1

STANDING COMMITTEE ON ENERGY (2009-2010)

FIFTEENTH LOK SABHA

MINISTRY OF POWER

DEMANDS FOR GRANTS (2009-2010)

FIRST REPORT

LOK SABHA SECRETARIAT
NEW DELHI

December, 2009/*Agrahayana*, 1931 (*Saka*)

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Presented to Lok Sabha on 17.12.2009
Laid in Rajya Sabha on 17.12.2009

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C.O.E. No. 185

Price : Rs. 102.00

Published under Rule 382 of the Rules of Procedure and Conduct of Business in Lok Sabha (Thirteenth Edition) and printed by Jainco Art India, New Delhi-110 005.

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2. Shri Shiv Singh	—	*Director*
3. Smt. Neena Juneja	—	*Committee Officer*

*Passed Away on 6th November, 2009.

CHAPTER I

INTRODUCTORY

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

1.1.2 The Ministry of Power is mainly responsible for evolving general policy in the field of energy. The main items of work dealt with the Ministry of Power are as given below:

- General Policy in the electric power sector and issues relating to energy policy and coordination thereof. (Details of short, medium and long-term policies in terms of formulation, acceptance, implementation and review of such policies, cutting across sectors, fuels, regions and intra-country and inter-country flows)'
- All matters relating to hydro-electric power (except small/ mini/micro hydel projects of and below 25 MW capacity) and transmission and distribution system network;
- Research, development and technical assistance relating to hydro-electric and thermal power, transmission system network and distribution systems in the States/UTs;
- Administration of the Electricity Act, 2003, (36 of 2003), the Energy Conservation Act, 2001 (52 of 2001), the Damodar Valley Corporation Act, 1948 (14 of 1948) and Bhakra Beas Management Board as provided in the Punjab Reorganisation Act, 1966 (31 of 1966);

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

1.1.3 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 the rank of Ex-officio Additional Secretaries to the Government of India. They are designated as Member (Thermal), Member (Hydro), Member (Economic & 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.

II. Implementation status of the recommendations contained in the 25th Report of the Standing Committee on Energy on Demands for Grants (2008-09)

1.2.1 The Committee in their 25th Report on Demands for Grants (2008-09) presented to Lok Sabha on 22.04.2008 made 29 recommendations. The Minister of Power made a statement regarding the status of implementation of recommendations made by the Committee in their 25th Report (14th Lok Sabha) in Parliament on 19.12.2008. The Minister in his statement brought out that all the 29 recommendations have been accepted for implementation by the Government. However, an analysis of status of implementation of recommendations suggests that the number of recommendations actually under implementation amounts to 23 and 6 recommendations have been classified as under process of implementation and these recommendations have been reiterated by the Committee in their 29th Report on Action Taken by the Government on the recommendations contained in 25th Report.

1.2.2 In Recommendation Sl. No. 1 (Para 2.1.11) the Committee had emphasised that since power projects are completed in a span of 5-10 years, the Ministry should ensure proper planning so that all funds are utilized in the financial year. Also in Recommendation Sl. No. 3 (Para No. 2.2.21), the Committee desired to know in what way, the steps taken to ensure proper co-ordination among different Ministries had helped in the Capacity Addition Programme. In Recommendation Sl. No. 8 (Para No. 2.3.18) the Committee had desired to be apprised of the present status of implementation of the basin-wise development of hydro potential in the country. In the matter of allocation of gas and coal (Recommendation Sl. No. 16, Para No. 2.5.10), the Committee recommended that the power sector should be given priority over other competing sectors. As regards the Renovation and Modernisation of Power Plants (Recommendation Sl. No. 23 Para No. 2.9.9), the Committee had desired that the Government should pursue with the State Governments and PSUs for constitution of dedicated teams so as to tackle constraints and bottlenecks in carrying out the Renovation and Mordernization. In (Recommendation Sl. No. 25, Para No. 2.10.15),

it was been desired by the Committee that funds should be made available for the important Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) so that all projects under the scheme could be completed in time. The Committee trust that these recommendations will be implemented expeditiously by the Government.

CHAPTER II

11TH FIVE YEAR PLAN—TARGETS AND ACHIEVEMENTS

2.1 The National Electricity Policy (NEP) stipulates power for all by 2012. To fulfill the objectives of the NEP, a capacity addition of 78,700 MW has been set for the 11th Five Year Plan. The breakup of the capacity addition target is given as under:—

(in MW)

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

2.2 As per the assessment made by the Central Electricity Authority against a planned capacity addition of 78,700 MW, a capacity aggregating to 80,610 MW has been ordered for execution during the 11th Plan.

2.3 The capacity already commissioned during the 11th Plan period as on 08.10.2009 is 18,100 MW. An additional capacity likely with high degree of certainty is 44,274 MW and the total feasible is 62,374 MW. However, of the projects proposed in capacity addition of 78,700 MW, a capacity of 16,712 MW will be slipping to 12th Plan.

2.4 To achieve the targets for the 11th Plan an amount of Rs. 3,09,231.38 crore was approved by the Planning Commission to the Ministry of Power comprising of Rs. 2,78,779.47 crore of IEBR and Rs. 30,451.91 crore of GBS. The PSU wise break-up of allocation is as under:—

(Rs. in crore)

S.N.	Name of PSU	IEBR	GBS	Total
1	2	3	4	5
1.	N.T.P.C. Ltd.	162701.34	0.00	162701.34
2.	N.H.P.C. Ltd.	27231.93	1000.00	28231.93

1	2	3	4	5
3.	POWERGRID	39999.00	0.00	39999.00
4.	D.V.C.	20550.00	0.00	20550.00
5.	T.H.D.C. India Ltd.	4158.30	500.00	4658.30
6.	SJVNL Ltd.	10539.70	00.00	10539.70
7.	NEEPCO	13278.06	1500.00	14778.06
8.	N.P.T.I.	0.00	80.00	80.00
9.	C.P.R.I.	0.00	320.00	320.00
10.	MOP	-	27051.91	27051.91
	TOTAL	2,78,458.33	30,451.91	3,08,910.24

2.5 The 11th Plan outlay *vis a vis* year-wise expenditure during the first two years of 11th Plan is given below:

(Rs. in crore)

Name of orgnaisation	11th Plan outlay	2007-08 (BE)	2007-08 (RE)	2007-08 (Actual)	2008-09 (BE)	2008-09 (RE)	2008-09 (Actual)
NTPC	162701.34 (GBS 0.00 IEBR 162701.34)	12792.00 (GBS 0.00 IEBR 12792.00)	11618.00 (GBS 0.00 IEBR 11618.00)	8751.92 (GBS 0.00 IEBR 8751.92)	13588.00 (GBS 0.00 IEBR 13588.00)	12670.00 (GBS 0.00 IEBR 12670.00)	12686.45 (GBS 0.00 IEBR 12686.45)
NHPC	28231.93 (GBS 1000.00 IEBR 27231.93)	2501.95 (GBS 1.00 IEBR 2500.95)	2769.07 (GBS 1.00 IEBR 2768.07)	2568.00 (GBS 0.00 IEBR 2568.00)	4385.19 (GBS 34.00 IEBR 4351.19)	3450.00 (GBS 34.00 IEBR 3416.00)	3677.85 (GBS 34.00 IEBR 3643.85)
PGCIL	39999.00 (GBS 0.00 IEBR 39999.00)	6500.00 (GBS 0.00 IEBR 6500.00)	6504.00 (GBS 0.00 IEBR 6504.00)	6615.00 (GBS 0.00 IEBR 6615.00)	8040.00 (GBS 0.00 IEBR 8040.00)	7624.00 (GBS 0.00 IEBR 7624.00)	8095.00 (GBS 0.00 IEBR 8095.00)
DVC	20550.00 (GBS 0.00 IEBR 20550.00)	4271.38 (GBS 0.00 IEBR 4271.38)	4288.21 (GBS 0.00 IEBR 4288.21)	2523.87 (GBS 0.00 IEBR 2523.87)	6612.85 (GBS 0.00 IEBR 6612.85)	5120.69 (GBS 0.00 IEBR 5120.69)	3391.37 (GBS 0.00 IEBR 3391.37)
THDC India Ltd.	4658.30 (GBS 500.00 IEBR 4158.30)	420.90 (GBS 10.00 IEBR 410.90)	736.21 (GBS 70.74 IEBR 665.47)	828.42 (GBS 70.74 IEBR 757.68)	804.92 (GBS 111.00 IEBR 693.92)	554.26 (GBS 0.00 IEBR 554.26)	614.85 (GBS 0.00 IEBR 614.85)
SJVNL	10539.70 (GBS 0.00 IEBR 10539.70)	642.80 (GBS 0.00 IEBR 642.80)	399.87 (GBS 0.00 IEBR 399.87)	219.23 (GBS 0.00 IEBR 219.23)	556.84 (GBS 0.00 IEBR 556.84)	417.76 (GBS 0.00 IEBR 417.76)	561.87 (GBS 0.00 IEBR 561.87)
NEEPCO	14778.06 (GBS 1500.00 IEBR 13278.06)	1258.70 (GBS 706.47 IEBR 552.23)	260.29 (GBS 163.53 IEBR 96.76)	187.79 (GBS 153.63 IEBR 34.16)	772.50 (GBS 155.00 IEBR 617.50)	447.58 (GBS 43.82 IEBR 403.76)	207.01 (GBS 13.82 IEBR 193.19)
MOP Schemes	27451.91 (GBS)	4765.53 (GBS)	4114.73 (GBS)	4074.66 (GBS)	5700.00 (GBS)	6022.18 (GBS)	5997.04 (GBS)
Total	308910.24 (GBS 30451.91 IEBR 278458.33)	33153.26 (GBS 5483.00 IEBR 27670.26)	30690.38 (GBS 4350.00 IEBR 26340.38)	25647.87 (GBS 4308.93 IEBR 21338.94)	40460.10 (GBS 6000.00 IEBR 34460.10)	36360.47 (GBS 6100.00 IEBR 30206.47)	35231.44 (GBS 6044.86 IEBR 29186.58)

Provision made for the year 2009-10 and the requirement for the remaining two years of the 11th Plan is given in the table below:—

(Rs. in crore)

Name of Orgn.	2009-10 (BE)			Balance available in the final 2 years		
	IEBR	GBS	TOTAL	IEBR	GBS	TOTAL
NTPC	17700.00	0.00	17700.00	123693.89	0.00	123693.89
NHPC	4482.99	185.00	4667.99	16537.09	781.00	17318.09
PGCIL	11510.00	0.00	1151.00	13779.00	0.00	13779.00
DVC	8313.34	0.00	8313.34	6321.42	0.00	6321.42
THDC	535.18	0.00	535.18	2250.59	429.26	2679.85
SJVNL	580.06	0.00	580.06	9178.54	00.00	9178.54
NEEPCO	774.70	50.00	824.70	12276.01	1272.65	13548.66
MOP Schemes(misc.)	0.00	8995.00	8995.00	0.00	8385.21	8385.21
Total	43896.27	9230.00	53126.27	184036.54	10868.12	194904.66

Shortfall in expenditure during first two years of the 11th Plan

During the first two years of 11th Plan, total Plan outlay to the tune of Rs. 73,613.36 crore was approved for the Ministry of Power. Against this Rs. 60,879.31 crore was the actual expenditure. Thus, the total utilization of the plan outlay in the first two years has been 82.70% only.

2.6 Review of the 10th Plan: Enactment of Electricity Act 2003 during the 10th Plan was an important step towards reforms in the power sector. The major milestones achieved during 10th Plan in the power sector include:

- As many as 14 States have restructured or corporatized their power sector and unbundled their boards into separate entities for transmission, distribution and generation.
- Distribution has been privatized in Orissa and Delhi.
- Setting up of State Electricity Regulatory Commissions (SERCs) has become mandatory. A total of 25 States have either constituted or notified the constitution of SERC and 21 SERCs has issued tariff orders.

