NPTI's Project "Modernisation and upgradation of training facilities at Corporate Office Faridabad", the RE for 2010-11 has been reduced from Rs. 5.89 crore to Rs. 2.89 crore.
8.	National Electricity Fund	227.64	0.00	227.64	The scheme could not be materialized in 2010-11 Accordingly, the amount during RE reduced to Nil.

1.23 In reply to a question about quarterly utilization of funds by the Ministry of Power (cumulative) during 2010-11 comprising of GBS of Rs. 10,630.00 crore, the Ministry have given the following data:—

(Rs. in crore)

Plan		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4
2008-09 *	Actuals	364.03	1,675.44	2,736.58	6,044.86
	Percentage	6.07%	27.92%	45.61%	100.75%
2009-10 **	Actuals	7.58	2,009.48	5,261.92	6,710.45
	Percentage	0.08%	21.77%	57.01%	72.70%
2010-11 ***	Actuals	865.84	3,989.33	5,364.06	8,494.23
	Percentage	8.15%	37.53%	50.46%	79.91%

1.24 The above figures are cumulative; the quarter-wise figures for plan expenditure for the year 2010-11 are 8.15% in 1st quarter, 29.38% in 2nd quarter, 12.93% in 3rd quarter and 29.45% in 4th quarter.

1.25 When enquired by the Committee about erratic quarterly utilization of funds, the Ministry of Power stated:—

> "For schemes like RGGVY, the funds are demanded on the basis of expected progress by the States towards implementation of the

sanctioned projects. However, due to various reasons, like delay in awards, delay in allotment of land for substations, delay in issuance of way bills, the actual supply of materials and execution of work get delayed and actual utilization of funds in some cases does not take place as per planning. Ministry has formulated a standard 18 month project cycle and the payments are related to the progress made under the projects, which is expected to make the situation better.

For certain projects/schemes in North East, efforts are made to ensure timely utilisation of allocated fund for the year. However, due to relatively long monsoon period in the North Eastern Region (April to September), generally the rate of progress of works in various project sites suffer badly which in turn causes less utilisation of allocated funds during the 1st two Quarters. This situation is improved considerably during the last two Quarter in the dry spell (October to March)."

1.26 When the Committee desired to know about the measures taken by the Ministry to ensure that the funds are utilized uniformly throughout the financial year and not in the last months alone, the Ministry stated as follows as follows:—

"The expenditure pattern is monitored on a weekly/monthly/quarterly basis by the JS and FA(P). Secretary (Power) also monitors the progress in the Senior Officers' Meeting. Performance of various CPSEs/organizations under the Ministry and important projects are monitored in the quarterly meeting. The instructions are issued from time to time for expediting the expenditure with a view to achieve their set targets as per the Monthly Expenditure Plan given in the Demands for Grants."

B. Power Generation and Capacity Addition Program

Capacity Addition Target for 2010-11

1.27 A capacity addition target of 20,359 MW had been fixed for 2010-11. It's Sector-wise Fuel-wise break up is as under:—

	Central Sector	State Sector	Private Sector	Total
Thermal	5,890	6,012	5,891	17,793
Hydro	529	597.5	219.5	1,346
Nuclear	1,220	0	0	1,220
Total	7,639	6,609.5	6,110.5	20,359

1.28 Against this target, a capacity addition of 12,160.50 MW (60% of target) has been commissioned during the year 2010-11. The Ministry of Power explaining the shortfall in achievement of targets have enumerated the following main reasons for non-achievement of the capacity addition targets:—

- Slow progress of civil works.
- Poor Geology.
- Flash flood.
- Delay and non-sequential supply of material for main plant.
- Shortage of skilled manpower for erection and commissioning.
- Contractual dispute between project developers and their sub-vendors/sub-contractors.
- Inadequate deployment of construction machinery.
- Shortage of fuel.
- Law and order problems.

1.29 Regarding the performance in capacity addition during the financial year 2010-11, the Secretary, Ministry of Power, during evidence before the Committee stated:—

> "Last year, in 2010-11, we synchronized projects of about 16 thousand MW and it is the highest among the ongoing capacity addition programme. It is worth remembering that during 10th Five Year Plan, we achieved a capacity addition of 21,000 MW through synchronization of 21,000 MW during a period of five year, and on the other hand, we synchronized 16,000 MW in a period of only one year, *i.e.* in the year 2010-11. We could run the projects of upto 12,160 MW at full capacity from the entire projects of 16,000 MW. It is also worth mentioning that last year a Super Critical Unit was commissioned in private sector and one Super Critical Project of NTPC was synchronized in Public Sector.
>
> This is the story of capacity addition regarding this, we can definitely say that we made a capacity addition of 9,500 MW in 2009-10, and synchronized 16,000 MW in 2010-11. Moreover, we operated 12,160 MW at full capacity. So, capacity addition is showing a rapid increase. We shall try for more capacity addition in the coming years."

1.30 Total Installed Power Generation Capacity of the Country:—

Sector	MW	%age
State Sector	82,452.58	47.49
Central Sector	54,412.63	31.34
Private Sector	36,761.19	21.17
Total	1,73,626.40	

Fuel	MW	%age
Total Thermal	1,12,824.48	64.98
Coal	93,918.38	54.09
Gas	17,706.35	10.20
Oil	1,199.75	0.69
Hydro (Renewable)	37,567.40	21.64
Nuclear	4,780.00	2.75
RES (MNRE)	18,454.52	10.63
Total	1,73,626.40	100.00

1.31 The power supply position in the country during 2007-08 to 2009-10:—

	Energy				Peak			
Year	Require-ment	Availa-bility	Surplus/ Deficts(-)		Peak Demand	Peak Met	Surplus/ Deficts(-)	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
2007-08	7,39,345	6,66,007	73,338(-)	9.9	1,08,866	90,793	18,073(-)	16.6
2008-09	7,77,039	6,91,038	86,001(-)	11.1	1,09,809	96,785	13,024(-)	11.9
2009-10	8,30,594	7,46,644	83,950(-)	10.1	1,19,166	1,04,009	15,157(-)	12.7

1.32 A generation target of 8,31,000 Million Unit (MU) was fixed for the year 2010-11, comprising 6,90,857 MU of thermal, 1,11,352 MU of hydro, 22,000 MU of nuclear power and 6,548 MU import from Bhutan, with a growth rate of 7.7% over the actual generation (7,71,200 MU) during 2009-10. Category-wise target and achievement during 2010-11 is as under:—

Category	Planned/Target (MU)	Actual (MU)	Achievement (%)
Thermal	6,90,857	6,65,008	96.26
Nuclear	22,000	26,266	119.39
Hydro	1,11,350	1,14,257	102.61
Bhutan Import	6,548	5,611	85.69
Total	8,30,757	8,11,142	97.64

1.33 On being asked for the reasons for shortfall in achievement of generation targets for the year 2010-11 and preemptive measure being taken to avoid this in 12th Plan, the Ministry of Power stated:—

> "During the year 2010-11, 811.142 BU against the target of 830.757 BU was achieved. The achievement was 97.64% of the target. Achievement of generation target is primarily dependent on commissioning and stabilization of new generating units and availability of fuel and water for generation of thermal and hydro power respectively. While rigorous monitoring of capacity addition and stabilization of units is done by the Ministry, inadequacy of domestic coal has been taken up with Hon'ble Prime Minister and a Group of Ministers has been set up. The target for electricity generation is fixed on a year-to-year basis prior to commencement of the next financial year and not for the entire Five Year Plan. The capacity addition targets are fixed for the five year plan. Rigorous monitoring of capacity addition will be continued for the 12th Plan projects. Augmentation in supply of coal and gas will be planned with Ministry of Coal and Ministry of Petroleum and Natural Gas. Progress of development of captive coal blocks is also being monitored."

C. Fuel Supply for Power Sector

1.34 Thermal generation continues to remain the mainstay of electricity generation in the country. While, the share of thermal power is around 63% of the installed capacity, its contribution to the total generation is 83%. Out of the thermal power generation, coal based generation forms the bulk of generation, contributing approximately 2/3rd of the total electricity generation in the country from an installed capacity of about 53%.

1.35 The coal requirement, anticipated availability as well as consequential gap are given below:—

Coal Requirement and Supply for the year 2011-12 in respect of plants designed on domestic coal

(Figures in Million Tonne)

1.	Coal requirement for plants designed on indigenous Coal	480
2.	Coal Availability from indigenous sources:—	
2(a)	From CIL Sources	319
2(b)	From SCCL	33
2(c)	From captive Mines	22

2(d)	Total coal availability from indigenous sources	374
3.	Shortfall of indigenous coal [1 – 2(d)]	106
4.	Coal to be imported to meet the shortfall for plants designed on indigenous coal	70
5.	Ceiling of imported coal in view of domestic coal availability of 374 Million Tonne and the 10% blending limit in the candidate TPSs.	29
6.	Domestic coal equivalent of imported coal	43.5
7.	Gap (in terms of Domestic coal) [3 – 6]	62.5*

* 62.5 MT coal translates to roughly 12,500 MW (87.5 Billion Unit at 80% PLF)

1.36 The Ministry of Power has reported that Coal India Limited had indicated availability of 360 Million Tonne (MT) coal for the power utilities for the year 2011-12. This has been reduced to 319 MT during the Annual Plan discussions of the Ministry of Coal held in Planning Commission on 27th January, 2011. With a substantial reduction of 41 MT from Coal India Limited in 2011-12, new generating capacity of around 15,000 MW would become stranded/under-utilized for want of coal.

1.37 The supply of coal by Coal India Limited (CIL) to the Power Utilities during the last few years has been falling short of requirement for meeting the electricity generation target and building stock of coal at the power stations up to normative level. Consequently import of coal has been increasing from 4.5 Million Tonne in 2004-05 to around 10 Million Tonne during 2005-06 to 2007-08, before touching 16 Million Tonne in 2008-09 and 23.2 Million Tonne (MT) in 2009-10. As supply of coal is falling short of the target, generation loss has been reported by the Power Utilities. The loss reported by the utilities was of the order of 10.9 Billion Unit in 2008-09, 14.5 Billion Unit in 2009-10 and around 6.9 Billion Unit in 2010-11 (April, 2010 to February, 2011). The problem is likely to get further aggravated from the year 2011-12 in view of the accelerated generation capacity addition, inadequate availability of coal from Coal India Limited and limitations in blending beyond 10% due to boiler design constraints.

1.38 Confirming the acute shortage of coal to power sector, the Secretary, Ministry of Power before the Committee has deposed as under:—

> "Sir, the first thing that we have to see here is, so far we have been pursuing capacity addition in a way where the requirement of coal by the sector has been lower than what Coal India could give us. Now, in the last two years things have changed to an extent where

the capacity addition has increased far beyond the supply that the Coal India has been able to make. That is the reason why there is suddenly a gap between the availability of coal to the power sector and the demand of the power sector..... The projection being given by the Ministry of Coal, CIL is much less in comparison to the demand and requirement of coal. It seems that due to this factor, the projects commissioned in 2009-10 and 2010-11 will get very reduced supply of coal. The projects commissioned in 2009-10 will operate at 40-50 PLF and perhaps the projects commissioned in 2010-11 will not get coal at all. We have taken up this matter at the highest level. A Group of Ministers has been constituted on this issue and it is considering this matter, but supply of coal has remained a very big challenge."

1.39 The Ministry of Power has further reported that during the year 2011-12, the long-term linkage/letter of assurance quantity/ requirement of coal for CIL linked Thermal Power Stations (TPSs)— including the stations requiring tapering linkage —commissioned/expected to be commissioned after 1st April 2009 is as under:—

(a)	TPSs commissioned during 2009-10 (5593 MW)	26 MT
(b)	TPSs commissioned/expected to be commissioned during 2010-11 (7,201 MW)	29 MT
(c)	TPSs targeted for commissioning during 2011-12 (11,858 MW—Part Requirement in 2011-12)	20 MT
	Total	75 MT

1.40 From the above, it is evident that against a requirement of 75 MT for TPSs linked with CIL, additional coal availability would only be 13 MT (319 — 306) as CIL's production and performance has not kept pace with the performance of power sector. This, along with 10% blending of imported coal (equivalent to 15% of domestic coal), will be adequate only for operating new plants of about 3,000 MW during the year. As on 1st April, 2011, new capacity of about 8,000 MW is likely to be stranded/ under-utilised for want of domestic coal. This figure of new capacity will reach 15,000 MW on 1st April, 2012. The 306 MT coal already tied up with the capacity commissioned upto 31st March, 2009 through FSAs being 306 MT, balance 13 MT coal cannot be distributed among the power plants requiring coal to the tune of 75 MT. The coal available from Coal India Limited (319 MT), SCCL (33 MT) and captive mines (22 MT) restricts the quantity of coal which can be imported to approximately 29 MT, which is equivalent to 43.5 MT of domestic coal.

1.41 Further, the quantity of globally available coal being limited, increase in the quantum of import has the tendency to push up the prices

of imported coal. Due to surge in demand for imported coal and floods in Australia, the prices of coal have already gone up substantially in the recent months. Given the financial health of State Electricity Distribution Companies in the country, the power utilities are reluctant to increase import of coal. In fact, the utilities have already started urging that the directions for import of coal may be reviewed as high cost of power with blending of imported coal has started impacting their operations and finances. The cost of power with 10% to 15% blending of imported coal has, depending on the location of the plant, lead to increase in power generation cost by 30 – 35 paisa per kWh. Further, some of the generating units, though available, did not get the despatch schedule on account of being lower in the merit order despatch. Discoms have also reported that due to blending of imported coal, the average per unit cost of power procurement having gone higher than the average power purchase price approved by the SERC, there is under recovery.

1.42 In regard to issue of "Go/No-Go" areas as indicated by the Ministry of Environment and Forest in respect of coal blocks the Ministry of Power have stated that the shortages in coal supply may further aggravate because 203 coal blocks (including 26 of power sector) have been placed in the No-Go list. Around 660 MT of future coal production is likely to suffer which will adversely affect our capacity addition and power generation programme.

1.43 The Ministry of Power have further stated that the concept of "Go/No-Go", though without any legal basis, has created tremendous uncertainty and affected the power project execution. Around 8 projects (13,560 MW) are in advanced stage of development, 2 UMPPs (8,000 MW) (Chhattisgarh and Orissa) have been kept on hold and many Central/ State and private projects (11,300 MW) are affected. Developers have now adopted a "wait and watch" policy on coal blocks/linkages and this has started adversely affecting power projects and the capacity addition programme. With this uncertainty, the Ministry of Power may find most difficult to achieve its capacity addition and generation targets.

1.44 When the Committee desired to know the progress made in regard to development of the coal blocks allotted to power utilities, the Secretary, the Ministry of Power during the evidence stated:—

> "The NTPC has six coal blocks allotted to them out of which one coal block they have finalized mining. They have given it to a mine developer. His work will start very soon. Out of the five, there are four coal blocks where evacuation is going to be a problem. There is a particular railway line that needs to be developed to evacuate the coal and the present alignment that was suggested for this line

was not accepted by the Ministry of Environment and Forests because of forest considerations and because of wildlife considerations. So, this alignment itself has to be changed so that the other four coal blocks can be mined."

1.45 When the Committee desired to know the progress made in acquiring the coal mines abroad to mitigate the acute shortage of coal in the country, the Ministry of Power replied that so far as NTPC is concerned, proposals for acquisition of coal mines abroad received from investment bankers as well as mine owners from countries like Indonesia, South Africa, Mozambique and Australia are under review and discussion with respective parties.

1.46 Explaining the constraints in importing of coal to meet the growing demand of coal for power sector the Secretary, the Ministry of Power has stated:—

"When you come for coal availability, importing coal from outside the country, this has one serious difficulty which is that the boiler designs of our plants are such that you cannot take more than 10 per cent of imported coal. The imported coal also has to be in proportion to the domestic coal that is available. You cannot run domestically designed plant purely on imported coal. It can add some to the domestic coal availability. It cannot replace it. So, domestic coal is absolutely essential and crucial. We cannot escape that. That is why we have been saying again and again that Coal India needs to improve the availability of coal to the power sector."

1.47 When the Committee desired to know about the specific steps taken to ensure that adequate quantity of coal is supplied to the Power Utilities in time, the Ministry of Power has stated:—

"The inadequacy of coal supply from Coal India Limited (CIL) to the Power Utilities has been brought to the notice of Hon'ble Prime Minister by the Ministry of Power and a Group of Ministers headed by Union Finance Minister has been constituted. Ministry has made the following suggestions to the Group of Ministers:—

(i) Optimum exploitation of authorized capacity of mines by CIL

(ii) Committed liability of CIL towards Power Utilities as per linkage/LOA be honoured before resorting to e-auction at a premium over the notified price as is being done by SCCL.

(iii) Coal stock at mine head be liquidated."

D. Development of Hydro Sector

1.48 Based on the studies for re-assessment of hydro-electric potential of the country, completed by Central Electricity Authority in 1987, identified hydropower potential in the country is 1,48,701 MW (1,45,320 MW–Above 25 MW). This includes 62,604 MW of potential in North Eastern (NE) Region (including 4,248 MW in the State of Sikkim). The identified potential in NE Region including Sikkim together constitutes about 43% of the total identified hydro power potential in the country.

1.49 Out of the above, a capacity of 1,686 MW has so far been harnessed in NE region including Sikkim (2.7% of the identified capacity) while another about 10.8% (6,752 MW) is presently under construction. Thus, about 86.5% of the identified hydro capacity is yet to be exploited. When the Committee desired to know about the steps taken by the Government to harness the hydro power potential of the country especially in North-Eastern Region, the Ministry of Power in their reply have enumerated the following measure that are being taken:—

"(a) **Policy Liberalisation for encouraging Private Sector Participation** in order to bring in additionality to resources for the capacity addition in the Power Sector.

(b) **Policy on Hydro Power Development, 2008** has been notified by Government of India on 31.3.2008 which aims to provide level playing field to private developers and provides for a transparent selection criteria for awarding sites to private developers and also for provision of merchant sales of upto a maximum of 40% of the saleable energy.

(c) **National Water Policy, 2002** which stipulates that in the planning and operation of system, water allocation priority should broadly be in the order of drinking water, irrigation, hydro power, ecology, agro industries and non agriculture industries, navigation and other uses.

(d) **Electricity Act, 2003** has come into force since 10th June, 2003 replacing the earlier Electricity Act 1910, the Electricity (Supply) Act 1948 and Electricity Regulatory Act 1998 which has emphasized the development of hydro power and safety of the structures including dam etc.

(e) **National Electricity Policy** was announced by Government in Feb.'2005, which lays emphasis on harnessing hydro potential speedily to facilitate economic development of

States, particularly the North-Eastern States, Sikkim, Uttaranchal, Himachal Pradesh and Jammu and Kashmir.

(f) **National Policy on Rehabilitation and Resettlement, 2007** has been announced by Government of India in order to protect the interests of affected persons and families whose land, property or livelihood is affected by land acquisition or by involuntary displacement of a permanent nature due to any other reason.

(g) **Mega Power Projects Policy** has been revised, as per which the minimum qualifying capacity of thermal power plants to avail mega project benefits, has been reduced from 1000 MW to 700 MW in certain special category State of Jammu and Kashmir, Sikkim and the seven states of North East. The corresponding qualifying threshold capacity for hydro power plants located in the states of Jammu and Kashmir, Sikkim and the seven states of North East, for availing mega benefits has been reduced from 500 MW to 350 MW.

(h) **Advance Action for 12th Plan** A capacity addition of about 1,00,000 MW had been originally envisaged in the country during 12th plan which included 87 candidate hydro projects with an aggregate installed capacity of 20,334 MW which comprised 32 no. of projects with total installed capacity of 10060 MW (benefits during 12th Plan - 8560 MW) in North-Eastern Region and Sikkim. However, due to amalgamation of few projects and subsequent change in installed capacity, the no. and the total installed capacity of candidate hydro projects in North Eastern Region and Sikkim for benefits during 12th Plan has now been revised to 29 no. of schemes aggregating to 10710 MW (benefits during 12th Plan - 9510 MW).

The state-wise summary of candidate hydro projects in North Eastern Region and Sikkim identified for benefits during 12th Plan is given below:—

	Nos.	I.C. (MW)
1	2	3
NE Region		
Assam	1	150
Manipur	1	66
Meghalaya	-	-

1	2	3
Mizoram	-	-
Arunachal Pradesh	16	8,453
Nagaland	-	-
Total (NER)	18	8,669
Sikkim	11	2,041
Total (NER+ Sikkim)	29	10,710

(i) **50,000 MW Hydroelectric Initiative** under which Preliminary Feasibility Reports (PFRs) of 162 hydro-electric projects (47,930 MW) were prepared in the year 2003-04 which includes 62 no. of schemes with aggregate installed capacity of 30416 MW in N.E. region and 10 no. of schemes in Sikkim with aggregate installed capacity of 1469 MW. As a follow up of preparation of PFRs, it was decided to take up implementation/preparation of DPRs for attractive schemes-selected from PFR schemes thereby providing a shelf of projects for execution in the near future.

(j) **H.E. Schemes Allotted for implementation in NER and Sikkim:**

In NER and Sikkim, 112 HE Schemes with aggregate capacity of 35196.5 MW have been allotted to private sector while 13 HE Schemes with an aggregate capacity of 8977 MW have been allotted to CPSUs for implementation during 12th Plan and beyond as given below:—

Name of State	Central		Private		Total	
	No.	I.C. (MW)	No.	I.C. (MW)	No.	I.C. (MW)
Arunanchal Pradesh	3	4,400	86	31,375.5	89	35,775.5
Assam	-	-	-	-	0	0
Manipur	2	1,566	-	-	2	1,566
Meghalaya	1	85	5	1,124	6	1,209
Mizoram	5	2,196	-	-	5	2,196
Nagaland	-	-	1	165	1	165
Total (NER)	11	8,247	92	32,664.5	103	40,911.5
Sikkim	2	730	20	2,532	22	3,262
Total (NER+Sikkim)	13	8,977	112	35,196.5	125	44,173.5

(k) **Constitution of Inter-Ministerial Group (IMG):**

An Inter-Ministerial Group (IMG) had been constituted by Ministry of Water Resources (MoWR) on 7th August, 2009 under the Chairmanship of Secretary (WR) on the directions of Prime Minister's Office (PMO) to evolve a suitable framework to Guide and accelerate the development of Hydropower in the North East. Ministry of Power was also represented in the Committee.

The IMG Group submitted its report in Feb. 2010 highlighting policy interventions in respect of major issues/constraints in the way of expeditious growth of hydro power development in North Eastern Region and Sikkim like Environment and Forest Clearance, Development of Infrastructural facilities, Cumulative Environmental Impact Assessment (EIA) studies for Assessing down-stream impact of hydro power development in Arunachal Pradesh, Evacuation of Power etc.

(l) A Task Force under the Chairmanship of Hon'ble Minister of Power with Deputy Chairman, Planning Commission, Minister of Water Resources, Minister of New and Renewable Energy, Minister of Environment and Forest and Ministers of Power from Hydro rich states has been constituted to look into all issues relating to development of Hydro Power."

1.50 The Ministry of Power have further stated that in addition to the above Policy Measures, other measures are also being taken for ensuring the timely completion of the projects presently under construction for benefits during 11th and 12th Plan period which are given below:—

"(a) Monitoring of Ongoing Hydro Projects:—

(i) Advisory Group:

An Advisory Group has been set up under the chairmanship of the Minister of Power to advise for expeditious completion of ongoing power generation projects.