- A total of 26 States have notified rural areas under Section 14 of the Act, permits have been taken of composite schemes of generation and distribution without any license.
- In compliance with Section 3 of the Electricity Act, 2003, the Central Government notified the National Electricity Policy in 2005. Similarly, National Tariff Policy was also notified in 2006. Further, in compliance with Sections 4 and 5 of the Electricity Act, 2003 the Central Government notified the Rural lectrification Policy on 28th August, 2006.
- The Central Government constituted the Appellate Tribunal for Electricity and the same became operational in July, 2005. The Tribunal has started hearing appeals against orders of the Regulatory Commissions/Adjudicating Officers.
- Open access has been technically allowed and also made functional for inter-state transmission; however it has, in fact, been hindered by the high cross-subsidy surcharge set by many SERCs.
- Finally, under APDRP, nine States have shown a cash loss reduction of Rs. 5254.60 crore over their loss levels of 2001-02. However, the progress is small and AT&C losses continue to remain high in most States.

2.7 Other new major initiatives in the 10th Plan are as follows:

Guidelines Formulated for Merchant Plants/Coal Linkages: Guidelines were formulated on Merchant Power Plants with an aim to restructure the electricity industry on 3 November, 2006. Under the policy, coal blocks/coal linkage will be provided to the successful bidders in setting up thermal power stations.

Guidelines for Procurement of Electricity: In compliance with Section 63 of the Electricity Act, 2003, the Central Government has notified guidelines for procurement of power by Distribution Licensees through competitive bidding. Further, the Central Government has also issued the standard bid documents for long-term procurement of power from projects having specified site and location.

Launch of Ultra-Mega Power Projects (UMPPs): The Electricity Act, 2003 requires competitive tariff-based bidding from independent power producers. To initiate the process and to realize the benefits of international competitive bidding and economies of scale, a

scheme was launched for development of coal-based UMPPs with a capacity of 4000 MW or above through tariff-based competitive bidding. The projects will include development of power projects as well as associated coal mines in respect of pithead sites and imported coal sourcing in respect of coastal sites. These projects will be awarded to developers on BOO basis.

Guidelines issued for Encouraging Competition in Development of Transmission Projects:

The Central Government has also notified guidelines for encouraging competition in development of transmission projects through tariff-based bidding.

2.8 The installed capacity addition in the 10th Plan is shown below:

Type	Target				Achievement			
	Central Sector	State Sector	Private Sector	Total	Central Sector	State Sector	Private Sector	Total
Hydro	7842.00	5381.20	1170.00	14393.20	4495.00	2691.00	700.00	7886.00
Thermal	12790.00	6675.64	5951.00	25416.64	6590.00	3553.64	1970.60	12114.24
Nuclear	1300.00	0.00	0.00	1300.00	1080.00	0.00	0.00	1080.00
Total	21932.00	12056.84	7121.00	41109.84	12165.00	6244.64	2670.60	21080.24

2.9 The expenditure of outlay for the Centre, States and UTs in the 10th Plan yearwise is given in the following table:

Sector	10th Plan approved outlay	2002-03 (Actual)	2003-04 (Actual)	2004-05 (Actual)	2005-06 (Actual)	2006-07 (RE)	10th Plan likely Expenditure	% Utilization
States and UTs	93225.71 (93225.71)	17102.58 (16462.20)	17836.89 (16541.68)	17035.28 (15137.09)	17330.07 (14742.72)	19371.57 (15580.77)	88676.39 (78464.46)	95.12 (84.170)
Central Sector	177050.64 (177050.64)	10993.42 (10581.79)	14327.50 (13287.12)	17039.96 (15141.25)	21045.93 (17903.81)	27271.04 (21934.40)	90677.85 (78848.37)	51.22 (44.53)
All	270276.35 (270276.35)	28096.00 (27043.99)	32164.39 (29828.80)	34075.24 (30278.34)	38376.00 (32646.53)	46642.61 (37515.17)	179354.24 (157312.82)	66.36 (58.20)

(Source: Planning Commission)
(* figures in bracket are at 2001-02 price)

Despite major mile-stones achieved during 10th Plan through various policy initiatives, there were project specific reasons for

under utilizations of 10th Plan targets. Some of the main reasons were:

(i) Delay in induction of super critical technology;

(ii) Delay in supplies/erection by supplier/contractor;

(iii) Financial closure problem;

(iv) Non-availability of gas; involvement of R&R issues

(v) Delayed investment decision;

(vi) Geological surprises

(vii) Delayed placement of works awards,

(viii) Delay in environmental and forest clearance

(ix) Law and order problem

2.10 The Committee note that during 10th Five year Plan, the Government initiated reforms in the power sector starting with the enactment of Electricity Act, 2003. Many of the States restructured or corporatised their power sector and transformed their electricity boards into separate entities for transmission, distribution and generation. States also constituted or notified the constitution of SERCs, the Central Government notified the National Electricity Policy in 2005 and National Tariff Policy 2006. The Central Government also notified the Rural Electricity Policy in August, 2006. The Central Government constituted the Appellate Tribunal for Electricity and the same became operational in July, 2005. Open access was also technically allowed and also made functional for inter-state transmission. Guidelines were formulated on Merchant Power Plants with an aim to restructure the electricity industry in November, 2006. The launch of the Ultra-Mega Power Projects (UMPPs) was also one of the initiatives in the 10th Plan as the Electricity Act, 2003 required competitive tariff based bidding from independent power producers. The Committee, however, observe that despite major mile-stones achieved during 10th Plan through various policy initiatives, as claimed by the Ministry, no marked improvement has been noted in the field of power generation. The Committee hope that the 11th Five Year Plan projects/programmes would be accomplished ensuring growth and development of the power sector leading to more generation. The Committee hope that the public sector will continue to play a dominant role in the 11th Plan while reforms will induce the private sector for greater participation for progress.

(Rec. Sl. No. 1)

2.11 The Committee observe that the proposed capacity addition in the 11th Plan is three and a half times of that achieved in the 10th Plan. The Committee note that as against the proposed capacity addition in the 11th Plan, of 78,700 MW a capacity of 16,712 MW is slipping to the 12th Plan. Since most of the power projects including Ultra Mega Power Projects (UMPPs) envisaged in the 11th Plan are likely to be commissioned only in the 12th Plan and capacity addition of 78,700 MW may not be achieved. Moreover, against an outlay of Rs 3,08,910.24 crore approved by the Planning Commission for the 11th Plan (comprising GBS of Rs. 30451.91 crore and IEBR of Rs. 2,78,458.33 crore) during the first two years out of a total Plan outlay of 73,613.36 crore, the actual expenditure was only Rs. 60,879.31. The Committee further note that there had been project specific reasons which had retarded the physical and financial performance of power sector PSUs during the 10th Plan. The Committee therefore, would like the Ministry to identify the project specific reasons halting the progress of power projects in 11th Plan and address them in right perspective. The Xth Plan also showed similar trends in achievement of physical and financial targets. The effective implementation and execution of the XIth Plan targets is also contingent upon fuel linkages being firmed up and the early start of work on new projects. The Committee therefore, recommend that Ministry of Power should expedite their efforts for fuel linkages and placement of orders for early procurement of equipment/ machinery necessary for the power sector in the next two years for the success of the present plan period.

(Rec. Sl. No. 2)

2.12 The Committee note that recently the Ministry of Power has completed the mid-term appraisal of 11th Five Year Plan. The Committee have not examined the detailed results of this exercise. The Committee would however, like the Government to take necessary action on the weak areas identified in the review so as to achieve the set targets of the 11th Plan in the remaining period of the Plan.

(Rec. Sl. No. 3)

CHAPTER III

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

3.1.1 The Minister for Power laid on the table of the Lok Sabha, the detailed Demands for Grants (2009-10) for the Ministry of Power on 10th July, 2009. The Demands show a budgetary provision of GBS of 9,230.00 crore (net receipts) with a provision of Rs. 7,341.00 crore in revenue and 1,889.00 crore in capital section. The Central Plan Outlay including IEBR however stands at 53,126.27. The detailed Demands for Grants of the Ministry are given as per Annexure I. The Programmes and Schemes of the Ministry within the financial provisions made under the Demands/Annual Plan are briefly as under:

(i) Secretariat: provision is for secretariat expenditure on establishment matters for the Secretariat.

(ii) Central Electricity Authority: The Central Electricity Authority coordinates the activities of the various agencies in relation to control and utilization of national power resources. It is also responsible for carrying out the survey and studies, collection and recording of data concerning generation, distribution, utilization and development of power resources.

(iii) Research and Development: Central Power Research Institute, Bangaluru 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: Provision has been made for expenditure on National Power Training Institute which is engaged in imparting training in various aspects of power sector including operation and maintenance of power stations.

(v) Joint Electricity Regulatory Commission (JERC) for Manipur and Mizoram: A Joint Electricity Regulatory Commission (JERC) has been set up for Manipur and Mizoram. A provision has been made for incurring expenditure on establishment and other activities of the commission.

(vi) Central Electricity Regulatory Commission: Under the provision of the ERC Act, 1998, the Central Government had constituted the Central Electricity Regulatory Commission (CERC). The Central Commission is a statutory body with a *quasi-judicial* status under the Electricity Act, 2003. A provision has been made for incurring expenditure on establishment and other activities of CERC in the form of Grant-in-Aid.

(vii) Rajiv Gandhi Grameen Vidyutikaran Yojana: RGGVY, a flagship scheme and a component of the Bharat Nirman, was launched in March, 2005 with a mandate to electrify over one lakh villages and release electricity connections to 2.34 crore rural BPL households in five years. (As per census 2001, 44% of the rural households have electricity. Improvement of rural electricity infrastructure is essential to empower rural India and unleash its full growth potential. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under the scheme projects can be financed with 90% capital subsidy for provision of Rural Electricity Distribution Backbone (REDB), creation of Village Electrification Infrastructure (VEI) and Decentralized Distributed Generation and Supply. REDB, VEI and DDG would also cater to the requirement of agriculture and other activities. Under this scheme un-electrified Below Poverty Line (BPL) households will get electricity connection free of charge. The continuation of the scheme in XI Plan was sanctioned on 3rd January, 2008 with the capital subsidy of Rs. 28,000 crore in Phase-I. To increase the coverage of small habitations, Government sanctioned electrification of habitations 100 population instead of 300.

(viii) Funds for Evaluation Studies and Consultancy: This provision is for conducting evaluation studies of various projects/programme/schemes.

(ix) Appellate Tribunal for Electricity: Under the provisions of Electricity Act, 2003, the Central Government has set up the Appellate Tribunal for Electricity. It handles appeals against the orders of the adjudicating officer or the appropriate Commissions under the Electricity Act, 2003.

(x) Joint Electricity Regulatory Commission (JERC) for UTs: One Joint Electricity Regulatory Commission (RERC) has been set up for Goa & UTs except Delhi. Provision has been made for incurring expenditure on establishment and other activities of the Commission, in the form of Grant-in-Aid.

(xi) Comprehensive Award Scheme: The scheme for awarding shields/certificate is being implemented by the Ministry of Power for outstanding performance of the Thermal Power Stations and Utilities.

(xii) Energy Conservation and Bureau of Energy Efficiency (BEE): 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 and National Mission for Enhanced Energy Efficiency (NMEEE).

(xiii) Restructured APDRP: The focus of the Restructured APDRP approved in July, 2008 for the 11th Plan is on actual, demonstrable performance in terms of loss reduction. The objective of the programme is to facilitate State Power Utilities to reduce the level of AT&C losses to 15%. The programme has two major components. Part A will include projects for establishment of information technology based energy accounting and audit system leading to finalization of verifiable base-line AT&C loss levels in the project areas. Part B envisages distribution network strengthening investments leading to reduction in loss levels. Initially, funds for the projects under both the parts are to be provided through loan (100% for Part A and 25% for Part B except special category and North-Eastern States for which under Part B 90% loan will be provided) which will be converted into grant on fulfillment of conversion 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.

(xiv) Assistance to Forum of Regulator (For) for Capacity Building and availing consultancy: The provision is for organizing full time training programmes every year to provide training to staff of the Central/State Electricity Regulatory Commissions.

(xv) Investment in Public Enterprises:-

(xv) (1) NTPC Limited: NTPC was set up in November, 1975 as a thermal power generating company with the main objective of construction Thermal Power Projects at coalpit heads.

(xv) (2) NHPC Limited: NHPC was set up in 1975 with a view to secure, speedy, efficient and economical execution and

operational hydro-electric projects in the Central Sector. The Corporation has so far completed construction of 11 projects in the Central Sector and 2 projects in joint venture *i.e.* Indira Sagar and Omkareshwar.