(ii) Special Monitoring Group:

A special monitoring group (SMG) under the chairmanship of Secretary (Power) has been constituted to discuss and sort out various issues through video conferencing for Jammu and Kashmir and North-Eastern Region.

(iii) Following mechanism is in place to monitor the progress of projects under construction:

- Central Electricity Authority (CEA) is performing the duties (monitoring of the power projects) in pursuance of 73 (f) of Electricity Act, 2003. The progress of each project is monitored continuously through frequent site visits, interaction with the developers, and critical study of monthly progress reports. Chairperson, CEA holds review meeting with the developers and other stakeholders to sort out the critical issues.
- A Power Project Monitoring Panel (PPMP) has been set up by the Ministry of Power to independently follow up and monitor the progress of the hydro projects.
- Review meetings are taken by Ministry regularly with the concerned officers of CEA, equipment manufacturers, State Utilities/CPSUs/Project developers, etc.

(b) Monitoring of Future Hydro Projects:

In addition to the Task Force which has been constituted under the Chairmanship of Hon'ble Minister of Power as mentioned above, regular meetings are taken by Chairperson, CEA to review the status of future hydro projects allotted to various developers like preparation of DPR, status of E&F clearance, likely date of placing of order etc."

1.51 In regard to the status of hydro electric power projects under execution in the North-Eastern States, the Ministry of Power has furnished the information given below:—

"The status of hydro electric projects as per target fixed in the Mid-Term appraisal for the 11th Plan which are under execution in North-Eastern States including Sikkim.

Sl. No.	Name of Project, Location and Installed Capacity	Original schedule of completion/ Revised commissioning schedule	Present status	Reasons for delay in completion schedule
	Meghalaya			
1.	Myntdu Leshka 2x42+1x42 =126 MW Distt.-Jaintia Hills	2006-07 / 2011-12	Civil works of Dam, HRT, HPT, Surge Shaft, Surface Penstock, Power House completed. HM and E&M works are in progress.	• Delay in award of major works. • Damage caused to works including power house due to flash flood in Oct., 2009 and again in May, 2010.
	Sikkim			
2.	Chujachen 2x49.5 =99 MW Distt.-East Sikkim	2009-10 / 2011-12	Civil works of Rongli Dam completed and for Rangpo Dam is in progress. Works for Surge Tank, HRT, surface penstocks are in progress. Both units are boxed up.	• Flash flood in April, 2009, washed away Coffer dam of Rangpo dam. • Slow progress of HRT concreting.
3.	Teesta Stage-III 3x200=600MW Distt.-North Sikkim	2011-12	Works of HRT, Pressure shaft and Power House are in progress.	• Erection of E&M equipment. • Pressure shaft Completion.

1.52 When the Committee asked for the issues/constraints which hinder the way of expeditious growth of hydro power development in North-Eastern Region, the Ministry in their reply have stated as below:—

"Some of the major issues/constraints in the way of expeditious growth of hydro power development in North-Eastern Region and Sikkim, as identified by the Group in its report submitted in Feb., 2010 and the proposed policy interventions are discussed below:—

(i) Environment and Forest Clearance

In view of the requirement of compensatory afforestation in lieu of forest land diverted for construction of Hydropower

Projects there is an urgent need to identify the non forest/ degraded forest land by the States especially the Arunachal Pradesh. It is therefore important that the NE States prepare an inventory of available non-forest and degraded forest land which may be offered for compensatory afforestation.

Further, the State level clearance for environment and forest takes a long time resulting in delay in implementation of projects. Therefore, States may prepare a time schedule for various steps involved in these clearances at State level.

(ii) Infrastructural facilities

Hydro electric projects identified in North-Eastern Region need infrastructural facilities like construction of bridges, strengthening of existing roads, efficient and reliable telecommunication links, better road transport/air services etc. Therefore, priority needs to be accorded by Ministry of Road Transport and Highways (MoRTH) for development of infrastructural facilities.

(iii) Non-Availability of hydrological and other data

State Government to facilitate availability of hydrological data/ details and topo-sheets/bench-marks for development. Creation of a Data Bank in certain central agency like CWC could also be considered so that developers have access to the already available hydrological data.

A proposal in this regard was prepared by MOWR for release of hydrological flow data especially relating to Brahmaputra basin to Private Developers in NE region and has been sent to Cabinet Secretariat.

(iv) Assessing the impact of the massive hydro power development in Arunachal Pradesh on down-stream areas in Assam

Most of the schemes, allotted by the States for implementation during 12th Plan period and beyond, are run-of-river (ROR) type developments, while only a few schemes are storage type development.

Therefore, Cumulative Environmental Impact Assessment (EIA) studies for these projects were proposed to be carried out as per the guidelines of MoEF. TOR for the same have since been finalized.

(v) Funding arrangements

Due to paucity of funds the development of Hydro projects has been slow. Further, HE projects are cost intensive and have long gestation periods ranging from 6 to 10 years. It was, therefore, proposed that Finance Ministry may be requested to consider issuing appropriate guidelines for financial Institutions/Banks to provide long term, low interest bearing debts with 16-20 years tenure to HE projects with long gestation.

(vi) Problems associated with Evacuation of Power

Considering enormous capacity additions envisaged during the forthcoming Plans, the associated transmission system needs to be firmed up well in time so that completion of the transmission lines matches the commissioning schedule of concerned projects and the power generated in the region could be exported outside the region.

The transmission system for this generation would be traversing through narrow passage at Siliguri termed as 'Chicken Neck Area' which also envisage transmission of power from Sikkim and Bhutan as well to Northern and Western Regions in the country. Therefore, the facilities presently available and the scope of further development in this sector may become a bottleneck in transmission system.

(vii) Non-Availability of skilled man-power

Due to enormous hydro capacity additions envisaged in the near future, there is likely to be considerable shortage of the skilled man-power. It has therefore, been proposed that Project Authorities will take up opening of ITIs and other training institutes for skill development of local population who can be employed in the project in construction stage and operation stage.

A proposal in this regard, to allow this cost in the project cost, in respect of projects with capacity of 300 MW and above has been put up to MoP *vide* ID No.CEA/E&C/EPD/417/2007/1555 dt. 8.10.09 for making appropriate additions to the National Electricity Policy, the Tariff Policy and Standard Bidding Guidelines and also intimated CERC accordingly *vide* D.O. No. CEA/E&C/EPD/417/2007/1582 dt. 12.10.09. The same need to be expedited.

(viii) Conversion of Storage Schemes into ROR Schemes

Government of Arunachal Pradesh has decided that the hydro power projects in the State would be developed as run of river projects and as far as possible, storage projects involving high dam should be avoided. At the same time, it is true that only a limited storage sites are available. The storage based hydro electric schemes are not only helpful to firm up the hydro power generation especially during the lean flow season and also provide water storage for flood moderation. These projects would also help in mitigating the impact of proposed diversion of waters by China.

Therefore, Government of Arunachal Pradesh could be directed to allot atleast one storage project in each sub basin of Siang, Lohit and Subansiri rivers.

A Task Force under the Chairmanship of Hon'ble Minister of Power with Deputy Chairman, Planning Commission, Minister of Water Resources, Minister of New and Renewable Energy, Minister of Environment and Forest and Ministers of Power from Hydro rich states has been constituted to look into all issues relating to development of Hydro Power."

1.53 On being asked whether the Ministry of Power is contemplating setting up of hydro power projects on the lines Ultra Mega Power Projects, the Ministry replied:—

"Water and Water Power are State subject. The allocation of hydro projects is in the purview of State Government. As regard, setting up of Mega Hydel Projects on the lines of Ultra Mega Power Projects (UMPPs), Ministry of Power came out with a new Hydro Policy in the year 2008. States have been requested to identify suitable site which they would like to offer under this Model. Agencies will then be identified to prepare the DPR, obtain the necessary clearances, acquire land and to manage the bid process on the lines of the work that was done by Power Finance Corporation for Thermal UMPPs."

E. Renovation and Modernization

1.54 Renovation and Modernization (R&M) is seen as a cost-effective option to maximize generation from the existing thermal power stations and better asset management. R&M, as a structured programme, was first taken up in September, 1984 for execution during the Seventh Plan. The programme had since been continuing with varying degree of success.

In the initial phase up to IXth Plan period there had been significant improvement in plant performance resulting in increased generation, however, there has been limited success thereafter.

1.55 The PLF in the country during 2006-07 to 2009-10 is as under:—

Year	Central	State	Private
2007-08	86.70	71.90	90.80
2008-09	84.30	71.17	91.01
2009-10	85.49	70.90	85.68
2010-11*	83.13	63.93	72.88

*Upto December, 2010

1.56 49 units (12,950 MW) for implementation of R&M work and 20 units (2794 MW) for implementation of Life Extension (LE) Programme for power plants under central power utilities were identified R&M work during the 11th Plan.

1.57 On being enquired by the Committee in regard to physical and financial targets and achievement of the Government for R&M programme of power generation projects during the 11th Five Year Plan, the Ministry of Power have stated as under:—

> "Units identified for LE works during the 11th Plan include 53 numbers (7318 MW) out of which 33 numbers (4524 MW) are in States sector and 20 numbers (2794 MW) are in central sector. Similarly for R&M works, a total number of 76 units (18965 MW) out of which 27 units (6015 MW) in States sector and 49 units (12950 MW) in central sector have been identified for implementation during the 11th Plan.
>
> LE/R&M status during 11th Plan (From April'2007 to December'2010)
>
> The LE works in 12 units (1171 MW) and R&M works in 61 units (14960 MW) were completed during the period from April'2007 to December'2010 and an additional generation of 1286 million unit per annum which is equivalent to 184 MW has been achieved after carrying out Life Extension works in these 12 number of thermal unit."

The Ministry of Power further reported that the above exercise has accrued additional generation of 610 MU per annum.

1.58 When the Committee desired to know the reasons for the shortfall in achievement of targets set under Renovation and Modernization (R&M) of Power Plant for 11th Plan, the Ministry replied as below:—

> "R&M activities unlike new supplies are more complex in nature and require integration of existing equipment with new supplies. BHEL being the original equipment manufacturer (OEM) for large number of power generating units in the country, sometimes find difficult to adhere to the original supply schedule in case of R&M projects. Though, BHEL is monitoring R&M works at corporate level, more emphasis needs to be given by BHEL for timely execution of R&M works. The reasons for the shortfall in achievement of targets are as under:—
>
> - Non-availability of funds and poor financial condition of State Electricity Boards (SEBs).
> - Non availability of dedicated R&M team with most of the SEB's/PSU's.
> - In power deficits scenario utilities hesitate to take longer shut down for undertaking LE works.
> - Delay in supplies of equipment by the suppliers.
> - Lack of co-ordination between the contractor and their sub-contractor.
> - Shortage of BOP suppliers/contractors in the country.
> - Surprises, when the unit is opened up for carrying out the R&M/LE works, new defects or damaged components are observed resulting in delay in procurement and rectification.
> - Termination of supply contract from original suppliers from Russia, as in the case of Obra TPS's.
>
> Supplies of some critical spares in case of Bathinda TPS and Gandhinagar TPS."

1.59 In respect of perspective planning for the 12th Plan period, the Ministry of Power have reported that under 12th Plan, life extension works have been identified on 72 thermal units of total capacity 16532 MW. This includes 30 units (5860 MW) from State sector and 42 units (10672 MW) from central sector. R&M works have been identified on 23 units (4971 MW) during the 12th Plan, out of this 11 units (4050 MW) are from NTPC, 9 units (291 MW) are from NEEPCO and 3 units (630 MW) are from State sector.