(xv) (3) Damodar Valley Corporation (DVC): DVC was established in July, 1948 for the promotion and operation of irrigation, water supply, drainage, generation, transmission and hydro-electric power in the Damodar Valley.

(xv) (4) North Eastern Electric Power Corporation (NEEPCO): NEEPCO was registered as a company under the Companies Act, 1956 on 2nd April, 1976 with the objective to plan, survey, investigate, design, construct, operate and maintain power stations in the North Eastern Region.

(xv) (5) SJVNL Limited: (formerly Nathpa Jhakri Power Corporation Limited-NJPC) was incorporated on May 24, 1988 as a joint venture of the Government of India and the Government of Himachal Pradesh to plan, investigate, execute, operate and maintain Hydro-electric power projects in the river Satluj basin in the State of Himachal Pradesh.

(xv) (6) THDC India Limited: THDC was incorporated as a joint venture of Government of India and Government of Uttar Pradesh in July, 1988 for integrated and efficient utilization of the hydro resources of Bhagirathi river and its tributaries at Tehri and down stream.

(xv) (7) Power Grid Corporation of India Limited (PGCIL): PGCIL was incorporated in 1989 to establish and operate the regional and national grid to facilitate transfer of power within and across the regions with reliability, security and economy on sound commercial principles. The transmission systems of NTPC, NHPC, NEEPCO and NLC were transferred with effect from April, 1992 to PGCIL.

3.1.2 Since the budgetary provisions have already been passed by the Parliament, the Committee endorse the same. The programmes/schemes under the Ministry vis-à-vis budgetary provisions have been discussed in the succeeding paragraphs. The Committee would like the Ministry to take note of the recommendations of the Committee while carrying out the programmes and schemes within the approved budgetary provisions.

(Rec. Sl. No. 4)

A. Plan Outlay

3.2.1 The budgetary allocation of the Ministry of Power for the year 2009-10 is proposed as Rs. 53126.27 crore as per the details given below:

(Rs. in crore)

Internal & Extra Budgetary Resources (IEBR)

Sl. No.	Organisations/ Schemes	Internal & Extra Budgetary Resources	GBS	Total Plan Outlay
A. Central Plan				
1.	N.T.P.C.	17700.00	0.00	17700.00
2.	N.H.P.C.	44.82.99	185.00	4667.99
3.	POWER GRID	11510.00	0.00	11510.00
4.	D.V.C.	8313.34	0.00	8313.34
5.	T.H.D.C. India Limited	535.18	00.00	535.18
6.	S.J.V.N.	580.06	0.00	580.06
7	NEEPCO	774.70	50.00	824.70
8.	MOP (OTHER)	0.00	8995.00	8995.00
	A. Total Central Plan	43896.27	9230.00	53126.27
B. Ministry of Power Schemes				
	Rural Electrification Scheme	0.00	7000.00	7000.00
	N.P.T.I. (Training & HR)	0.00	20.00	20.00
	C.P.R.I. (Research & Testing)	0.00	55.00	55.00
	Programme & Infrastructure improvement of CEA	0.00	15.00	15.00
	Bureau of Energy Efficiency	0.00	82.00	82.00
	Other MOP Schemes	0.00	1823.00	1823.00
	Total—B	0.00	8995.00	8995.00

3.2.2 On being enquired about the financial requirements of the Ministry during 2009-10 and as finally approved by the Planning Commission, the Ministry of Power furnished the following statement to the Committee:

(Rs. in crore)

Name of Orgn.	Outlay proposed by Ministry of Power			Finally approved by Planning Commission		
	GBS	IEBR	TOTAL	GBS	IEBR	TOTAL
NTPC	0.00	17700.00	17700.00	0.00	17700.00	17700.00
NHPC	644.80	4482.99	5127.79	185.00	4482.99	4667.99
PGCIL	0.00	11510.00	11510.00	0.00	11510.00	1151.00
DVC	0.00	8313.34	8313.34	0.00	8313.34	8313.34
THDC India Ltd.	0.00	535.18	535.18	0.00	535.18	535.18
SJVNL	0.00	580.06	580.06	0.00	580.06	580.06
NEEPCO	50.00	774.70	824.70	50.00	774.70	824.70
MoP Schemes	14821.27	0.00	14821.27	8995.00	0.00	8995.00
	15516.07	43896.27	59412.34	9230.00	43896.27	53126.27

3.2.3 It has been brought to the notice of the Committee that the amount approved by the Planning Commission was sanctioned by the Ministry of Finance. However, it was pointed out that Rs. 15516.07 crore (including GBS of NHPC) was sought under GBS for implementing the MoP schemes. However, only Rs. 9230.00 crore was sanctioned. The Ministry of Power have stated that the matter would be taken up with the Ministry of Finance/Planning Commission for additional allocation at R.E. stage, if required.

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

Year	BE (Rs. in crore)	RE (Rs. in crore)	Rs. in crore (Actual utilization)	%of Budget Estimate
2006-07	27,623.70	25,325.77	22,848.71	82.71%
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			

It may be seen from the above that the Ministry were not able to utilize the amount earmarked in the Budget Estimates during last three years and the BE for the current year has been kept at Rs. 53,126.27 crore.

3.2.5 The figures for expenditure in the year 2009-10 for first quarter are shown below:-

	GBS	IEBR	TOTAL	% utilization in financial year 2009-10 (w.r.t. B E)
Plan Expenditure 1st quarter	7.58	3,914.59	3,922.17	7.38%
Non plan	24.07	0.00	24.07	18.93%

3.2.6 To a specific question on the utilization of budgetary resources on the whole and specifically in the first quarter of the financial year, the Ministry have informed:

"The resources available from various organizations under Ministry of Power are those provided from the Consolidated Fund of India through Gross Budgetary Support and those generated by the organization from Internal and Extra Budgetary Resources (IEBR). The break up of Rs. 53126.27 crore during 2009-10 is as under:

(i) Rs. 9230 crore — Plan (GBS)

(ii) Rs. 43896.27 crore — IEBR

(iii) Rs. 127.14 crore (Net) — Non- Plan (Excluding BTPS)

The amount indicated at Sl. Nos. (i) & (iii) is provided through Consolidated Fund of India.

Different proposals of ongoing projects as well as new projects are being processed and monitored to ensure early sanction and to utilize allocated funds in the current Financial Year.

Unutilized releases of last quarter of the previous year are available in the 1st quarter of the current year. In view of this, the expenditure generally in the 1st quarter under Plan, from the current year's budget is low which picks up in the subsequent quarters".

3.2.7 The quarterly utilization of funds by the Ministry of Power during 2008-09 is shown below:—

(Rs. in crore)

	GBS	IEBR	Total	% Utilization in financial year 2008-09 (w.r.t. BE)
Expenditure during 1st quarter	364.03	3,628.35	3,992.38	9.87%
Expenditure during 2nd quarter	1,311.41	4,961.37	6,272.78	15.50%
Expenditure during 3rd quarter	1,061.14	6,331.76	7,392.90	18.27%
Expenditure during 4th quarter	3,308.28	14,265.10	17,573.38	43.43%

3.2.8 Explaining the reasons for less utilization of funds in 1st and 2nd quarters of the financial year, the Ministry stated in a note:

> "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)".

3.2.9 Explaining about the expenditure in the 1st & 2nd quarter during the years 2008-09 and 2009-10, the Ministry have informed that as against the expenditure of Rs. 7.58 crore in 1st Quarter under Plan (GBS), the expenditure during the 2nd quarter is Rs. 2001.90 crore.

This has been achieved by close monitoring of the projects from time to time.

As per monthly expenditure plan, 15.25% is required to be spent under 1st Quarter under Plan and 11.49% under non-plan; 25.92% & 11.49% in 2nd quarter respectively. The quarterly utilization of funds was low on account of the unspent balances in 1st quarter. The comparative position in 2009-10 *vis-a-vis* 2008-09 is as under:

(Rs. in crore)

	GBS	IEBR	Total	% Utilisation
Expenditure during 1st quarter (2008-09)	364.03	3628.35	3992.38	9.87
2009-10	7.58	3914.59	3922.17	7.38
Expenditure during 2nd quarter(2008-09)	1311.41	4961.37	6272.78	15.50
2009-10	2001.90	6468.92	8470.82	15.94
Expenditure during 3rd quarter(2008-09)	1061.14	6331.76	7392.90	18.27

3.2.10 Regarding the enhanced IEBR of PSUs during 2009-10 as against Rs. 30,206.47 crore during 2008-09 the Ministry have stated that proposed Rs. 43,896.27 crore as IEBR for PSUs is based on their requirement. The Ministry have explained the same in a written reply as given below:

> "The Ministry has proposed Rs. 43896.27 crore as IEBR for PSUs based on the figures furnished by the PSU's in the format issued by the Ministry of Finance and as per the financing pattern approved by the Planning Commission and as shown in the "Plan allocation statement" from the Planning Commission.
>
> The IEBR of a PSU during a fiscal year is worked out taking into account the various projects of the PSUs, targets of the plan & their ability to generate fund/ raise funds for the projects through internal resources, depreciation, provisions etc. This comprises Rs. 11802.64 cr., Rs. 18608.99 cr., Rs. 5727.10 cr., Rs. 7757.54 cr. from Internal Resources, Bonds/Debenture, ECB & other resources respectively"

3.2.11 In a written reply to a specific query on the efforts being made to increase the pace of expenditure and also bring momentum

in the achievement of targets, set by the Ministry, the Ministry have stated:

> "The expenditure pattern is monitored on a weekly/monthly/ quarterly basis by the JS & FA(P). Secretary (Power) also monitors the progress in the Senior Officers' Meeting. Performance of various CPSUs/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".

Utilisation of Plan Outlays by PSUs

3.2.12 In reply to a query by the Committee about major reasons for shortfall in uilisation of the Plan Outlays by various PSUs during 2008-09 the following information has been submitted by the Ministry:

(1) NTPC Limited

The BE of NTPC for 2008-09 was Rs. 13588.00 crore, which was revised to Rs. 12670.00 crore, but the actual has been shown as Rs. 13224.51 crore. The reasons given for non-utilisation of funds are as given below:

(i) Against the BE of Rs. 752 crore for proposed addition of 3200 MW of generation capacity at Central Generating Station of NTPC, Darlipalli Project, the RE figures are Rs. 45 crore, The expenditure was not incurred due to withdrawal of water commitment by State Govt. thereby leaving a shortfall of Rs. 752 crore.

(ii) Against BE 08-09 of Rs. 826.50 crore for addition of 1980 MW of generation capacity at North Karanpura Project, The RE figures are Rs. 61.67 crore, an amount of Rs. 18.64 crore was incurred leaving a shortfall of Rs. 807.86 crore. Technical bids for SG&TG package awarded have been under evaluation and main plant award is now targeted in 2009-10, subject to settlement of project, location on Coal bearing area issue raised by M/o Coal.

(2) NHPC Limited

The BE of NHPC for 2008-09 was Rs. 4385.19 crore, which was revised to Rs. 3450.00 crore, but the actual has been shown as

Rs. 3677.85 crore. The reasons given for non-utilisation of funds are as given below:

(i) Parbati II—less utilization is due to slow progress at project as a result of order of High court of HP regarding ban on procurement of sand and aggregate from any mining in Distt. Kullu for Mega Projects. Less progress in power house was because of frequent encountering of air pockets/ fractured rock resulting in high intake of grout material.

(ii) Kotli BHEL I to III—Less utilization due to these projects could not be posed to CCEA approval for want of Forest clearance for Kotli BHEL 1A, 1B and II which were earlier envisaged to be started in 2007-08.

(iii) Teesta Low Dam IV—due to delay in transfer of forest land and non-starting of civil works.

There are small positive and negative variations in RE figures of other schemes, however the net effect on overall IEBR is a shortfall of Rs. 935.19 crore.

(3). DAMODAR VALLEY CORPORATION (DVC)

The BE of DVC for 2008-09 was Rs. 6612.65 crore, which was revised to Rs. 5120.69 crore, but the actual has been shown as Rs. 3391.37 crore. The reasons given for non-utilisation of funds are as given below:

Some of the physical targets could not be accomplished. The physical targets had to be revised and thereby the financial target. Apart from delay in supply of materials by EPC contractors, scarcity of cement & steel materials etc., delay in land acquisition and associated law & order problem in projects namely Koderma, Durgapur Steel and Raghunathpur was also the major reason.

There are small positive and negative variations in RE figures of other schemes, the net effect on overall IEBR is a shortfall of Rs. 1491.96 crore.

(4). THDC India Limited

The BE of THDC for 2008-09 was Rs. 804.92 crore, which was revised to Rs. 554.26 crore, but the actual has been shown as Rs. 614.85 crore. The reasons given for non-utilisation of funds against BE 2008-09 are as given below:

Due to rescheduling to Sept., 09 for Koteshwar HEP(400MW) for completion of column, Beam in Service Bay upto El-563.0 M (crane beam level) and non-approval of new schemes.

There are small positive variations in RE figures of other schemes; the net effect on overall IEBR is a shortfall of Rs. 139.66 crore. As compared to BE *vs* the actual expenditure, the shortfall is Rs. 90.07 crore and positive variation compared to RE 2008-09 *vs* actual expenditure is Rs. 60.59 crore.

(5) NORTH EASTERN ELECTRIC POWER COMPANY (NEEPCO)

The BE of NEEPCO for 2008-09 was Rs. 772.50 crore, which was revised to Rs. 447.58 crore, but the actual has been shown as Rs. 227.40 crore. The reasons given for non-utilisation of funds are as given below:

(i) The progress of the ongoing Kameng HEP (600 MW) suffered badly due to encountering of adverse geology in tunnel boring especially in 3(three) faces. To stabilize the excavated power House Slope, micro piling works had to be resorted to, resulting in delay in concreting works. Further, the devastating flash flood due to cloud burst on 26th & 27th October, 2008 and its aftermaths at various sites of the project plagued the progress of the project as a whole leading to the under utilization of allocated fund for the year 2008-09. The fund outlay was therefore revised from Rs 398.57 cr. (BE 2008-09) to Rs. 308.61 cr. (RE 2008-09).

(ii) In the absence of administrative approval of the revised cost estimate of the Khangten Small HP, the allocated outlay of Rs. 16.56 cr. (BE 2008-09) was revised to Rs. 7.54 cr. (RE 2008-09). However, CEA has recently vetted the RCE of the project at Rs. 73.68 cr. (hard cost) vide their letter dated 18.06.09.

(iii) Under the head of Survey & Investigation, an amount of Rs. 30 cr. was earmarked as BE for the year 2008-09. However, due to the prevailing environmental issues in respect of the Kameng-I HEP (1120 mw), Arunachal Pradesh, the S&I works suffered. Further, in regard to Ranganadi Stage-II HEP, Arunachal Pradesh, the MoA has not yet been signed due to the non-payment of the upfront premium to the State Govt. Further, the Govt. of Arunachal Pradesh has withdrawn the Kapak Leyak (160 MW) and Badao HEP (70 MW) from NEEPCO *vide* their letter dated 22.12.08. In view of the above facts, the RE 2008-09 was projected at Rs. 11.52 cr. An amount of Rs. 120.38 cr. was projected against Garo Hills Coal Based Power Project in Meghalaya

comprising of IEBR of Rs. 119.38 cr. and NBS of Rs. 1.00 cr. as the MoA with Govt. of Meghalaya was signed on 20.12.07. However, the Govt. of Meghalaya *vide* their letter dated 9th April, 2008 intimated NEEPCO not to operationalise the above MoA until further order. The RE 2008-09 was reduced to Rs. 0.50 cr. only. NEEPCO is pursuing with the State Govt. for obtaining clearance for early start of the project activities.

(iv) For Renovation and Modernisation of Kopili Power Station of NEEPCO, an amount of Rs. 52.99 cr. was projected as BE 2008-09 (IEBR). The proposal of the R&M scheme of Kopili Unit-I & II as well as 220/132 KV Kopili and 132/33 KV Khandong switchyard was placed in the 6th TCC & 6th Regional Power Committee meeting held on 7th&8th August, 2008 at Gurgaon for approval of the Power Committee. Since the finalization of the proposal was anticipated to take time, the RE 2008-09 against this scheme was projected at Rs. 3.88 cr. only. Meanwhile, the issue was discussed in the said power committee meeting and it was decided that NEEPCO would prepare a detailed report incorporating the cost implications and the benefits to be accrued to the beneficiaries and circulate the same among all the beneficiaries so that the issue would be taken up in the next NERPC meeting for in principle approval. A meeting was convened with BHEL at Shillong on 05.11.08 for detail discussion on the scope of R&M works and financial offer of BHEL for the supply/delivery of equipments/materials for the entire scope for preparation of the report indicating the latest financial implication. Offer from BHEL, the OEM, was received for R&M works of T.G.- equipment under phase-I with cost involvement of around Rs. 28 crore.

3.2.13 The Committee note that the Budget Estimates of Ministry of Power for the year 2009-10 including IEBR have been placed at Rs. 53,126.27 crore. While the Budget Estimates (2008-09) including IEBR were Rs. 40,460.10 crore and Revised Estimates were Rs. 36,306.47 crore, the actual utilization was Rs. 35,231.44 crore comprising of Rs. 6,044.86 crore as GBS and Rs. 29,186.58 crore as IEBR which was 87.08% of Budget Estimate and 97.04% of Revised Estimate respectively. The Committee also note that the utilization of funds quarterwise was 9.87%, 15.50%, 18.27% and 43.43% in the 1st , 2nd, 3rd and 4th quarter of 2008-09 respectively. Although the Ministry have justified that the expenditure in the first quarter is

low and it picks up in the subsequent quarters, the Committee are apprehensive whether this situation would be overcome in the subsequent years. Although a mechanism is reportedly in place to monitor new and ongoing projects for early sanction and utilization of funds no perceptible improvement has been observed in this regard. Even for the schemes like RGGVY, the Ministry have stated that funds are demanded on the basis of expected progress by the States torwards implementation of the sanctioned projects. Also due to reasons like delay in awards, delay in allotment of land for substations, supply of materials, execution of work, actual utilization of funds does not take place. Since some of the projects/schemes are spill over from the previous year, the Committee find no reason as to way the Plan outlay expenditure in the first quarter should be as low as 8 or 9% as against the stipulated expenditure of about 25%. The Committee therefore, would like the Government to review the project planning/monitoring system of various PSUs/Bodies under the administrative control of the Ministry with a view to improve the same so as to ensure that funds are utilized evenly during the year. This would ensure proper utilization of funds as also achieving the physical targets set for various programmes/ schemes in the power sector.

(Rec. Sl. No. 5)

3.2.14 The Committee also find that underutilization has also been observed in Plan outlays of NTPC, NHPC, DVC, THDC India Limited and NEEPCO. The main reasons for lesser utilization of funds by these PSUs are stated to be withdrawal of water commitment by the State Governments delay in technical bids in case of NTPC, ban on procurement of sand and aggregate from any mining in District Kullu for Mega Projects, non-availability of forest clearance for Kotli – BHEL, IA, IB and II; delay in transfer of forest land and non-starting of civil works in respect of Teesta Low Dam IV in case of NHPC, delay in supply of material, scarcity of cement and steel, delay in land acquisition etc. in case of DVC. The Committee feel that as an administrative Ministry, the Ministry of Power, should have been in a position to provide requisite help to power PSUs, which are facing these nagging problems since long and adversely affecting the planned power generation. The Committee would like the Ministry to prepare an action plan for taking conclusive action in this direction in coordination with other Central Ministries/State Governments.

(Rec. Sl. No. 6)

B. Power Generation and Capacity Addition Programme

3.3.1 As regards the Power generation and capacity addition programme in the country, the Committee have been informed that the all India generating capacity/total installed capacity end of September, 2009 was 152,360 MW consisting of 98,045 MW(64.4%) thermal, 36,885 MW (24.2%) hydro, 4120 MW (2.7%) nuclear and 13310 MW (8.7%) from Renewable Energy Sources(RES). The following statement provides the total power generation capacity in the country:

Thermal

Coal + Lignite	80,396 MW	
Gas	16,449 MW	
Diesel	1,200 MW (total 98045 MW)	(64.4%)
Hydro	36,885 MW	(24.02%)
Nuclear	4120 MW	(2.7%)
Renewables	13,310 MW	(8.7%)

Out of the total installed capacity 17% (25,891 MW) came from the private sector, 33% (49,842 MW) from Central Sector and 50% (76,627 MW) from State Sector.

3.3.2 Asked about the power generation programme for the last two years vis-à-vis actual achievements for the same as against the capacity targeted at 78,700 MW in the 11th Plan. The Ministry gave the following data:

Year	Target	Revised target	Achievement
2007-08 MW	16335.2 MW	12039.0 MW	9263.00 MW
2008-09	11061.2 MW	7530.00 MW	3454.00 MW
2009-10	14507 MW		5383.00 MW
			18100.00 MW as on 08.10.2009

3.3.3 When asked about the targets *vis-a-vis* the actuals for power generation during the VIIth, IXth & Xth Plans, the Committee have been informed as under:

Plan	Target	Actual	(%)
VIIIth	30,538 MW	16,423 MW	(54%)
IXth	40,245 MW	19,015 MW	(47%)
Xth	41,110 MW	21,180 MW	(52%)

3.3.4 The Ministry also informed that out of planned capacity addition target of Rs. 78,700 MW, 64% (50,570MW) was based on Coal, 20% (15,627MW) from hydro, 9% (6,843MW) from Gas, 3% (2,280MW) from Lignite and 4% from nuclear (3,380 MW) in XIth Plan.

3.3.5 The Ministry also informed that in the XIth Plan 34% (26,783 MW) would be coming from the State Sector, 19% (15,043 MW) from Private Sector and 47% i.e. (36,879 MW) from Central Sector.

Capacity Awarded for Commissioning during XIth Plan

(capacity in MW)

	Hydro	Thermal	Nuclear	Total
Central	8,654	21,496	3,380	33,530 (42%)
State	3,362	21,001	-	25,363 (32%)
Private	3,491	18,226	-	21,717 (26%)
Total	15,507	61,723	3,380	80,610

Capacity Commissioned/expected to be commissioned during XIth Plan (Fuel-wise)

	Commissioned as on 08.10.2009	Additional capacity likely with high degree of certainty	Total capacity feasible	Capacity being attempted under "Best Efforts"
Hydro	3,431	4,806	8,327	2,110
Thermal	14,449	36,308	50,757	10,480
Nuclear	220	3,160	3,380	
Total	18,100*	44,274	62,374	12,590

*Additional capacity commissioned during period: Renewables 5549MW, Captive 5,000.30 MW

3.3.6 Giving details of the constraints in achieving the capacity addition targets, the Ministry has attributed the following reasons in a presentation made before the Committee during evidence:

- Delay in placement of orders.
- Delayed and non-sequential supplies.

- Shortage of skilled manpower/commissioning teams.
- Delay in resolution of contractual issues.
- Constraints in movement of heavy equipment due to bottlenecks in road transportation.
- IT based monitoring not implemented.
- Inadequate deployment of construction machinery.
- Delay in Environment and Forest clearance.
- Land acquisition problems.
- Shortage of fuel.

3.3.7 To achieve a target of 78700 MW in the 11th Plan, the Ministry have informed that they have taken the following steps to prevent slippage and achieve capacity addition targets in the 11th Plan:

"(i) One of the important reasons for slippage in the target of the 10th Five Year Plan was delay in placement of orders for main plants and Balance of Plants (BoPs). Learning from the past experience orders for the plants and equipments have already been placed for the projects targeted for commissioning in the 11th Plan.

(ii) Bharat Heavy Electricals Limited (BHEL) has enhanced its capacity to deliver 10,000 MW of main plant equipment per annum, have put in place an action plan to enhance capacity to deliver 15,000 MW per annum by December, 2009 and may raise this capacity upto 20,000 MW by 2011 depending upon the market demand. The ability of BHEL to supply and deliver equipment still remains an important and crucial element for success in capacity addition.

(iii) A Joint Venture Company has been formed between NTPC Ltd. and BHEL on 29.04.2008 to take up Engineering, Procurement and Construction (EPC) for power plants and manufacturing of equipment for power projects and other infrastructure projects.