IV. MINISTRY OF POWER SCHEME (FUNDED THROUGH GBS)

A. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

1.60 This Scheme of Rural Electricity Infrastructure and Household Electrification has been introduced in April, 2005 for achieving the National Common Minimum Programme objective of providing access to electricity to all Rural Households over a period of four years. Rural Electrification Corporation (REC) is the nodal agency for the programme.

1.61 The continuation of RGGVY has been approved by the Government in the XI Plan for attaining the goal of providing access to electricity to all households, electrification of about 1.15 lakh un-electrified villages and electricity connections to 2.34 crore BPL households. The approval has been accorded for capital subsidy of ₹ 28,000 crore during XI Plan period, at this stage.

1.62 In regard to the achievement under Rajiv Gandhi Grameen Vidyutikaran Yojana, the Secretary, Ministry of Power during the evidence before the Committee stated:—

> "In the year 2010-11, we had a target to complete the work related to electrification of 17,500 villages. In that context, we have completed the electrification of 18,306 villages. By adding that work we have completed the electrification of 96,562 villages by March, 2011. As long as the matter of releasing electricity connection to BPL families is concerned in 2010-11, we released connection to 58,83,000 families against the target of 47 lakh and with that addition we have provided connection to one crore and sixty lakh people by March, 2011."

1.63 The Year-wise physical and financial targets and achievements for the sanctioned projects under RGGVY are as under:—

Physical

Year	Un/de-electrified villages		BPL Households	
	Target	Achievement	Target	Achievement
1	2	3	4	5
2005-06	10,000	9,819	Not specified	16,815
2006-07	40,101	28,706	Not specified	6,55,773
2007-08	9,000	9,301	16,00,000	16,21,182
2008-09	15,000	12,056	35,00,000	30,84,788

1	2	3	4	5
2009-10	17,500	18,374	47,00,000	47,18,468
2010-11	17,500	18,306	47,00,000	58,83,355
2011-12	14,500	509 (as on 30.04.2011)	47,00,000	1,92,010
Cumulative achievement		97,071		1,61,72,391

Financial

(Rs. in crore)

Year	Allocation of funds	Subsidy disbursed
2004-05	400.00	400.00
2005-06	1,100.00	1,100.00
2006-07	3,000.00	3,000.00
2007-08	3,944.56	3,913.45
2008-09	5,500.00	5,500.00
2009-10	5,000.00	5,000.00
2010-11	5,000.00	5,000.00
2011-12	6,000.00	0.00
Total	29,944.56	23,913.45

1.64 Elaborating the experience of implementing RGGVY in its present form, the Ministry stated that the experience of the Government of India in the implementation of RGGVY in present form has been mixed. Some of the states have performed very well, but some of the states especially where majority of the works are getting implemented have not risen to the occasion. As on 15.01.2011, in case of some of the States such as Orissa, Jharkhand, Assam, Meghalaya, Arunachal Pradesh, Chhattisgarh, Rajasthan, Manipur, Mizoram and Himachal Pradesh, a large proportion of the target for electrification of villages have not been achieved.

1.65 When the Committee desired to know the inordinate delay in execution of the projects in some of these States, the Ministry of Power, enumerated the following reasons responsible for the same:—

(i) Delay in award of sanctioned projects by the State utilities.

(ii) Delay in forest clearance for the land proposals required for execution of the Projects in some States.

(iii) Delays in land acquisition for 33/11 KV sub-stations by States.

(iv) Limited number of good agencies available for execution of turnkey contracts.

(v) Delays in issuance of road permit and way bills in some States.

(vi) Very poor upstream transmission infrastructure in some States.

(vii) Delay in providing authentic BPL lists by some States.

(viii) Delay in taking decision to waive State and local taxes on line materials by some States.

(ix) Difficult terrain in some States."

1.66 In reply to a further question about implementations of RGGVY, the Ministry explained that the Government have reviewed the working of Rajiv Gandhi Grameen Vidyutikaran Yojana and taken the following steps for its effective implementation:—

"(i) Government of India has set up an Inter-Ministerial Monitoring Committee which periodically meets to sanction projects and review progress of implementation.

(ii) States have been advised to set up District Committees to monitor the progress of rural electrification works. All the states have notified formation of District Committees.

(iii) The States have also been requested to hold monthly meeting under the Chairmanship of Chief Secretary to resolve the bottlenecks in implementation of RGGVY.

(iv) Ministry of Power, the Government of India as well as Rural Electrification Corporation (REC), the nodal agency for RGGVY, conduct frequent review meetings with all the stakeholders; the concerned State Governments, State Power Utilities and Implementing Agencies for expeditious implementation of the scheme as per the agreed schedules.

(v) To ensure qualitative execution of rural electrification works, a three tier quality control mechanism has been enforced under RGGVY in XI Plan."

1.67 On being enquired about the feedback mechanism of RGGVY working at the ground level from the elected representatives of the people as the objective of the scheme is to benefit the rural households and people of BPL category, the Ministry replied that there is a Consultative Committee of Parliament for the Ministry of Power, which provides

feedback and advises the Ministry on its various schemes and programmes. District Committees have been constituted in all the districts, which coordinates and reviews extension of electrification in the district. Minister of Power has requested Chief Ministers to include the elected representatives in these Committees. Further, a window named "Public Forum" has been provided on RGGVY website (rggvy.gov.in), wherein one can register one's suggestion/complaints related to the scheme. Further, a Three-Tier Quality Control Mechanism has been set up to check the quality of implementation. The Ministry has also planned to commission an evaluation study of the scheme to check its efficacy.

1.68 Asked whether the Government is contemplating to remodel the scheme so as to ensure the involvement of lesser agencies avoiding the element of subletting the contract and factoring in accountability with regard to first hand implementation, maintenance of quality of product and subsequent effective maintenance of electrified areas. In reply the Ministry have stated:—

> "The present model of implementation through turnkey contracting is considered best for effective and timely implementation of the projects as it involves single window accountability for supply of quality material and their erection. Responsibility of operation and maintenance, after commissioning of the project, lies with the State Distribution Utility and the turnkey contractor has no role to play in these activities."

B. Re-structured — Accelerated Power Development Reforms Programme (R-APDRP)

1.69 The Government of India has launched the R-APDRP for State Distribution Utilities to make their distribution system IT enabled so that the energy auditing and accounting could be carried out and the reasons for losses are known and through the strengthening of distribution systems, the overloading and frequent power failure could be minimized. The focus of the programme is an actual, demonstrable performance in terms of AT&C loss reduction.

1.70 The Ministry have stated that Projects under the scheme are to be taken up in two parts. Part-A is for the projects for establishment of baseline data and IT applications for energy accounting/auditing and IT based consumer service centers and Part-B is regular distribution strengthening projects. The programme size is ₹ 51,577 crore. Expected investment in Part-A (Baseline System) would be ₹ 10,000 crore and that in Part-B would be ₹ 40,000 crore. PFC is the nodal agency for operationalising the programme.

1.71 Initially funds for projects under both the parts would be provided through loan. The entire amount of loan for Part-A projects would be converted into grant on the completion the project and up-to 50% (90% for special category States) loan of Part-B projects would be converted into grant on achieving the 15% AT&C loss in the project area on a sustainable basis. Part C of the programme is an enabling component for the implementation of APDRP. Provision of ₹ 1,177 crore through GBS (Grant) has been provided in the scheme. Under Part D of the scheme, there is provision for incentive for utility staff in towns where AT&C loss levels are brought below 15%. There is provision of ₹ 400 crore (grant) for this purpose.

1.72 In regard to the progress of work under R-APDRP, the Secretary, Ministry of Power stated:—

> "Under R-APDRP scheme, the target was to cover 1401 towns in Part 'A'. We have sanctioned projects in all these towns. We have awarded 1232 projects against these 1401 projects *i.e.* 88% projects have been awarded. Work is in progress in these projects. We had to sanction projects in 1100 towns under Part 'B' programme. We have sanctioned projects in 823 towns. We shall complete the remaining projects by the end of this year."

1.73 When the Committee desired to know the details of the targets and achievements (physical and financial) of R-APDRP during the 11th Plan, the Ministry in their written reply have stated as below:—

> "Under Part –A of the R-APDRP, all the eligible 1,401 towns at the project cost of ₹ 5,177 crore for twenty nine states/UTs, covering almost the entire country have been sanctioned and 18 SCADA projects worth ₹ 471.58 crore have also been sanctioned for Gujarat, Rajasthan and Tamil Nadu. The most of the States except NER States have also awarded the work of execution to IT Implementation Agencies. In the NER States the financial evaluation of bids invited for appointment of IT Implementation Agencies is under process and it is expected that award will be placed shortly. The standard project completion cycle is 24 months for Part-A schemes. Under Part –B, 775 projects worth ₹ 14,854.43 crore for thirteen states are sanctioned; the project completion cycle of these projects is 36 months.
>
> So far ₹ 3,623.64 crore has been released under the R-APDRP, out of which ₹ 3,528.25 cr. is the loan to PFC to disburse the same to utilities and ₹ 95.39 cr. is grant to PFC as fee to the nodal agency.

Details of year wise progress achieved are given below:—

(Rs. in crore)

Year	Projects sanctioned			Fund Releases		
	Part-A	Part-B	Total	Loan	Grant	Total
2008-09	1,947.70	0.00	1,947.70	325.00	25.00	350.00
2009-10	3,183.00	3,059.28	6,242.28	1,331.46	1.26	1,332.72
2010-11	517.88	11,795.15	12,313.03	1,871.79	69.13	1,940.92
TOTAL	5,648.58	14,854.43	20,503.01	3,528.25	95.39	3,623.64

1.74 Budget Estimate for R-APDRP for the year 2011-12 has been kept at Rs. 2034.00 crore. (Rs. 1959.00 crs. as loan and Rs. 75.00 crore as grant).

1.75 On being asked by the Committee to provide details regarding reduction of the Technical and Commercial Losses (AT&C) since inception of the APDRP and R-APDRP, the Ministry furnished the information as under:—

"10th Plan Accelerated Power Development Reforms Programme (APDRP) was launched in 2002-03 as additional central assistance to the States for strengthening and up gradation of sub-transmission and distribution systems of high-density load centers like towns and industrial areas with main objectives of reduction in AT&C and commercial losses; improve quality and reliability of supply of power.

Re-structured APDRP for XI Plan was approved on 31.07.2008 as a Central Sector Scheme. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction.