(iv) Joint Venture companies have also been formed between M/s L&T and MHI, Japan, M/s JSW and Toshiba, M/s Bharat Forge and Alstom and M/s GB Engineering and Ansaldo for manufacture of various power plants equipments.

(v) All stakeholders have been sensitized towards enlarging the vendor base so as to meet the Balance of Plants (BoP) requirements. Pre-qualifying requirements have been relaxed to attract new vendors.

(vi) Standardization of specifications for 500 MW unit done.

(vii) Pre-qualification requirement for super critical unit manufacturers has since been modified so as to qualify new Joint Venture between Indian company and the technology provider company.

(viii) Bulk ordering of 11 units of 660 MW each with supercritical technology with mandatory phased indigenous manufacturing Programme is also planned to promote indigenous manufacturing. NIT for all 11 units of 660 MW was issued on 16.10.2009.

(ix) To overcome the shortage of skilled manpower, 'Adopt an ITI' initiative has been taken up. States and Projects developers being encouraged to adopt ITIs.

(x) Monitoring mechanism in the Ministry has been strengthened. The progress of generation projects for completion 11th Five Year Plan is reviewed intensively in periodical meetings by Central Electricity Authority, Ministry of Power and Power Projects Monitoring Panel (PPMP). An Advisory Group comprising of retired Secretaries of the Ministry of Power, CMD, BHEL, Secretary General FICCI, Director General, CII etc. under the Chairmanship of Hon'ble Minister of Power has been set up to review and advise on the expeditious completion of ongoing power generation projects.

(xi) Financial closure has been achieved in respect of all the projects included in the 11th Plan targets.

Planning Commission had set a capacity addition target of 78,700 MW during 11th Plan. A capacity of 18,100 MW has been commissioned during 11th Plan till 08.10.2009. As per the assessment made by CEA for mid-term review of 11th Plan, capacity aggregating to 44,274 MW is likely to be commissioned with high level of certainty during the remaining period of 11th Plan. Thus a total capacity of 62,374 MW is likely with a high level of certainty. In addition a capacity of 12,590 MW is being attempted for during the 11th Plan on best efforts basis & some of these projects may be commissioned".

3.3.8 Elaborating on the requirement of manpower during evidence, the representative of the Ministry stated that this was a major hurdle and our ITIs were not properly equiped and they also did not have instructors and therefore Power Ministry had started a scheme i.e. adopt an ITI. The witness stated that to reduce the requirement of six lakh or eight lakh manpower, the PSUs like NTPC had started adopting ITIs. In fact, NTPC has already adopted 17 ITIs to produce workers and trained manpower.

3.3.9 On being pointed out by the Committee the all factors including shortage of manpower are taken into account while making a Five Year Plan and enquired then how was it that all these factors were not taken note of and action taken prior to fixing capacity addition targets, the Secretary replied:

> "This eight lakh requirement is for the construction, operation and maintenance combined required by the State sector and the private sector, Central Sector and also the contractors. This is the total requirement. So we worked out this requirement before the beginning of the the Plan and we had a number of meetings with the State sector, private sector of State Governments, the Department of Technical Education. We discussed the curriculum that is required to be introduced. A lot of preparations was carried out before the beginning of the 11th Five Year Plan.
>
> Regarding training in the ITI, we have already adopted 17 ITIs. We will try to reduce our problem of manpower requirement during the execution or managing the project, in one or one-and half years we will be on course to manage it. We are in touch with the Ministry of Labour and HRD on this. On energy efficiency, it is already on the anvil and we are trying our best".

3.3.10 In regard to monitoring of capacity addition programmes, the Ministry have replied that:

> "Ministry of Power has been monitoring the capacity addition, availability of fuel, outage of generating units, etc., which have a significant contribution in realisation of generation targets.
>
> Besides above, Ministry of Power has also constituted a Power Project Monitoring Panel in addition to the on-going monitoring efforts of CEA to facilitate removal of bottlenecks. Power Projects Monitoring Panel has been set up to strengthen monitoring effort and provide independent assessment on project implementation. An Advisory Group of former Power Secretaries has been formed under the Chairmanship of Hon'ble Minister of Power."

3.3.11 In a reply to a query on the role of the Ministry as a facilitator for overcoming various problems being faced by the power PSUs resulting in lower power generation, the Ministry have stated:

"The issues required to be brought to the notice of (a) other Ministries, namely, Ministry of Coal, Ministry of Petroleum & Natural Gas, Ministry of Environment & Forests, etc., (b) the State Governments and (c) the agencies like BHEL are taken up to facilitate overcoming of the problems.

The following steps have been taken/are being taken by the Government to enhance power generation:

(i) Monitoring of coal supply to all major power plants of the country.

(ii) Import of coal to bridge the gap between requirement & availability of domestic coal.

(iii) Arranging linkages of additional quantity of gas to improve capacity utilization of gas-based stations from new gas fields. Minister of Power is the Member of the EGoM on commercialization of Gas.

(iv) Spot-purchases of LNG to bridge the gap between demand & availability from domestic sources.

(v) Co-ordinated Operation & Maintenance of hydro, thermal, nuclear and gas-based power stations to optimally utilize the existing generation capacity.

(vi) Rigorous monitoring of capacity addition of on-going generation projects to ensure their timely completion. Some of the important measures taken are as follows:

(a) The Central Electricity Authority (CEA) has designated nodal officers to be associated with each on-going project who continuously and closely monitor the progress at site through visits and interaction.

(b) Intensive review meetings are regularly organized by the Ministry of Power along with CEA, Central Public Sector Undertakings (CPSUs) and other stakeholders to review the critical milestones associated with each on-going project.

(c) A Power Project Monitoring Panel (PPMP) has been set up to independently follow up and monitor the progress of the critical projects.

(vii) Enhancing of manufacturing capacity of power plant equipment of M/s. BHEL Promoting setting up of new manufacturing capacity for power equipment in the country.

(viii) Sensitizing the industry about the requirement of power sector. Reviewing pre-qualification requirements for new manufacturers for critical equipment.

(ix) Development of Ultra Mega Power Projects of 4000 MW each to reap benefits of economies of scale through tariff based bidding.

(x) 'Adopt an ITI' initiating to help building up skilled manpower.

(xi) Advising to BHEL for advance procurement action for critical materials and as forgings for which items are only limited foreign suppliers.

(xii) Advising to project developers for improvement in contract document to avoid contractual disputes.

Standard specifications for main plants for coal based sub-critical thermal plants for size 500 MW and above."

3.3.12 Further, the Ministry has informed that BHEL has been asked to take following actions:

- Detailed analysis for outsourcing of equipment manufacturing on system basis and other components to ancillary units.
- To book for raw material/casting/forging/piping in anticipation of order in view of tight position in availability of these materials in international market.
- Development of skilled manpower in the area of high pressure welding, fittings, instrumentation, electrical, masons and carpenters and a pool of skilled technicians to be created.

3.3.13 Reportedly the Ministry of Power has also been taking up the matter regarding enhancing the partnership of private sector in manufacture of power equipments and to ensure that there is no shortage of power equipments in future. Further, in the report of Working Group on Power for 11th Plan, it has been recommended that there is a need to develop additional players in the domestic area to adequately meet the projected capacity addition demands and

in order to discover the benchmark price. There is necessity to develop more players in critical areas like main plant, HP Piping, coal handling, ash handling, CW pumps etc.

3.3.14 Regarding the equipment required for the power sector, it has further been informed that NTPC has formed a Joint Venture Company with Bharat Forge Limited on 19/6/2008. NTPC & Bharat Forge Limited have equity participation in the ratio of 49:51 respectively in the JV Company. The aim of the JV Company is to establish a facility, subject to establishment of techno-commercial viability, to initially take up manufacture of castings, forgings, fittings and high pressure pipings required for power and other industries, Balance of Plant (BoP) equipment for the power sector including technological tie-ups, tie up with strategic partners etc. JV Company may, eventually also explore opportunities related to manufacturing of power equipments. As a part of various efforts being made for expediting addition of generation capacity in the country, discussions were held with various manufacturers of international power plant equipments to spread awareness about large generation capacity being inducted in the country and promote setting up indigenous manufacturing capacity by these manufacturers. M/s MHI, Japan have entered into a joint venture agreement with M/s Larsen & Toubro, India for setting up manufacturing facility for manufacture of supercritical boilers and turbines in India. Bharat Forge-Alstom, Toshiba-JSW, Ansals-GB Engineering are also in the process of setting up manufacturing facilities in India.

3.3.15 The Committee note that the capacity addition target of the Ministry of Power is 78,700 MW in the 11th Plan. The capacity achieved in 2007-08 was 9263.00 MW as against a target of 16335.2 MW and the achievement in 2008-09 was 3454.00 MW as against a target set of 11061.2. The target set this year was 14507 MW and so far 5383 MW has been achieved on 8.10.2009. The total achievement so far is 18100 MW in the 11th Plan out of a target of 78700 MW. The Committee are doubtful whether these targets would be achieved given the pace of achievements made in previous plans and in the first two years of the 11th Plan. The main reasons given by the Ministry for delay in the execution of projects include delay in placement of orders, delayed and non-sequential supplies, shortage of skilled manpower/commissioning teams, delay in resolution of contractual issues, constraints in movement of heavy equipment due to bottlenecks in road transportation, IT based monitoring not implemented, inadequate deployment of construction machinery, delay in Environment and Forest clearance, land

acquisition problems, shortage of fuel etc. The capacity addition programmes also faced similar problems during 10th Plan as a result of which targets set have fallen short of achievement. The Ministry have therefore, not learnt any lesson from past experience in overcoming such problems during 11th Plan. The Committee feel that some of the problems like delay in Environment and Forest clearance, land acquisition problems, shortage of fuel etc. could have been solved by having effective coordination with the concerned Ministries at the highest level. The Committee, therefore, recommend that expeditious action needs to be initiated and the Ministry of Power should co-ordinate with the various agencies and other Ministries to remove all bottlenecks and hurdles in capacity addition programme.

(Rec. Sl. No. 7)

3.3.16 The Committee have been informed that another problem coming in the way of capacity building programmes is of shortage of skilled manpower. The Committee find it difficult to understand why the shortage of manpower is a factor for executing the capacity addition programme as the country abounds in educated, unemployed youths. The Committee would like the Ministry to tie up with technical institutes like IITs, ITIs and State Government Poly-techniques to arrange the skilled manpower, trainers and teaching staff etc. The Committee would also like the Ministry to set targets for each PSUs for adopting ITIs. This would go along way in solving shortage of technical manpower for establishing new power plants.

(Rec. Sl. No. 8)

3.3.17 The Committee would like to stress that optimal output of existing power producing units could not be achieved without proper and continuous supply of coal and gas. The Committee therefore, desire that the matter of availability of fuel for the power sector should be taken up at the highest level with the Ministry of Coal and Ministry of Petroleum & Natural Gas to work out the fuel linkage for the power sector.

(Rec. Sl. No. 9)

3.3.18 The Committee are happy to note that NTPC has formed a Joint Venture Company with Bharat Forge Limited on 19.06.2008 to establish a facility, subject to establishment of techno-commercial viability to take up manufacture of castings forgings, fittings and high pressure pipings and also Balance of Plant (BOP) equipment for the power sector. NTPC and BHEL have also formed a joint

venture for EPC (Engineering, Procurement and Construction) activities and equipment manufacturing for power projects. The Committee feel that these Joint Ventures should work out details of production lines to be set up and start the manufacturing units within a time schedule to ensure that they deliver all the equipment required to achieve the capacity addition targets set for this plan period and also the 12th Plan period. The Committee would appreciate if more such Joint Ventures are formed to boost capacity addition programme.

(Rec. Sl. No. 10)

C. Development of Hydro Power

3.4.1 The Government has launched the 50,000 MW hydro power initiative in 2003 for accelerated development of hydro power in the country. The Ministry of Power have stated that under the 50,000 MW initiative, Pre-Feasibility Reports (PFRs) of 162 Hydro Electric Projects having aggregate installed capacity of 47930 MW were prepared during 2003-04 which includes 62 schemes with aggregate installed capacity of 30416 MW in N.E. Region and 10 schemes of Sikkim with total installed capacity of 1469 MW.