Since inception of APDRP in year 2002-03, Aggregate Technical and Commercial Losses (AT&C) has been reduced from 36.64% in year 2002-03 to 28.44% in year 2008-09. Details are given below:—

Sl. No.	State	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
1	2	3	4	5	6	7	8	9
1.	Bihar	77.64	66.25	82.50	83.75	43.99	47.38	34.37
2.	Jharkhand	72.63	62.47	62.83	52.14	54.41	58.17	59.00
3.	Orissa	40.88	47.40	54.07	44.07	39.90	41.38	39.43
4.	Sikkim	80.12	66.67	38.33	44.87	61.43	51.32	56.86
5.	West Bengal	26.62	32.87	23.91	28.34	30.66	22.70	22.73
6.	Arunachal Pradesh	61.73	16.34	25.43	68.99	57.96	61.59	60.15

1	2	3	4	5	6	7	8	9
7.	Assam	39.43	43.35	39.31	35.24	36.64	35.18	20.32
8.	Manipur	76.81	69.70	88.56	77.83	79.69	79.39	81.01
9.	Meghalaya	42.39	39.35	38.12	37.90	39.08	39.45	43.37
10.	Mizoram	49.63	38.70	24.61	21.98	31.71	28.31	41.01
11.	Nagaland	53.74	55.63	43.13	50.41	48.01	44.08	48.69
12.	Tripura	34.27	14.84	20.96	32.36	29.19	30.16	31.98
13.	Delhi	59.51	51.19	43.55	40.32	34.32	37.96	17.97
14.	Haryana	47.62	42.85	43.66	42.83	25.60	33.02	33.29
15.	H.P.	29.52	9.26	21.71	17.06	13.47	17.15	12.85
16.	Jammu and Kashmir	68.22	68.79	68.33	63.25	64.68	71.92	69.05
17.	Punjab	26.45	25.52	24.00	23.31	22.54	19.10	18.96
18.	Rajasthan	47.13	50.84	46.74	42.19	35.74	33.02	29.52
19.	Uttar Pradesh	32.21	58.38	46.81	43.89	44.25	37.10	40.32
20.	Uttrakhand	37.59	43.48	45.62	27.98	35.54	38.32	35.37
21.	Andhra Pradesh	36.14	22.62	21.15	16.68	17.88	16.19	12.99
22.	Karnataka	45.68	35.82	33.67	38.04	32.76	32.13	25.68
23.	Kerala	36.19	32.73	32.12	23.61	23.34	21.52	21.61
24.	Puducherry	41.67	20.53	16.46	17.46	17.46	18.69	18.47
25.	Tamil Nadu	20.02	20.64	19.41	17.09	16.21	16.19	15.33
26.	Chhattisgarh	37.48	30.99	32.30	38.76	29.26	30.89	32.45
27.	Goa	22.99	21.28	18.34	12.37	16.89	13.12	17.17
28.	Gujarat	31.24	35.48	35.15	26.72	23.60	22.81	22.05
29.	Madhya Pradesh	49.42	41.52	54.27	44.44	45.67	46.78	61.05
30.	Maharashtra	44.25	38.95	27.98	33.15	34.59	31.32	31.19
	Grand Total	36.64	34.90	34.82	33.02	30.62	29.58	28.44"

C. Energy Conservation

1.76 Ministry of Power, through Bureau of Energy Efficiency (BEE), has initiated a number of energy efficiency initiatives in the areas of household lighting, commercial buildings, standards and labelling of appliances, demand side management in agriculture/municipalities, SME's and large industries including the initiation of the process for development of energy consumption norms for industrial sub-sectors, capacity building

of SDAs etc. and estimates that 15% saving of energy is possible by such interventions. In order to enhance the efforts to promote energy efficiency during the XIth plan period and to achieve the target of reducing consumption by 5%, a target of 10000 MW of avoided capacity addition has been kept during the corresponding period.

1.77 Acknowledging the importance of energy conservation programme the Secretary, the Ministry of Power, during the evidence stated:—

> "Energy conservation and energy efficiency is a very large programme of the Government of India. Under this programme, Bachat Lamp Yojana (BLY) scheme, standard and labeling programmes are being run. Last year we launched a very big programme. We have identified such industries which are the biggest consumer of electricity. Specific energy consumption target was set for these industries after identifying more than 500 units among these. This programme will be launched on 1st April of the current year. These units have to achieve their targets of specific energy consumption in three years. It will lead to saving of electricity on a large scale. This programme will conclude in three years. There are two points in it. The units surpassing their targets will get Energy saving certificate and these units can sell these certificates. Penalty will be imposed on against those units which cannot achieve their targets."

1.78 The following schemes are being run by the Ministry of Power for promoting Energy Efficiency in India during the XIth Plan:—

- Bachat Lamp Yojana (BLY) Scehme
- Standards and Labelling
- Energy Conservation Building Codes (ECBC)
- Agricultural and Municipal DSM Scheme
- Energy Efficiency in Small and Medium Enterprises (SMEs) Sector
- Strengthening Institutional Capacity of SDAs Scehme
- Contribution to State Energy Conservation Fund (SECF) Scheme
- National Energy Conservation Awards, 2010
- Painting Competition on Energy Conservation, 2010
- National Certification Examination for Energy Managers and Energy Auditors
- National Mission for Enhacned Energy Efficiency (NMEEE)

1.79 The achievements in respect of energy saved relating to the programmes/schemes of the BEE during 2007-08, 2008-09 and 2009-10 is 4995.97 MW. Out of the target of 2600 MW fixed for 2010-11, BEE has achieved 2482.4 MW (provisional) upto 31st December, 2010.

1.80 The details of the targets/achievements of various projects of EC and BEE during XIth Plan are given as under:—

Sl. No.	Name of The Project/Scheme	Targeted Avoided Capacity (MW)	Present Status
1	2	3	4
1.	Bachat Lamp Yojana (BLY)	4,000	An Avoided Capacity of 230.43 MW has been achieved upto 31.12.2010. Approximately 2.08 crore CFLs have been distributed at the rate of an incandescent bulb.
2.	Standards and Labelling Scheme	3,000	An Avoided Capacity of 4954.15 MW has been achieved upto 31.12.2010.
3.	Energy Conservation Building Code (ECBC)	500	An Avoided Capacity of 9.18 MW has been achieved upto 31.12.2010.
4.	Agricultural and Municipal DSM	2,000	AG(DSM) 6 DPRs have been prepared in the States of Maharastra, Gujarat, Punjab, Rajasthan and Haryana. In the States of Madhya Pradesh two Agricultural DSM pilot projects are being initiated. MU(DSM) Under Municipal DSM programme DPRs for over 89 ULBs have been prepared and preparation of DPRs for 112 Municipalities is in progress.
5.	Strengthening Institutional Capacity	-	An Avoided Capacity of 1092.02 MW has been achieved upto 31.12.2010.
6.	State Energy Conservation Fund (SECF)	-	An amount of Rs. 32 crore has been distributed to 16 States till 31.12.2010 on their notification of SECF. This fund is used to promote energy conservation and efficiency efforts on a sustainable basis in the State.
7.	Energy Efficiency Improvement is Small and Medium Enterprises (SMEs)	500	Savings under this Scheme has been reflected under Energy Conservation Awareness Scheme.

1	2	3	4
8.	National Energy Conservation Scheme	-	The avoided capacity achieved is equivalent to 1192.60 MW upto 31.12.2010.
9.	National Mission on Enhanced Energy Efficiency (NMEEE)	-	Baseline estimation of 8 sectors completed and verified by NPC.
	Total	10,000	

1.81 On being enquired by the Committee about the role of private sector in implementation of energy conservation projects, the Ministry of Power stated as under:—

> "The implementation of almost all of the programmes of the Bureau of Energy Efficiency (BEE) is through the private sector. These private sector players include manufacturers of energy efficient equipment and appliances, builders of energy efficient buildings, and both large industry as well as Small and Medium Enterprises (SMEs).
>
> In addition to the above, BEE has initiated a programme to promote Energy Service Companies (ESCOs). The number of ESCOs that have been empanelled by BEE and thereafter, rated by CRISIL/ ICRA are 89.
>
> The performance contact model for delivery of energy efficiency services, which is the cornerstone of ESCO project, is also being promoted in all sectors like buildings, municipalities, agriculture, etc. through various programmes. BEE is preparing more than 1000 DPRs for implementation through ESCOs in these sectors. The avoided capacity addition from 2007-08 to 2009-10 is 4995.97 MW (verified). The avoided capacity from 1.04.2010 to 31.12.2010 is 2482.4 MW.
>
> Under Bachat Lamp Yojana (BLY) Scheme, the public-private partnership between the Government of India and the Private Sector CFL Investors (Project Developers) and State level Electricity Distribution Companies would provide the framework to distribute high quality, long life CFLs at about Rs. 15 per piece to the households of the country. Currently, 17 CFL investors have been empanelled for this purpose."

PART II

OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE

2.1 The Committee take note that the Rule 331G of the Rules of Procedure and Conduct of Business in Lok Sabha relating to examination of Demands for Grants by Departmentally Related Standing Committees (DRSCs) was suspended by the Hon'ble Speaker, Lok Sabha due to rescheduling of the Financial Business in Lok Sabha to pass the Demands for Grants for the year 2011-12 during the Seventh Session of Fifteenth Lok Sabha without being referred to the concerned DRSCs. However, the Committee have examined the Demands for Grants and made Report thereon. Since, the Budget for the year 2011-12 has already been passed by the Parliament, the Committee endorse the same. Nevertheless, the Committee feel that the suggestions/ recommendations of the Committee would help the Ministry of Power in analyzing their performance/implementation of various projects/ schemes and also take correctives during the current year, which happens to be the terminal year of the 11th Plan Period. The Observations/Recommendations of the Committee are given in the succeeding paragraphs.

11th Five Year Plan–targets and achievements

2.2 The Committee note that the Planning Commission had initially fixed a capacity addition target of power generation at 78,700 MW for the 11th Plan period (2007-12). Subsequently, based on the assessment by the Central Electricity Authority (CEA) at the time of Mid-Term Appraisal of the 11th Plan, the capacity addition target was brought down to 62,374 MW. The Ministry have now submitted that so far capacity addition to the tune of 34,462 MW has been commissioned, whereas, the remaining 27,912 MW capacity is still under construction. Further, capacity addition targets for 2011-12, which happens to be terminal year of 11th Plan, has been kept at 17,600 MW including 2,000 MW of Nuclear Power. As a result, even if the target for 2011-12 is fully achieved, only 52,062 MW capacity additions will be attained in the entire 11th Plan Period. Hence, at best only about 66% of the original target for capacity addition in the 11th Five Year Plan is likely to be achieved. Projects of 10,312 MW capacity will be carried over to the 12th Five Year Plan. The main reasons for the shortfall

in achievement of targets have been assigned by the Ministry to the delay and non-sequential supply of material for main plant, delay in placement of order for Balance of Plants (BoPs), shortage of skilled manpower for erection and commissioning, inadequate deployment of construction machinery, shortage of fuel, law and order problems etc. The Ministry has reportedly been taking various steps to ensure that capacity addition targets are fully achieved. However, considering the end result it seems that steps taken are neither adequate nor effective. In order to fully achieve the targets of Five Year Plan it is essential that the Ministry should make yearly plan, propose a time schedule, perform consistently throughout the plan period and achieve yearly targets. In case there is slippage in any particular year, its reasons be analyzed and followed by quick remedial measures. In the process, it should also be ensured that reasons for low performance do not recur and impair the performance of the next year. Rather efforts should be invigorated in such a manner that it compensates the non-achievement, if at all, of the targets of preceding year. But the Ministry has failed to achieve the yearly targets leading to the dismal cumulative performance in terms of capacity addition during the 11th Plan period. The plea of the Ministry that capacity addition in the 11th Plan is highest as compared to earlier Plans is hardly convincing as any comparison to justify the poor performance is nothing but feeble attempt to seek recluse under indefensible cover. The Committee have time and again, considering the pace of work and other factors, expressed their apprehension over the achievement of even the reduced capacity addition target of 62,374 MW and cautioned for execution of the capacity addition programme in a time bound, coordinated and accountable manner which should be closely monitored on monthly basis. However, due attention was not paid to such words of wisdom and the Ministry was oozing with confidence in achieving the reduced target of 11th Plan with high level of certainty. Now, the Ministry has stated that projects of 10,312 MW capacity will slip into the 12th Plan. It reflects not only on planning, execution and monitoring of the projects by the Ministry but also its obtrusiveness with regard to amenability to suggestions made for improving its performance. Most of the reasons tendered by the Ministry for non-achievement of the targets are routine in nature which are neither unexpected nor insurmountable. With a little alertness and planning the factors responsible for the non-attainment of the targets could have been easily sorted out. As the 11th Plan is terminating this year, the Committee strongly recommend that the Government should strive hard to achieve the maximum possible capacity addition in 11th Plan. Further necessary steps should be taken to ensure the non-recurrence of reasons responsible for low achievement of the targets.

(Recommendation Sl. No.1)

2.3 The Committee also recommend that keeping in view the dismal performance in capacity addition program during 11th Plan so far, the Government while planning the capacity addition targets for 12th Plan, should examine all the ground realities, hindrances as well as opportunities, in more scientific and accurate manner, so that a realistic and achievable target is fixed. In addition, the Government should review its present monitoring system with a view to make it more effective in ensuring the timely completion of the projects.