3.4.2 As a follow up of preparation of PFRs, it was decided to take up 77 low tariff schemes (first year tariff upto Rs. 2.50/kwh) with an aggregate capacity of 33951 MW for preparation of DPR/ Implementation for likely benefits during the 11th Plan and beyond. Out of the 77 schemes, 25 schemes with aggregate capacity of 22382 MW are located in North Eastern Region and 4 schemes in Sikkim with total installed capacity of 835 MW. The status of preparation of DPRs under 50,000 MW Initiative is given below:

S. No.	Particulars	All India			NER+Sikkim		
		Nos.	Cap. (MW) As per PFR	Cap. (MW) As per DPR	Nos.	Cap. (MW) As per PFR	Cap. (MW) As per DPR
1.	DPRs already Prepared	20	7793	7296	8	4645	3141
2.	DPRs proposed to be prepared						
(i)	2009-10 (Oct'09 to March'10)	12	4160	-	4	2157	-
(ii)	2010-11	9	6959	-	5	6490	-
(iii)	2011-12	2	4500	-	2	4500	-
	Grand Total	**43***	**23412**	**7296**	**19**	**17792**	**3141**

*Work held up in balance 34 schemes on account of non-availability of clearance from DoEF/Local agitation/non-allotment of the project by the State Govt. etc.

3.4.3 During 11th plan, the Planning Commission has approved a capacity addition of 15,627 MW of Hydro Projects, out of which 4 projects (2724 MW) are in N.E. region and 3 projects (1809 MW) are in Sikkim. During 12th plan , a shelf of 109 hydro projects having aggregate capacity of 30920 MW have been prepared, out of which 31 projects (11798 MW) are in N.E.region and 11 projects (2455 MW) are in Sikkim.

3.4.4 Recent initiatives taken for development of Hydro Power in the country as given by Ministry of Power are given below:—

(i) Policy on hydro power development Hydro Power Policy, 2008 has been notified by Govt.of India on 31.3.2008. The main points of the policy are given below:

- Provides level playing field to private developers—tariff to be determined by the regulator under section 62 of Electricity Act, 2003, — as is being done for PSUs upto Jan. 2011.
- Transparent selection criteria for awarding sites to private developers — regulator to decide.
- Enables developer to recover his additional costs through merchant sale of upto a maximum of 40% of the saleable energy. 5% reduction for a delay of every six months.— Balance long term PPAs.
- For 10 years from the COD, developer to provide 100 units of electricity per month to each PAF — in cash or kind or a combination of both.
- Project developer assists in implementing rural electrification in the vicinity of the project area and contributes the 10% share of the State Govt. under the RGGVY scheme.
- Additional 1% free power from the project for a Local Area Development Fund, — regular revenue stream for welfare schemes, creation of additional infrastructure and common facilities.
- The State Governments are also expected to contribute a matching 1% from their share of 12% free power.

(ii) Electricity Act, 2003:

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. The Act has emphasized access to electricity for all households in next five years; demands to fully met by 2012, supply of reliable and quality power in an efficient manner at reasonable rates etc.

(iii) National Electricity Policy:

In the National Electricity Policy announced by Govt. in Feb. 2005, which among others, lays emphasis taking measures conducive to development of electricity industry, promoting competition, protecting interest of consumer, rationalization of electric tariff, transparent provision regarding subsidies, promotion of efficiency and environmental benign policies etc. economic development of States, particularly North-Eastern States, Sikkim, Uttaranchal, Himachal Pradesh and J&K.

(iv) National Rehabilitation(R&R) Policy, 2007:

National Rehabilitation & Resettlement policy has been brought out in Oct. 2007 by the Ministry of Rural Development (Deptt. Of Land Resources). The Policy addresses the need to provide succour to the assetless rural poor, support the rehabilitation efforts of the resource poor sections, namely small and marginal farmers, SCs/STs and women who have been displaced. Besides, it seeks to provide abroad canvas for an effective dialogue between the Project Affected Families and the Administration for Resettlement & Rehabilitation to enable timely completion of project with a sense of definiteness as regards cost and adequate attention to the needs of the displaced persons. The objectives of the Policy are to minimize displacement, to plan the R&R of PAFs including special needs to Tribals and vulnerable sections, to provide better standard of living to PAFs and to facilitate harmonious relationship between the Requiring Body and PAFs through mutual cooperation.

(v) Mega Power Projects Policy (Revised)

Keeping in view the requirements of power projects located in certain special category States of J&K, Sikkim and the seven States of North East, the minimum qualifying capacity of thermal power plants to avail mega project benefits, has been reduced from 1000 MW to 700 MW in these States. The corresponding qualifying threshold capacity for hydro power plants located in the States of J&K, Sikkim and the seven States of North East, for availing mega benefits has been reduced from 500 MW to 350 MW.

3.4.5 The Ministry have informed that in regard to Mega hydel projects, States have been requested to identify suitable site, agencies will then be identified to prepare DPR, obtain necessary clearances, acquire land and to manage the bid process.

3.4.6 In regard to development of hydro power in the North East, the Ministry stated:—

"An Inter-Ministerial Group (IMG) has been constituted (*vide* Ministry of Water Resources' O.M. dated 7th August, 2009) to evolve a suitable framework to guide and accelerate the development of Hydropower in the North-East. The composition of the group is as under:

1.	Secretary, Ministry of Water Resources	— Chairman
2.	Secretary, Ministry of Power	— Member
3.	Secretary, Ministry of Environment & Forests	— Member
4.	Secretary, DONER	— Member
5.	Principal Advisor (Power), Planning Comm.	— Member

The Group will have the following Terms of Reference:

1. The Group shall identify the issues related to development of Hydropower in the North East, particularly in Arunachal Pradesh. The Group will particularly address the issues related to following aspects of hydro power development :

(i) Environment & Forest clearance

(ii) Development of Infrastructure (Roads & Bridges)

(iii) Land acquisition

(iv) Rehabilitation and Resettlement issues

(v) Security clearance from MHA, MOD and IB

(vi) Providing Hydrological Data to private developers

(vii) Power Evacuation

(viii) Sequencing of projects

(ix) Tariff/Regulatory issues

(x) Storage project versus ROR Projects

(xi) Long Term Financing

2. (i) This Group shall go into the details of identified issues and evolve a suitable framework to guide and accelerate the development of hydropower in the north east. In this exercise, it will consider practical solutions and provide necessary guidance and direction to concerned Ministries/ Departments and the State Governments. It will suggest a specific timeline for actions for concerned Ministries/ Departments and the State Governments and the project developers.

(ii) In respect of the issues involving policy intervention the Group will submit its recommendation for appropriate modification in the policy in the Cabinet Secretariat/PMO.

3. The Group shall submit its report within 4 months.

The first meeting of the IMG was held on 13.8.2009 and the second meeting was held on 7.10.2009. The third meeting of the group is being held on 07.12.2009.

3.4.7 A number of projects of NEEPCO have suffered time and cost overruns during the last five years. They include Kameng Hydro Electric Project and Tuirial Hydro Electric Project (60 MW), Mizoram.

3.4.8 Regarding the delay in execution of projects in the North East region by NEEPCO, the Ministry have informed that there are 3 nos. Ongoing H..E. Projects namely Kameng HE Project (600 MW) in Arunachal Pradesh, Pare H.E. Project (110 MW) in Arunachal Pradesh and Turial H.E. project (60 MW) in Mizoram. The relevant details of these projects are given below:—

S.No	Name of Project/ Capacity/ Agency/ State/ Date of Approval	Commissioning Schedule		Delays relating to latest v/s last approved /original	Project Cost Rupees in crores Price level		Reasons for time and cost overrun
		Original Mm/yy	Latest Mm/yy		Original	Latest	
1	2	3	4	5	6	7	8
1.	Kameng (4x150 MW) NEEPCO Ar. Pd.02.12.2004	Dec. 2009 (2009-10)	2012-13	3 years 3 months	2496.90	2496.90	-Change in spillway or est level of main dam for better silt management resulting in change in design. -Slow progress in dam & HRT due to various reasons *i.e.* bad geology,

1	2	3	4	5	6	7	8
							heavy seepage, inadequate machinery at site. –Work suffered due to flash flood in Oct. 2008.
2.	Pare (2x55 MW) NEEPCO Arunachal Pd.4.12.2008	Aug., 12 (2012-13)	- (2012-13)	-	573.99	573.99	Package I (Civil Works) awarded to M/s. HCC on 30.8.09. Other packages under process.
3.	Turial (2x30 MW) (NEEPCO) Mizoram	2005-07	-	*	368.72	836.14 (June, 09 PL)	*The project works could not be continued on account of agitation called by Turial Crop Compensation Association (TCCA) demanding payment against Crop Compensation, leading to stop of all activities w.e.f. 09.06.2004. On 13.08.2004, agitation was called off conditionally. In view of the law and order situation and anticipated increase in the cost of the project, revival of works is under consideration with the Govt.

3.4.9 To a query as to why funds for survey and investigation could not be utilized, the Ministry clarified the BE 2008-09 of Rs. 30 crore (IEBR) in respect of NEEPCO had to be reduced at RE stage and RE 2008-09 was projected at Rs 11.52 crore because of the following reasons:

(i) Due to non-receipt of clearance from National Board of Wild Life and other statutory clearances from Govt. of Arunachal Pradesh in respect of Kameng – I HE Project (1120 MW), the S&I works could not be taken up as per schedule. NEEPCO is continuing the follow up action for early start of the S&I activities in the project.

(ii) The Secretary (Power), Govt. of Arunachal Pradesh, *vide* Order No.: PWRS/W-465/98 Dated Itanagar the 2nd February 2007 informed that the Government of

Arunachal Pradesh withdrew all authorization issued to NEEPCO for undertaking works relating to Survey & Investigation and preparation of DPRs for development of H.E. Projects without prior MOU/MOA/Implementation agreement signed with the State Govt. for the Project sites identified in Kameng, Subansiri and Lohit Basins located within the territory of Arunachal Pradesh except Kameng-I/Bhareli-I HEP (1120MW), Pare HEP (110MW) and the on going Kameng HEP (600MW). Though the State Govt. extended their authorization to NEEPCO up to March, 2008 for S&I activities, the Govt. of Arunachal Pradesh withdrew authorization from NEEPCO for carrying out S&I activities and preparation of DPR of Badao & Kapak Leyak HE Projects *vide* their letter dated 19.09.2008 and further informed *vide* their letter dated 22.12.2008 that these projects had already been allotted to private developers. Before these, the Govt. of Arunachal Pradesh intimated the decision to handover four projects *viz.* Talong HEP (160 MW), Dibbin HEP (125 MW), Kameng Dam HEP (600 MW) & Kameng-II HEP (600 MW) to Private Developers for which DPR Preparation was carried out by NEEPCO. In regard to Ranganadi Stage-II HEP (130 MW) in Arunachal Pradesh, the Draft MOA sent to the State Govt. is still pending in view of the demand of payment of Upfront Premium @ Rs. 5 lakh per MW by the State Govt.

(iii) Presuming that the above hurdles in conducting S&I activities in the State of Arunachal Pradesh shall be resolved, an amount of Rs. 12 cr. was projected as BE 2009-10 against the head of Survey & Investigation works. Further, in Meghalaya, recently NEEPCO has identified a project *viz*. Mawphu HE Project, Stage-II (85 MW) on Umiew River, downstream of Mawphu HEP in East Khasi Hills District. Preliminary studies indicate an installed capacity of 85 MW. The Govt. of Meghalaya has allocated this Project to NEEPCO in Sept. 09 and a draft MoA for execution of the Project is being firmed up. Due to the above and since no remarkable headway in resolving the hurdles in respect of Kameng-I HEP (1120 MW), Ranganadi Stage-II HEP (130 MW) has been witnessed, the RE 2009-10 has now been projected at Rs. 4 cr. (IEBR).

3.4.10 The Committee note that hydro power is a clean and continuous source of Energy and does not require the use of heavily

exploited fossil fuels. The country abounds in hydro power potential, especially in the North East region of the country. The Government had launched, the 50,000 MW hydro power initiative way back in 2003. The Ministry of Power have informed that under the scheme, pre-feasibility Reports (PFRs) of 162 hydro electric projects having aggregate installed capacity of 47,930 MW were prepared during 2003-04 which includes 62 schemes with aggregate installed capacity of 30,416 MW in North East region and 10 schemes in Sikkim with total installed capacity of 1469 MW. As a follow up, the Ministry decided to take up 77 schemes with an aggregate capacity of 33951 MW for preparation of DPR/implementation for likely benefits during the 11th Plan and beyond. The Committee would like the Ministry to take up for execution of these projects for which DPRs have been prepared in a time bound manner. The Committee also like the Ministry to facilitate various statutory clearances for 34 Schemes which have been held up for non-availability of clearances. According to the Ministry a shelf of 109 projects having aggregate capacity of 30,920 MW have been kept for the 12th Plan. The Committee desire that all ground work in regard to the projects envisaged in the 12th Plan needs to be undertaken immediately as the gestation period of hydro projects is quite long and in order to reap the benefits, work has to be initiated 5-7 years before the target dates.

(Rec. Sl. No. 11)

3.4.11 The Committee have been informed that an Inter-Ministerial Group (IMG) has been constituted to evolve a suitable framework to guide and accelerate development of hydropower in the North east and Secretary, Ministry of Power is one of the Members of the IMG. The Group shall go into the details of identified issues and evolve suitable frame work to guide and accelerate development of hydropower in the North East region. The Group shall submit its Report in 4 months. The Committee are also dismayed to note that a number of projects of NEEPCO have suffered time and cost overruns. The Kameng project was scheduled for commissioning in 2009-10 but may not be ready before 2012-13. The Turial project was scheduled to be commissioned in 2005-07 but has been called off on account of local agitation and revival of the works is under the consideration of the Government. The Committee would like to be apprised of the latest developments in this regard and hope that early solution to the problems related to development of hydro power in the North East region of the country are arrived at. The Committee would await the findings/ Recommendations of the IMG.

(Rec. Sl. No. 12)

3.4.12 The Committee note that survey and investigation is an important part of setting up of hydro-projects. The funds kept for the same were reduced from Rs. 30 crore (IEBR) in respect of NEEPCO at R.E. stage (2008-09) to Rs. 11.52 crore. The Secretary (Power), Government of Arunachal Pradesh had in February, 2007 informed that the Government of Arunachal Pradesh had withdrawn all authorization issued to NEEPCO for undertaking works relating to survey and investigation and preparation of DPRs for development of Hydro Electric projects without prior MOU/MOA/ implementation agreement signed with the State Government for the project sites identified in Kameng, Subansiri and Lohit Basins located within the territory of Arunachal Pradesh except Kameng-I/ Bhareli-I (HEP), pare HEP and on going Kameng. The Committee also learn that some projects were also being given to private developers. The Committee desire that the Ministry of Power to look into this matter seriously and try to resolve the issues between NEEPCO and the State Government. The Committee desire that the issue may also be referred to Inter-Ministerial Group for their consideration. The Committee hope that projects of survey and investigation, for which money has been allocated will not be surrendered and work will continue on the same in the future. The Committee specifically would like the Ministry to take up the matter with the State Government of Arunachal Pradesh for allocating projects to NEEPCO for which DPR was carried out by them instead of handing over to private players.

(Rec. Sl. No. 13)

D. Captive Power Generation and Merchant Power Plants

3.5.1 In reply to a query from the Committee about the installed capacity of captive power generation in the country and steps taken to encourage captive generation the Ministry informed that according to section 9 of the Indian Electricity Act, 2003 sanction/licence for setting up of captive power plant is not required. The total installed generating capacity of captive power plants in the country is 24,976.4 MW.

3.5.2 The Government has taken various legislative policy and administrative measures to facilitate captive generation and utilization of surplus capacity the details of which are given below:

(i) Under the Electricity Act, 2003, captive power plants, including group captive, have been freely permitted. The

Act provides that any person may construct, maintain or operate a captive generating plant and dedicated transmission lines. Under the provisions of the Act, every person, who has constructed a captive generating plant and maintains and operates such plant, shall have the right to open access for the purposes of carrying electricity from his captive generating plant to the destination of his use subject to the availability of transmission capacity.

(ii) National Electricity Policy, notified in February, 2005, emphasizes the need for bringing surplus capacity available with captive and standby generating stations in India to the grid continuously or during certain time periods.

(iii) Tariff Policy, notified in January 2006, recognizes that captive generation is an important means to make competitive power available and urges the Electricity Regulatory Commission to create an enabling environment that encourages captive plants to be connected to the grid.

(iv) The Conference of Chief Ministers on Power Sector issues held in May, 2007 has resolved to facilitate captive power plants to provide the spare generating capacity to the grid and strive to do away with restrictive levies, duties and regulations in a time bound manner.

3.5.3 During the course of evidence, it was pointed out that captive power plants were not being encouraged and they had suffered due to lack of fuel linkage to the extent that their capacity was not fully utilized. The Secretary, Ministry of Power stated before the Committee:

"with regard to fuel linkage, our first priority is to give it to the Central PSUs, State PSUs and companies which supply power to the grid. But the figures that we are giving you are about the units which are completely commissioned, generating and by and large utilizing power on their own with regard to fuel, they make their own arrangements. They either buy coal in open market in e-Auction, or if it is gas-based power station, they get the fuel on their own by buying it in the open market by importing it. Companies like Suzlon and Essar bring their own fuel and coal".

3.5.4 Elaborating on the efforts made by the Government to facilitate captive power plants, the Ministry have replied that presently the main problem being faced by Captive Power Generators in providing spare generating capacity and selling their surplus power is the open access regulations applicability. This is an important issue

as this is not only related to captive plants, but it is also related to other surplus power being traded as well as the power to be sold by merchant plants which are likely to come up in the near future. Other problems faced by Captive Power Generators/Co-generators are low priority to fuel linkage, inadequate tariff structure for sale of power to state utilities, inadequate wheeling and banking arrangements , high cross subsidy surcharge and high wheeling charges irrespective of voltage levels in some states, high contract demand charges, non-uniformity in the regulations issued by different SERCs etc.

3.5.5 Further to facilitate captive power plants in providing spare generating capacity and injection of surplus power from captive power plants to the Grid, Ministry of Power has been actively involved in moderating the charges/duties on Open Access, cross-subsidy surcharge etc. Various conferences and seminars with the stakeholders have been held to evolve consensus and expedite action on the concerned issues. A meeting was taken by Secretary (Power) with Forum of Regulators on 5th November, 2007 in New Delhi. The issues raised were regarding implementation of open access, rationalization of various charges such as cross subsidy surcharge, transmission charges, wheeling charges and reduction of AT&C losses. It was emphasized that the open access should be actually formalized and it should be made transparent. In view of this, it was suggested that all regulatory commissions should place the details regarding open access charges in a time bound manner on their website. It should indicate the clearances given by the regulators and pending applications for open access. It was also emphasized that for free flow of power, no barriers should be put. As on July, 2009, 22 States have issued notification of open access regulations at distribution level. Various conferences and Seminars with the stakeholders including various industry associations have been held to evolve consensus and expedite action on the concerned issues. In this regard, various regional level meetings were organized by CEA in association with CII, PTC & PFC during 2007-08 and 2008-09 in various places of Northern, Western & Southern region to know the ground realities and address the problems being faced by Captive Power Generators in selling their surplus power. Many State Govts/ SERCs have also taken necessary steps for reducing the charges/duties on Open Access, cross-subsidy surcharge, Electricity duty etc.

3.5.6 In response to the provisions of the National Electricity Policy 2006 allowing a part of new generating capacities say 15% to be sold outside long term PPAs to promote market development, Ministry of Power has taken the following measures to encorurage setting up of merchant power plants:

(i) Fuel tie-ups are being facilitated for Merchant Power Plants.

(ii) Open access in transmission has been introduced in the Electricity Act, 2003. In distribution, open access is to be introduced in phases. For consumers with requirement of more than one Mega Watt open access is to be mandatorily introduced by January, 2009.

3.5.7 The Committee note that according to section 9 of the Indian Electricity Act, 2003 sanction/licence for setting up of captive power plant is not required. The total installed generating capacity of captive power plants in the country is 24,976.4 MW. The National Electricity Policy emphasises the need for bringing power from standby generating stations to the grid, the tariff policy also urges the creation of an enabling environment by the Regulatory Commission that encourages captive plants to be connected to the grid. However, the prevalent scenario is not so conducive for the captive power plants since their generating capacity is not fully utilized for lack of adequate fuel linkages. The Secretary, Ministry of Power admitted during evidence that in case of fuel linkage priority was given to the Central PSUs, State PSUs and Companies which supplied power to the grid. The captive generators were to arrange their own fuel. The Committee find that although the Government have been involved in moderating the charges/duties, providing grid connectivity, specifying guidelines on open access etc. to benefit the captive generators, however, the Committee would like to see the proactive role of the Ministry of Power for helping in providing fuel linkages to the captive generators who are unable to generate to their full capacity and also prevail upon them to supply additional power to the grid.

(Rec. Sl. No. 14)

E. Ultra Mega Power Projects (UMPPs)

3.6.1 The initiative to develop Ultra Mega Power Projects (UMPPs) has been taken, as reported by the Ministry of Power for the reasons (i) the National Electricity Policy envisage the energy and peaking shortages are to be overcome by 2012 (ii) the Electricity and tariff policies under the Electricity Act envisages the future requirement of power needs to be procured competitively (iii) the tariff from large size generation projects would have the benefit of economies of scale and thus the cost of electricity generated from these projects is expected to be reasonable (iv) with mitigation of risks relating to tie up of land fuel, works and other statutory clearances envisaged in

the initative time for completion of these projects will be considerably reduced and the expected competition would result in lower tariff of electricity from these projects. (v) The size of these projects being large, they would meet the power needs of a number of States through transmission of power on regional and National grid.

3.6.2 The Ministry have further informed the bidding process has been completed and SPVs have been transferred to the identified bidders in case of four projects:

1. Sasan in Madhya Pradesh,
2. Tilaiya in Jharkhand (Two pit head locations based on domestic Coal)
3. Mundra in Gujarat,
4. Krishnapatnam in Andhra Pradesh (the two coastal locations based on imported coal)

3.6.3 Further regarding the present position of UMPPs in Tamil Nadu, Chhattisgarh, Karnataka, Maharashtra and Orissa, the Ministry have explained as follows:

1. Cheyyur UMPP, Tamil Nadu

- The project site at Cheyyur has been confirmed by the State Government in March 2008.
- PFC has assigned various technical studies like technical consultancy assignment, ocean related studies etc.
- GoTN issued notification for Administrative Sanction for land acquisition on 6th July 2009.
- The application for port ToR filed with MoEF and the case was presented before the Expert Appraisal Committee of MoEF on 20th July 2009 for approval of ToR and the minutes of the meeting are awaited, who suggested to look for an alternative site as Committee felt that the present site at Paramankeri village is located in Eco-sensitive area. PFC in consultation with CEA and State Government is working for finalization of alternate site.

2. Sundergarh UMPP, Orissa

- The State Govt. confirmed the site and water availability at Bedabahal in Sundergarh District.

- GoO levied 5 % profit of UMPP to be used for peripheral area development fund. The matter has been taken up with the State Government at different forum. Recently, Hon'ble MoP has also written DO letter to CM, Orissa for removal of this clause. The response from the State Government is awaited.

3. Chhattisgarh UMPP

- The State Government has confirmed the site near Salka and Khamaria villages near Udaipur in district Sarguja.
- Gram Sabha has been organized in all the villages and Section 4 notification has been issued for 9 villages.

4. Maharashtra UMPP

- Site identified at Munge in Sindhudurg district.
- Local agitation to be resolved for further development.

5. Karnataka UMPP

State to suggest alternate sites.

3.6.4 The Ministry of Power in a presentation before the Committee have stated that they are also proposing second UMPPs in Andhra Pradesh and Gujarat and additional UMPPs in Orissa.