(Recommendation Sl. No. 2)

2.4 The Committee note that the utilization of the funds by the Government in 1st Quarter has been abysmally low throughout the 11th Plan period. It has been 6.07%, 0.08% and 8.15% for the year 2008-09, 2009-10 and 2010-11 respectively. It is very logical that poor spending in 1st Quarter have the cascading effect and put pressure in spending patterns of later Quarters. The Ministry has given various reasons for erratic quarterly spending. The Committee find it difficult to understand that despite the fact that expenditure pattern is monitored on a weekly/monthly/quarterly basis by the Ministry, there is not a single year in the entire 11th Plan when all the four quarterly spending were according to the norms laid down by the Ministry itself. It amount to improper and unscientific planning, financial imprudence and non-serious approach with regard to achievement of the target. When there are hierarchical levels for monitoring of the capacity addition programmes, then such recurrent feature is beyond comprehension and the Committee is inclined to infer that the entire system of monitoring the pace of work of is nothing but a ritual exercise. The Committee, therefore, strongly recommend that the Ministry should not only recast its present monitoring system to make it more accountable and trustworthy to ensure the uniform quarterly spending as per the norms but also taking proper correctives to avoid recurrence of the lapses responsible for sluggishness in the achievement.

(Recommendation Sl. No. 3)

Power Generation and Capacity Addition Program

2.5 The Committee note that the Country has the total installed power generation capacity of 1,73,626.40 MW. Against the requirement of 8,30,594 MU of power only 7,46,644 MU of power could be made available during the year 2009-10, leaving a gap of 83,950 MU, *i.e.* 10.1% of the requirement. Further, during 2010-11, 8,11,142 MU of power could be made available against the target of 8,31,000 MU. It is clear that the generation of power has failed to keep pace with the Country's

ever growing power demand. It is evident that the demand for power has been growing at the rate of 5-10% annually. The Committee is surprised to know that the power generation target for 2010-11 was equal to the actual power requirement of previous year *i.e.* 2009-10. Moreover, even this target could not be fully achieved. Explaining the shortfall in achievement, the Ministry has stated that generation target is primarily dependent on commissioning and stabilization of new generating units and availability of fuel and water for generation of thermal and hydro power respectively.

The Committee further note that the capacity addition of 12,160.50 MW during the year 2010-11, which is reportedly the highest ever, is only 60% of the target. The reasons attributed by the Ministry for the shortfall in achievement has been slow progress of civil works, poor geology, delay and non-sequential supply of material for main plant, shortage of skilled manpower for erection and commissioning, contractual dispute between project developers and their sub-vendors/ sub-contractors, inadequate deployment of construction machinery, shortage of fuel, law and order problems etc. It is certain that all the factors may not have happened in most of the plants. The Committee believe that one or the other reasons might have taken place in a disparate manner here and there, but to put them together as a shield for laxity and inaction in all the projects betrays the Commitment and sincerity of purpose. The Committee feel that the reasons given by the Ministry are such that can be anticipated well in advance and accordingly a remedial action plan could be formulated and strictly executed to ensure that targets are fully achieved. However, it is regretted that these foreseeable and avoidable reasons could not be foreseen and it is a matter of concern as these problems may recur during the 12th Plan period also. The Committee, therefore, recommend that an effective mechanism should be put in place to overcome such routine and anticipated issues in a time bound manner so that the targeted capacity addition is achieved. The Committee further desire that the generation targets for a particular year should commensurate with the anticipated demand for that period. They advice that realistic targets should be fixed keeping in view the present demand as well as the possible growth in demand for power in the ensuing year.

(Recommendation Sl. No. 4)

Fuel Supply to Power Sector

2.6 The Committee note that against the coal requirement of 480 MT for plants designed on indigenous coal for the year 2011-12,

the total availability would be only 417.5 MT including 319 MT from CIL, leaving a gap of 62.5 MT. The Ministry of Power have stated that against the earlier indication by CIL for supplying 360 MT of coal, it will now supply 319 MT to power sector. The Ministry have further stated that the reduction of 41 MT of coal by the CIL would affect the new generating capacity to the extent of 15,000 MW. It is a well known fact that various power plants are already running well below their installed capacity for want of coal. In a situation where the Country is facing a peak shortage of power of around 13%, the short supply of coal would acutely aggravate the problem. Further, the Ministry of Power is planning for a massive capacity addition program for the 12th Five Year Plan, mostly based on coal. Since power sector is the backbone of economic development of a country, the significance of power generation capacity cannot be compromised and the self reliant fuel linkage issue cannot be left in the domain of uncertainty. In this context the long term solution has become extremely important. Although, efforts have been made for acquiring coal mines abroad besides allotment of coal blocks to the power utilities like NTPC etc. yet, the realization of coal from these efforts still remain a far cry. To make matter worse, issues like supply of coal to a power plant from far off mines, non-availability of even bare minimum stock of coal and pilferage of coal contributes significantly in the non-achievement of generation targets. Considering the limitation on quantity of coal that can be imported due to blending limit and the high cost of imported coal, the Committee recommend that the Coal India while augmenting excavation of coal, should give first priority to power sector in allocation of coal. The Committee further recommend that for the time being coal stock, lying at pithead, as reported by the Ministry of Power, should be supplied to power stations facing acute shortage of coal as a stop gap arrangement. The Committee are aware of the constraints of the Ministry of Power with regard to the issue of fuel linkage and they strongly feel that a long term solution to the problem should be worked out in the Group of Ministers (GoMs) meetings and/or International economic tie-up/cooperation. Further Ministry of Power has made certain suggestions to the Group of Ministers (GoM) which *inter-alia* involves positive response from Coal India Limited with regard to optimum utilization of mines and committed liabilities of CIL to power utilities before resorting to e-auction at premium. The Committee, therefore, strongly recommend the GoM should give appropriate directions to the Ministry of Coal/Coal India Limited to ensure that power plants do not suffer power generation loss for want of coal.

(Recommendation Sl. No. 5)

2.7 The Committee are dismayed to note that the development work related to coal blocks allotted to power utilities is not satisfactory. National Thermal Power Corporation have been allotted 6 coal blocks but the actual excavation of coal has not started from any of these coal blocks. The reasons for non-development of coal blocks have been assigned to environment/forest non-clearances. The developments of many other coal blocks are also getting delayed for want of environment and forest clearances. Issue of environmental clearances is of vital importance and should be resolved before a decision is taken with regard to the allotment of a coal block. This will not only save time, efforts and money of the allottee but will end the air of uncertainty with regard to the development of these coal blocks after allotment. Coal India Limited and other stakeholders should ensure that the coal blocks which they are earmarking for allotment are free from all encumbrances including legal and environmental and are ready for development. The Committee feel that the Country has reached a stage where any kind of the development work will have some kind of impact on environment. Therefore, striking a balance between environmental and development is need of the hour. Both environment and development are prime concern of the Country. The Committee, therefore, recommend that the matter of granting environment and forest clearance to coal blocks, need to solved through joint meetings at highest level by the stakeholders at the earliest. Further they also emphasize that a permanent mechanism of joint meeting among the stakeholders should be put in place for expeditious environmental and forest clearances.

(Recommendation Sl. No. 6)

Development of Hydro Power

2.8 The Committee note that the Country has hydropower potential to the tune of 1,48,701 MW including 62,604 MW of potential in North Eastern (NE) Region. The identified potential in NE Region constitutes about 43% of the total identified hydro power potential in the country. The Committee also note that out of the above, a capacity of 1,686 MW has so far been harnessed in NE region which is less than 3% of the total potential available in NE region. Thus, more than 97% of the identified hydro capacity is yet to be exploited. The Committee find that it is totally unsatisfactory situation in view of global warming concern and acute shortage of fossil fuel supply for the thermal power stations, hydropower can be a suitable, substantial and sustainable source of clean energy. Despite the huge potential available in the NE region, the pace of development of hydro sector has been slower to the level of distress due to one reason or the other. The main reasons

given for the poor hydropower development in NE region are environment and forest clearance, infrastructural facilities, non-availability of hydrological and other data, funding arrangements, evacuation of power, non-availability of skilled manpower etc. The Committee observe that much of the problems faced in development are hydropower in NER are related with the State Governments and cannot be resolved without their support. Therefore, the special attention of the Central Government is needed in this matter. The Committee also find that the most hydel projects involves issues such as environment clearances, rehabilitation and resettlements. Various Hydro Power Projects get inordinately delayed as the developers find it difficult to overcome these issues. The Committee feel that it would be better if the Government after detailed analysis/survey of the Hydro Power potential available in the Country, resolve the issues of environmental clearances, resettlement of displaced persons and other anticipated issues related to each of the site, if any, before its allotment to the developers as the same would minimize the interruption of work after their allotment for developing hydel power projects and accelerate the pace of development of this Sector. There should also be accurate and complete hydrological data so that the possible constraints are well taken care of at the beginning itself. The Committee strongly recommend that keeping in view the huge potential in this Sector, the Government should expedite a workable and holistic policy on Hydro Power assimilating the recommendations/suggestions of the high powered Committee and Groups (setup earlier), and timely completion of projects. All foreseeable constraints must be taken care of, involvement of public as well as private sector be encouraged and special attention be given to North-Eastern region for proper development of the Hydro Sector with a view to minimizing over-dependence on thermal sector.

(Recommendation Sl. No. 7)

Renovation and Modernization of Power Plants

2.9 The Committee note that 69 units have been identified for implementation of Renovation and Modernization (R&M) work involving generation of capacity of more than 15,500 MW of electricity. In the Central Sector, 20 units are for implementation of Life Extension program, whereas, 49 units are for Renovation and Modernization work. The PLF in the Central Sector has been around 80-85%, whereas, it is much lower in the State. The generation loss due to old technology and plant machinery can be tackled effectively if advancement of technology is appropriately introduced and implemented. The Renovation and Modernization is a cost effective option to increase

generation from the existing power stations. The Committee feel that this aspect of power generation has not been given due importance and recognition as it was introduced only in the 7th Plan. With the advent of the concept of UMPPs, the existing power plants of the age of 5 years or more do not become obsolete and hence they are to be so modernized as to catch up with the plants equipped with the latest technologies. Hence, the entire concept of Renovation and Modernization needs to be revisited so that it can become compatible with the present days requirement. The reasons given for the non-achievement of the targets under Renovation and Modernization of power plants for 11th Plan is not convincing as BHEL is not in a position to supply the original products for power plants which it has taken upon itself by entering into an agreement with buyers. Hence, to expect BHEL to supply technology including equipment for Renovation and Modernization which is definitely more advanced and complex, is nothing but most unrealistic and amounts to keeping the Renovation and Modernization efforts in the backburner. The organization itself has to evolve the technological methodology to keep it updated without relying on any outside agency. The Committee, therefore, strongly recommend that Renovation and Modernization efforts should be reinvigorated, thoroughly examined and properly channelized. Necessary budgetary allocation should also be made with the target set for each of the plant identified for this exercise to make them competitive and efficient with the realization of optimum Plant Load Factor.

(Recommendation Sl. No. 8)

Rajiv Gandhi Grameen Vidyutikaran Yojana

2.10 The Committee note that Rajiv Gandhi Grameen Vidyutikaran Yojana was introduced in April, 2005 with the objective of providing access to electricity to all rural households. For this purpose the Ministry had set a target of electrification of about 1.15 lakh un-electrified villages and providing electricity connections to 2.34 crore BPL households by 2011-12. Against these targets, work related to electrification of 96,562 villages and providing electricity connection to 1.60 crore BPL households was accomplished by March, 2011. The Ministry, for year 2011-12 have fixed a target of electrification of 14,500 villages and providing electricity connections to 47 lakh BPL households. Thus, the original target set under this scheme is far from being achieved even if the target fixed for the year 2011-12 are fully achieved. However, the Committee are happy to note that the achievement of the Ministry for the year 2010-11 exceeds the targets *i.e.* 18,306 villages were electrified against the target of 17,500 villages

and connections to 58.83 lakh BPL households were provided against the targets of 47 lakh BPL households. The Committee expected this kind of commitment from the Government in implementation of RGGVY right from its inception. However, the performance in initial years was not as committed and result oriented as it should have been. Moreover, the Committee are unable to understand the low target set for the year 2011-12 *i.e.* electrification of 14,500 villages and providing connections to 47 lakh BPL households, in view of the performance in the previous year where the achievement was 18,306 and 58.83 lakh respectively. The Committee, therefore, strongly recommend that the Ministry should step up the targets for the year 2011-12 so that the target envisaged by RGGVY are fully achieved by the end of the 11th Plan.

(Recommendation Sl. No. 9)

2.11 The Committee find that there is inordinate delay in implementation of RGGVY scheme in some of the States. The Ministry explained that there are number of reasons for this which *inter-alia* include delay in forest clearances, delay in land acquisition for 33/11 kV sub-stations, limited number of good agencies, delay in issuance of road permit, delay in providing authentic BPL list etc. The Ministry also submitted before the Committee that in the execution of the scheme the role of the State Government is crucial in the timely execution of the scheme. The Committee have been apprised that there are delays on the part of States in awarding sanctioned projects to utilities, allotment of land for construction of new sub-stations, sanction of revised cost estimates of CPUs, identification of villages for electrification, energization of villages where the infrastructure has been created and establishment of franchisees in the electrified villages etc. The Committee do appreciate the inherent bottlenecks, wherein the Ministry have hardly any control. However, these impediments cannot be allowed to impede the implementation of such an important scheme covering most remote and neglected sections of the Country. The Committee find that steps have been taken to set up monitoring Committee which periodically meets to sanction projects and review the progress of implementation and formation of district Committee besides the review of the scheme on monthly basis by the respective Chief Secretaries of the States. The Committee gather that at times though only of small proportion of the village is electrified, the village itself is considered as electrified. Further, the transformers installed are of a lower capacity so any further connections required in future cannot be accommodated within the installed infrastructure. They also find that sub-letting of the contract at various levels goes on. This not only leads to avoidable delay at each level but also compromises on

quality of works besides scope for pilferage of the funds earmarked for the scheme without producing adequate results. The Committee are of the considered view that REC, the nodal agency for RGGVY will have to play a more proactive role in the implementation of the scheme. Further, they are of the opinion that the process of sub-letting of the contract under the scheme should be kept at minimum level. The Committee also recommend that the concept of electrification of the village needs to be relooked and considered afresh specifying the percentage of electrification of village qualifying as the electrification of that particular village. They also emphasize that besides monitoring of the scheme at the bureaucratic level periodically, the involvement of elected representatives of the people will go a long way in making the scheme a success. The Committee, therefore, strongly recommend that the scheme of RGGVY should have strong inclusive monitoring systems with regard to its implementation and achievement of the target. The involvement of the elected representative of the people at the District Level Committee should be made mandatory in order to ensure the proper coverage of villages as well as BPL households under the scheme besides, ensuring the proper quality of work. The Committee would like the involvement of people's representatives at local level *i.e.* Panchayats, Gramsabhas and Block Level.

(Recommendation Sl. No. 10)

Re-structured Accelerated Power Development Reform Program (R-APDRP)

2.12 The Committee note that R-APDRP for the 11th Plan has been approved as a Central Sector Scheme. They find that the aim of the programme is to bring down Aggregate Technical and Commercial (AT&C) losses in actual and demonstrable manner. The projects under the scheme are to be taken up in two parts. 'Part-A' is for establishment of base line data, IT applications for energy accounting/auditing and IT based consumer centers whereas 'Part B' is for the strengthening of regular distribution centers. The size of the programme is ₹ 51,577 crores of which ₹ 10,000 cores will be spent in Part-A and ₹ 40,000 crores will be spend in Part-B programme. Under Part-A of the programme 1401 towns at project cost of ₹ 5,177 crores for 29 States/UTs have been sanctioned and under Part-B of the programme 775 projects amounting to ₹ 14854 crores have been sanctioned in the 13 States. The Committee further note that against the sanction of ₹ 3,059.28 crores under 'Part-A' and ₹ 11,795.15 crores under Part-B of the scheme for the year 2009-10 and 2010-11 only ₹ 1,332.72 crores and ₹ 1,940.92 crores respectively were released. Budget estimate for R-APDRP for the year 2011-12 has been kept as ₹ 2,034 crores. The Committee find that the budget for the programme for the current

fiscal has been reduced. The Committee observe that the lesser allocation for the programme clearly shows that it is not coming up on expected lines and AT&C losses continue to remain on the higher side. The programme has been restructured but the results are not forthcoming. It is yet to be seen whether IT enabled programme will give the desired results as strengthening of the distribution centers does not specify details of the various steps that will help in the reduction of AT&C losses. The Committee therefore, strongly recommend that the scheme of R-APDRP should envisage the analysis of reasons responsible for losses, efficacious remedial measures and a coordination mechanism wherein States and several implementing agencies are entrusted with earmarked role and identified responsibilities for losses reduction so as to ensure that the programme becomes successful.

(Recommendation Sl. No. 11)

2.13 The Committee note APDRP was first introduced in the year 2002-03 with the main objective of reduction in AT&C losses. The scrutiny by the Committee has revealed that since the inception of APDRP in the year 2002-03, Aggregate Technical and Commercial Losses (AT&C) have been reduced from 36.64% in year 2002-03 to 28.44% in year 2008-09. In other words the Government, in 6 years, have succeeded in reducing the losses by only about 8%. The present losses are still very high and nowhere near the desired level *i.e*. 15% as envisaged under this scheme. The losses in the NE region as well as States such as Jammu and Kashmir, Jharkhand and Madhya Pradesh are unacceptably high. The Committee expect that the Ministry would come up with some special provisions while implementing this Programme in these States so that the losses can be brought down to an acceptable level. The Committee strongly feel that there is an urgent need for review of this programme as the purpose and objective of the programme in bringing down the AT&C losses has not been achieved. The Committee, therefore, recommend that this programme may be reviewed with a view to broaden its scope, putting in place an accountable system to prevent unnecessary delays and below par performances and yield the desired results by achieving its main goal of reducing AT&C and commercial losses to the level of 15% across the country.

(Recommendation Sl. No. 12)

Energy Conservation

2.14 The Committee note that various energy conservation programmes are being run by the Government. They feel that the energy

conservation program is a step in right direction as 'energy saved is energy generated', therefore, it can help, to a great extent, in bridging the gap between the growing demand of power and supply position in the Country. They further note that a target of 10,000 MW of avoided capacity addition has been fixed for 11th Plan period under the various energy conservation programs run by the Ministry. Against this, 7,478 MW of avoided capacity addition has been achieved till December, 2010. The Committee express its satisfaction over the cumulative achievement. They, however, express their serious concern over abysmally poor performance in respect of some of the projects such as Bachat Lamp Yojana (BLY) and Energy Conservation Building Code (ECBC), the achievement so far has been 230 MW and 9 MW against the targets of 4,000 MW and 500 MW respectively. As dealt with elsewhere in the Report paragraphs that the country's power generation has so far not been able to keep pace with the rapidly growing demands for power, it becomes imperative that besides more generation and capacity addition of power, simultaneous concerted efforts should also be made to conserve energy. The Committee, therefore, recommend that the Ministry, instead of getting complacent with their achievements, should try to accelerate the pace of various energy conservation projects especially in regard to those schemes/programmes/projects where performance has not been up to the mark. Needless to emphasize the Ministry should focus on all possible avenues to conserve energy besides advertisements for creating awareness among general masses and incentives to participants in their endeavour to conserve energy.

(Recommendation Sl. No. 13)

NEW DELHI;
10 *August,* 2011
19 *Sravana,* 1933 *(Saka)*

MULAYAM SINGH YADAV,
Chairman,
Standing Committee on Energy.

ANNEXURE I

MINISTRY OF POWER

DEMAND No. 75

Ministry of Power

A. The Budget allocations, net of recoveries and receipts, are given beiow:

(Rupees in crore)

		Major Head	Actual 2009-2010			Budget 2010-2011			Revised 2010-2011			Budget 2011-2012		
			Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
		Revenue	4951.38	-209.29	4742.09	6201.16	-155.13	6046.03	5425.38	-173.46	5251.92	6779.84	-135.01	6644.83
		Capital	1552.76	—	1552.76	4428.84	—	4428.84	3299.84	—	3299.84	2862.16	—	2862.16
		Total	6504.14	-209.29	6294.85	10630.00	-155.13	10474.87	8725.22	-173.46	8551.76	9642.00	-135.01	9506.99
1.	Secretariat-Economic Services	3451	1.00	20.96	21.96	1.00	21.79	22.79	1.00	21.79	22.79	1.00	24.10	25.10
2.	Waiver of Guarantee fee													
	2.01 National Hydro Electric Power Corporation Ltd.	2075	—	75.74	75.74	—	—	—	—	—	—	—	—	—
	2.02 Less Receipts Netted	0075	—	-75.74	-75.74	—	—	—	—	—	—	—	—	—
		Net	—	—	—	—	—	—	—	—	—	—	—	—

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Power													
	General													
3.	Central Electricity Authority	2801	5.71	71.29	77.00	12.16	65.64	77.80	5.59	69.01	74.60	13.18	77.03	90.21
		4801	1.30	—	1.30	2.84	—	2.84	2.84	—	2.84	3.05	—	3.05
		Total	7.01	71.29	78.30	15.00	65.64	80.64	8.43	69.01	77.44	16.23	77.03	93.26
4.	Research and Development													
	4.01 Central Power Research Institute, Bengaluru	2801	41.50	—	41.50	78.18	—	78.18	61.52	—	61.52	163.40	—	163.40
5.	Training													
	5.01 National Power Training Institute (NPTI)	2801	20.00	1.90	21.90	20.00	6.40	26.40	17.00	6.40	23.40	16.89	6.40	23.29
6.	Setting up of JERC for Manipur and Mizoram	2801	0.82	—	0.82	1.25	—	1.25	1.25	—	1.25	2.38	—	2.38
7.	Central Electricity Regulatory Commission	2801	—	4.00	4.00	—	4.00	4.00	—	—	—	—	—	—
	7.01 CERC Fund													
	7.01.01 CERC Fund	2801	—	—	—	—	—	—	—	31.80	31.80	—	31.48	31.48
	7.01.02 Amount met from CERC Fund	2801	—	—	—	—	—	—	—	-31.80	-31.80	—	-31.48	-31.48
	Total-Central Electricity Regulatory Commission		—	4.00	4.00	—	4.00	4.00	—	—	—	—	—	—

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
8.	National Investment Fund (NIF)													
	8.01 Transfer to National Investment Fund	2801	3158.00	—	3158.00	5052.00	—	5052.00	2052.00	—	2052.00	5052.00	—	5052.00
	8.02 Amount met from NIF for Subsidy for Rural Electrification - RGGVY	2801	-3100.00	—	-3100.00	-5000.00	—	-5000.00	-2000.00	—	-2000.00	-5000.00	—	-5000.00
	8.03 Amount met from NIF for APDRP	2801	-58.00	—	-58.00	-52.00	—	-52.00	-52.00	—	-52.00	-52.00	—	-52.00
		Net	—	—	—	—	—	—	—	—	—	—	—	—
9.	Subsidy for Rural Electrification-RGGVY	2801	5000.00	—	5000.00	4852.00	—	4852.00	4429.58	—	4429.58	5326.70	—	5326.70
10.	Consultancy Charges for APDRP Project	2801	10.52	—	10.52	19.48	—	19.48	19.44	—	19.44	—	—	—
11.	Funds for Evaluation Studies and Consultancy	2801	0.07	—	0.07	1.00	—	1.00	0.50	—	0.50	1.00	—	1.00
12.	Appellate Tribunal for Electricity	2801	—	5.29	5.29	—	6.95	6.95	—	7.95	7.95	—	8.50	8.50
13.	Setting up of Joint JERC for UTs and Goa	2801	—	3.00	3.00	—	4.00	4.00	—	4.00	4.00	—	4.00	4.00
14.	Comprehensive Award Scheme for Power Sector	2801	0.54	—	0.54	0.75	—	0.75	0.75	—	0.75	0.82	—	0.82
15.	Energy Conservation	2801	18.00	—	18.00	143.94	—	143.94	127.24	—	127.24	130.80	—	130.80
16.	Bureau of Energy Efficiency	2801	57.84	—	57.84	66.92	—	66.92	61.84	—	61.84	123.80	—	123.80
17.	APDRP	2801	1.26	—	1.26	100.00	—	100.00	100.00	—	100.00	75.00	—	75.00

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18.	Assistance to Forum of Regular Capicity Building	2801	1.95	—	1.95	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	—	—	—	0.41	—	0.41	—	—	—
20.	Loan to PFC for APDRP	6801	1331.46	—	1331.46	3230.00	—	3230.00	2213.90	—	2213.90	1755.60	—	1755.60
21.	Interest Subsidy to National Electricity Fund	2801	—	—	—	227 64	—	227.64	—	—	—	249.57	—	249.57
22.	Interest Subsidy to NTPC (AGNSP)	2801	—	—	—	26.84	—	26.84	26.84	—	26.84	—	—	—
23.	Acquisition of Coal bearing Areas for NTPC	4801	27.00	—	27.00	—	—	—	710.65	—	710.65	489.93	—	489.93
	23.01 Deduct Recoveries	4801	-27.00	—	-27.00	—	—	—	-710.65	—	-710.65	-489.93	—	-489.93
		Net	—	—	—	—	—	—	—	—	—	—	—	—
	Total-General		6490.98	85.48	6576.46	8785.00	86.99	8871.99	7070.70	87.36	7158.06	7864.19	95.93	7960.12
	Thermal Power Generation													
24.	Badarpur Thermal Power Station													
	24.01 Revenue Expenditure	2801	—	32.10	32.10	—	24.80	24.80	—	5.54	5.54	—	17.65	17.65
	24.02 Less Revenue Receipts	0801	—	-342.27	-342.27	—	-288.71	-288.71	—	-288.15	-288.15	—	-272.69	-272.69
		Net	—	-310.17	-310.17	—	-263.91	-263.91	—	-282.61	-282.61	—	-255.04	-255.04´
	Transmission and Distribution													
25.	Lumpsum provision for Project/ Schemes for the benefit of N.E. Region and Sikkim													

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	25.01 Subsidy for Rural Electrification—RGGVY	2552	—	—	—	648.00	—	648.00	570.42	—	570.42	673.30	—	673.30
	25.02 Loan to PFC under APDRP	6552	—	—	—	370.00	—	370.00	257.10	—	257.10	203.40	—	203.40
	25.03 Investment in Public Enterprises in N.E. Region	4552	—	—	—	45.00	—	45.00	45.00	—	45.00	87.50	—	87.50
	Total—Lumpsum provision for Project/Schemes for the benefit of NE Region and Sikkim		—	—	—	1063.00	—	1063.00	872.52	—	872.52	964.20	—	964.20
	Total-Power		6490.98	-224.69	6266.29	9848.00	-176.92	9671.08	7943.22	-195.25	7747.97	8828.39	-159.11	8669.28
26.	Investment in Public Enterprises other than N.E. Region													
	26.01 Investment in North Eastern Electric Power Corp. Ltd.	4801	35.00	—	35.00	—	—	—	—	—	—	—	—	—
	26.02 Loans for Power Projects	6801	185.00	—	185.00	781.00	—	781.00	781.00	—	781.00	812.61	—	812.61
	Total—Investment in Public Enterprises other than N.E. Region		220.00	—	220.00	781.00	—	781.00	781.00	—	781.00	812.61	—	812.61
	Power													
	General													
27.	Actual Recoveries	2801	-207.84	-5.56	-213.40	—	—	—	—	—	—	—	—	—
	Grand Total		6504.14	-209.29	6294.85	10630.00	-155.13	10474.87	8725.22	-173.46	8551.76	9642.00	-135.01	9506.99

B. Investment in Public Enterprises:

(Rupees in crore)

		Head of Dev.	Actual 2009-2010			Budget 2010-2011			Revised 2010-2011			Budget 2011-2012		
			Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total
	26.01 National Thermal Power Corporation Ltd.	12801	—	10467.13	10467.13	—	22350.00	22350.00	—	15820.00	15820.00	—	26400.00	26400.00
	26.02 National Hydro Electric Power Corporation Ltd.	12801	185.00	3523.25	3708.25	781.00	4108.34	4889.34	781.00	3307.00	4088.00	812.61	4277.39	5090.00
	26.03 Damodar Valley Corporation Ltd.	12801	—	7289.32	7289.32	—	8539.78	8539.78	—	4311.49	4311.49	—	5890.59	5890.59
	26.04 North Eastern Electric Power Corporation Ltd (N.E. Region Component)	12801 .	35.00	258.96	293.96	45.00	841.30	886.30	45.00	443.31	488.31	87.50	949.77	1037.27
	26.05 Satluj Jal Vidyut Nigam Ltd.	12801	—	407.16	407.16	—	525.17	525.17	—	545.45	545.45	—	1133.13	1133.13
	26.06 Tehri Hydro Development Corporation Ltd.	12801	—	610.51	610.51	—	856.83	856.83		615.56	615.56	—	389.85	389.85
	26.07 Power Grid Corporation of India Ltd.	12801	—	10617.45	10617.45	—	12900.00	12900.00	—	11900.00	11900.00	—	17700.00	17700.00
	Total		220.00	33173.78	33393.78	826.00	50121.42	50947.42	826.00	36942.81	37768.81	900.11	56740.73	57640.84
C.	Plan Outlay													
	1. Power	12801	6469.14	33173.78	39642.92	9567.00	50121.42	59688.42	7852.70	36942.81	44795.51	8677.80	56740.73	65418.53
	2. North Eastern Areas	22552	35.00	—	35.00	1063.00	—	1063.00	872.52	—	872.52	964.20	—	964.20
	Total		6504.14	33173.78	39677.92	10630.00	50121.42	60751.42	8725.22	36942.81	45668.03	9642.00	56740.73	66382.73

ANNEXURE II

STANDING COMMITTEE ON ENERGY

MINUTES OF THE TENTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2010-11) HELD ON 19TH APRIL, 2011 IN COMMITTEE ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1100 hrs. to 1325 hrs.

PRESENT

Shri Mulayam Singh Yadav — *Chairman*

MEMBERS

Lok Sabha

2. Shri Ram Sundar Das
3. Shri Paban Singh Ghatowar
4. Shri Chandrakant Bhaurao Khaire
5. Shri Shripad Yesso Naik
6. Shri Sanjay Nirupam
7. Shri Jagdambika Pal
8. Shri Ravindra Kumar Pandey
9. Shri M.B. Rajesh
10. Shri Ganesh Singh
11. Shri Radha Mohan Singh
12. Shri Vijay Inder Singla

Rajya Sabha

13. Shri Govindrao Wamanrao Adik
14. Shri V.P. Singh Badnore

15. Shri Bhagat Singh Koshyari
16. Shri Mohammad Shafi
17. Shri Motilal Vora
(Chaired the meeting for some time in absence of the Chairman)

SECRETARIAT

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

REPRESENTATIVES OF THE MINISTRY OF POWER

Ministry of Power

1.	Shri P. Uma Shankar	—	Secretary
2.	Shri G.B. Pradhan	—	Special Secretary
3.	Shri Ashok Lavasa	—	Addl. Secretary
4.	Shri Rakesh Jain	—	Joint Secretary and FA
5.	Shri I.C.P. Keshari	—	Joint Secretary
6.	Shri Sudhir Kumar	—	Joint Secretary
7.	Shri Devender Singh	—	Joint Secretary
8.	Shri M. Ravi Kanth	—	Joint Secretary

Central Electricity Authority

	Shri Gurdial Singh	—	Chairperson

Public Sector Undertakings/Autonomous Bodies/ Statutory Bodies

1.	Shri Arup Roy Choudhury	—	CMD, NTPC
2.	Shri A.B.L. Srivastava	—	CMD, NHPC
3.	Shri S.K.Chaturvedi	—	CMD, Powergrid
4.	Shri R.S.T. Sai	—	CMD, THDC
5.	Shri H.D. Khunteta	—	CMD, REC
6.	Shri R.P. Singh	—	CMD, SJVNL
7.	Shri I.P. Barooah	—	CMD, NEEPCO
8.	Shri Satnam Singh	—	CMD, PFC
9.	Shri A.B.Aggarwal	—	Chairman, BBMB

10.	Shri Subodh Garg	—	DG, NPTI
11.	Shri N. Murugesan	—	DG, CPRI
12.	Shri Kapil Mohan	—	DDG, BEE
13.	Shri Rajiv Bansal	—	Secretary, CERC
14.	Shri Krinwant Sahay	—	Registrar, APTEL

2. At the outset, the Chairman welcomed the Members of the Committee and the representatives of the Ministry of Power to the sitting of the Committee and apprised them of the provisions of Directions 55(1) and 58 of the Directions by the Speaker.

3. Thereafter, the representatives of the Ministry made a power-point presentation on the Demands for Grants (2011-12) covering targets and achievements under major programmes of the Ministry.

4. 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) Reasons for less achievement under Capacity Addition Programme and the remedial action taken by the Ministry.

(iii) Re-structured Accelerated Power Development and Reforms Programme (R-APDRP)— reduction of Transmission and Distribution losses, reasons for not getting desired result under this programme in seven years and possible solutions for the problem faced in effective implementation of the scheme.

(iv) Need for better understanding/co-ordination between the Ministry of Environment and Forests and the Ministry of Power in regard to delay in obtaining clearances for power projects/coal mines.

(v) Acute shortage of coal for the Power Sector in view of less supply from CIL.

(vi) Issues related to implementation of the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).

(vii) Need of Single Window Clearance System for setting power projects.

(viii) Emphasis on Energy conservation.

(ix) Proper exhaustion of hydro power potential available in North-Eastern States.

The Members 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.

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

The Committee then adjourned.

STANDING COMMITEEE ON ENERGY

MINUTES OF THE FOURTEENTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2010-11) HELD ON 25TH JULY, 2011 IN COMMITTEE ROOM 'B' PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1030 hrs. to 1120 hrs.

PRESENT

Shri Mulayam Singh Yadav — *Chairman*

MEMBERS

Lok Sabha

2. Shri Ram Sundar Das
3. Shri Jagdambika Pal
4. Shri Nityananda Pradhan
5. Shri M.B.Rajesh
6. Shri Vijay Inder Singla

Rajya Sabha

7. Shri Govindrao Adik
8. Shri V.P. Singh Badnore
9. Smt. Shobhana Bhartia
10. Shri Shyamal Chakraborty
11. Shri Ram Chandra Khuntia
12. Shri Jesudasu Seelam
13. Shri Mohammad Shafi
14. Shri Motilal Vora
15. Shri Veer Pal Singh Yadav

SECRETARIAT

1.	Shri Brahm Dutt	—	*Joint Secretary*
2.	Smt. Abha Singh Yaduvanshi	—	*Director*
3.	Shri N.K. Pandey	—	*Additional Director*
4.	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 draft Report on the Demands for Grants (2011-12) of the Ministry of Power.

The Committee adopted the draft Reports with minor modifications.

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

The Committee then adjourned.