3.6.5 The Committee note that the Ultra Mega Power Projects (UMPPs) have been taken up with an objective to overcome the general energy shortage in the country, encourage the private sector participation so as to make electricity available to the consumer at low tariff for a longer period of time. However, out of the nine UMPPs originally envisaged for development way back in 2006-07 only four projects *viz.* Sasan in Madhya Pradesh, Tilaiya in Jharkhand, Mundra in Gujarat and Krishnapatnam have completed the bidding and SPVs (special purpose vehicles) have been transferred to the identified bidders. For the remaining projects *i.e.* Cheyyur UMPP, Tamil Nadu, Sundergarh UMPP, Orissa, Chhattisgarh UMPP, Maharashtra UMPP and Karnataka UMPP, the Ministry have explained that they are in the process of finalization of sites, acquisition of land, availability of water etc. The Ministry have also informed that they are also proposing second UMPPs in Andhra Pradesh and Gujarat. In this prevalent situation, it is unlikely that power would be produced and transmitted from these UMPPs in

the remaining part of the 11th Plan period. The Committee would like to be apprised of the developments in this field and desire that work on all UMPPs envisaged commence in this plan period itself, so as to reap the benefits of the power produced by these projects at the earliest.

(Rec. Sl. No. 15)

F. Renovation and Modernization of Power Plants

3.7.1 The data regarding plant load factor of thermal power stations as given in the economic survey (2008-09) is given below:

(i) Category

(figures in per cent)

(i) Category	2006-07	2007-08	2008-09 (provisional)
State Electricity Boards	70.6	71.9	71.2
Central Sector	84.8	86.7	84.3
Private Sector	86.3	90.8	91.0
(ii) Regions	2006-07	2007-08	2008-09 (provisional)
Northern	79.6	81.4	81.8
Western	79.3	80.3	79.5
Southern	83.9	84.9	83.3
Eastern	68.3	69.6	64.7
North-Eastern	16.8	20.4	47.6
India	76.8	78.6	77.2

3.7.2 The Ministry have stated that the main reason for low Plant Load Factor of thermal Power Plants in public sector and State Sector Plants especially because they are old vintage units, there is obsolence of technology, there is mismatch in designed fuel quality and fuel actually supplied and also due to long duration of outrage of the units for planned and unscheduled maintenance and poor operation and maintenance practices being followed at some power plants.

3.7.3 The following steps have been taken/are being taken to improve performance of thermal power plants:

(i) Renovation, modernization, uprating and life extension programmes of old and in-efficient generating units.

(ii) Partnership in Excellence' (PIE) Programme was initiated by Ministry of Power, Government of India, in August, 2005 with a view to improve the performance of low performing units of power utilities with assistance from better performing power utilities like NTPC.

(iii) Continuous inter-action of CEA engineers with Power Station Authorities, BHEL and other concerned agencies for sorting out operation and maintenance problems and site visits for monitoring the performance of units.

(iv) Reducing the duration of planned maintenance in the Thermal Power Stations.

3.7.4 In response to a question on the Partnership in Excellence (PIE) programme, the Ministry have informed:

"'Partnership in Excellence (PIE)' was launched by Ministry of Power in August, 2005 for an initial period of 2 years (i.e. upto Aug. 2007) to improve performance of such stations which were running at PLF much below 60%. Thermal stations which were running at PLF below 60% were identified. NTPC was chosen as partner in 16 thermal power stations and Tata Power was selected in case of Dhuvaran TPS. Four stations decided to take self improvement measures. There was an over-all increase in PLF from 43.9% to 52.1% during the year 2007-08 from these units."

3.7.5 A significant improvement was achieved in the following stations:

Sl. No.	Name of the plant/utility	Capacity under PIE Programme	PLF before PIE Programme (Apr-Sep 2005)	PLF after PIE Programme (2007-08)
1.	Bokaro B/DVC	630 MW	45.5%	70.9%
2.	Chandrapura/DVC	390 MW	58.8%	69.4%
3.	Rajghat/IPGCL	135 MW	42.5%	75.5%
4.	Ennore/TNEB	280 MW	22.0%	59.3%
5.	Dhuvaran/GSECL	280 MW	27.0%	71.0%
6.	Kutch lignite/GSECL	215 MW	28.3%	72.9%

3.7.6 On request from some of the utilities, the programme was extended beyond August 2007 and concluded in June 2008.

> "The major component of thermal generation in the country is from units of 200 MW and above rating constituting about 80% of the thermal installed capacity and these large size units are having Plant Load Factor of more than 83%. Smaller size units of less than 200 MW rating (140 MW, 120MW, 110 MW, 100 MW, 60/62.5 MW, 50MW etc.) are generally operating at low PLF averaging less than 55%. However, such units constitute of about 20% of the thermal installed capacity. Most of these units are in state sector and are very old (more than 30 years), inherently inefficient and have obsolete technology for which it is difficult to carryout maintenance due to non-availability of spares. R&M/Life extension programme is being carried out in some units of rating 110 MW and above capacity (reheat type) where ever found techno economically viable. However, as a long term measure, it is contemplated to retire other small size units in a phased manner."

3.7.7 The Committee note that Renovation and Modernisation is an important exercise and an ongoing process to renovate and extend the life of power plants and also to increase their Plant Load Factors (PLF). The Committee note that in this connection a programme called Parnership In Excellence (PIE) was initiated by the Ministry of Power in August, 2005 with a view to improve the performance of low performing units of power utilities with assistance from better performing power utilities like NTPC. The Committee are happy to note that the exercise which concluded in June, 2008 there was an overall increase in Plant Load Factor ranging from 43.9% to 52.1% during 2007-08 from the units, as per the data supplied by the Ministry. The Committee hope that such programmes will be initiated again in the near future in partnership with Central PSUs, who have a credible degree of experience in this field, so that many of the old units can be revived for increased generation of power. The Committee find that in the recent years the plant load factor in the private sector has grown to 91.0 level much above the Central Sector i.e. at 84.3 level for the year 2008-09. The Committee hope that the power PSUs under the Central Sector also strive to achieve plant load factors of 90% and above.

(Rec. Sl. No. 16)

II. MINISTRY OF POWER SCHEMES (FUNDED THROUGH GBS)

A. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

3.8.1 The salient features of the National Electricity Policy *interalia* include availability of Electricity to all households in the next five years, demands to be fully met by 2012 energy and peeking shortages to be overcome and spinning reserve to be available as well as supply of reliable and quality power of specified standards in an efficient manner at reasonable rates and protection of consumers interests.

3.8.2 Elaborating on the present status of RGGVY, the Ministry informed that as per Census 2001, 119,570 villages do not have electricity. RGGVY was launched in the year 2005 for electrification of over 1 lakh villages with a budgetary outlay of Rs. 5000 Crore for the last two years of the X Plan. Continuation of the scheme in the XI Plan was sanctioned on 3rd January 2008 with an outlay of Rs. 28,000 crore against a demand of Rs. 42,000 Crore for comprehensive rural electrification of the country. A sum of Rs. 7000 crore has been kept for rural electrification schemes (2009-10). Since launch of RGGVY, 63,040 villages have been electrified. The projects sanctioned under X Plan are expected to be completed by October end this year. 567 projects for 540 districts have been sanctioned so far with an estimated completion subsidy cost of Rs. 33,000 Crore *i.e.* the sanctioned outlay so far for the scheme. These projects target to cover 118,499 villages. It is targeted to complete these projects by March 2012. 63,040 villages have been electrified and free electricity connections have been provided to 63.6 lakh rural BPL households. During 2009-10, States have been given a target to electrify 17,500 villages and to release 47 lakh connections to BPL households. State wise financial targets are not fixed under RGGVY. The release of RGGVY funds depends on achieving various milestones under each project. States should achieve the set milestones to become eligible for release of RGGVY funds.

3.8.3 Giving details on the targets fixed for RGGVY and the achievements made, the Ministry have stated that the RGGVY targets for the year 2008-09 were to electrify 19,000 villages and to provide electricity connections to 50 lakh BPL households. However, States were given internal targets to electrify 21,625 villages and to provide electricity connections to 60.45 lakh BPL households. Against these targets, 12056 villages were electrified and 30.85 lakh electricity connections were provided to rural BPL households.

3.8.4 According to the Ministry, the set targets could not be achieved by the States due to following main reasons:

(1) Delay in sanction of continuation of scheme in XI Plan: The continuation of scheme was sanctioned on 3rd July 2009, which disturbed the continuity of implementation of scheme.

(2) Availability of limited annual budget: During 2008-09, Rs. 5500 crore was made available against requirement of Rs. 13,000 crore.

(3) The States took long time in awarding the projects: Some of the states (especially NER states and J&K) took abnormally long time in awarding the X Plan projects. 26 projects sanctioned under XI Plan RGGVY are yet to be awarded.

(4) Allotment of land for new substations: The States have abnormally delayed allotment of land for new substations to CPSUs especially in the States of Bihar and Jharkhand.

(5) Delay in release of BPL lists: The States especially Bihar, Jharkhand and Uttar Pradesh took long time in releasing BPL lists to CPSUs, which delayed BPL connections. The numbers in the released lists varies widely from the sanctioned numbers in DPRs

(6) Settlement of entry tax and way bills: The issue of issuing way bills for entry of material took a long time especially in Bihar, Jharkhand and Orissa. The waiver of tax for XI Plan projects is yet to be done by Bihar.

(7) Theft of material in Bihar & Jharkhand: More than 1500 km. of conductor has been stolen in Bihar. Transformers are also being stolen in Bihar.

(8) Delay in energization of villages: Though infrastructure has been completed in 63,040 villages, only 44,588 villages have been energized.

(9) Delay in taking over of works by States: Out of 63,040 completed villages, only 36,606 villages have been taken over by the States. This results in delay in shifting of man and T&P from completed projects to new projects.

(10) Delay in forest clearance for the projects in Jharkhand and Uttarakhand.

3.8.5 The Ministry of Power have stated in a presentation before the Committee, the new conditions for RGGVY:

(i) States to ensure a minimum daily supply of 6-8 hours of electricity in the RGGVY network.

(ii) States to give assurance of meeting any deficit in this context by supplying electricity at subsidized tariff.

(iii) Deployment of franchisees is mandatory for the management of rural distribution in projects financed under the scheme.

(iv) Three-Tier Quality Monitoring Mechanism introduced to ensure quality of material & implementation.

(v) States to notify their Rural Electrification Plans.

- With implementation of Phase I of the XI Plan, proposed to electrify 1.18 lakh un-electrified and provide electricity connections to 2.46 crore BPL households.
- So far, 567 projects sanctioned covering:
  - Electrification of 118,499 un-electrified villages,
  - Intensive electrification of 354,699 electrified villages
  - Free connections to 246.06 lakh BPL households

Proposals	Projects	Project Outlay (Rs. Crore)	Un-electrified Villages (No.)	Electrified Villages (No.)	BPL House-holds (Lakh)
Sanctions: Xth Plan	235	9,732.90	68,763	1,11,936	83.1
Sanctions: XIth Plan	332	16,506.04	49,736	2,42,733	162.96
: Cumm.	567	26,238.94	118,499	3,54,669	246.06
Achievement (Cumm.)			65,140 (55%)	90,726 (25.6%)	72.70 (29.54%)

Yearwise Progress

Year	Un-electrified Villages (No)			BPL Households (Lakh)		
	Target	Achmt	% Achmt	Target	Achmt	% Achmt
Xth Plan						
2005	10,000	9,819	98.2%	3	0.17	5.7
2006	40,000	28,706	71.8%	40	6.55	16.4%
Total	50,000	38,525	77%	43	6.72	15.6%
XIth Plan						
2007-08	10,500	9,301	88.6%	40	16.21	40.5%
2008-09	19,000	12,056	63.5%	50	30.85	61.7%
Cumulative (up to 31/3/09)	79500	59882	75.3%	133	53.79	40.4%
During year: 2009-10 (as on 01.10.09)	17,500	5,258	30%	47	18.91	40.2%

3.8.6 The Ministry have informed that CPSUs have been entrusted with implementation of RGGVY in different States. CPSUs project targets to electrify 66,029 villages and to provide electricity connections to 98.86 lakh rural BPL households. They have completed works in 32,817 villages and provided electricity connections to 18.88 lakh rural BPL households. Elaborating on the problems being faced by the RGGVY schemes, the Secretary stated:

> "Secondly, some Hon'ble Members also raised the issue of Rajiv Gandhi Grameen Vidyutikaran Programme, about its quality of execution, quality of supply, quality of material and above all, quality of transformer. Basically, the problem of implementation of programme is focused on four States. They are all in the eastern region. Assam is one major area; Bihar, Orissa and Jharkhand are the other three States where maximum work is required to be done. There is a three tier review of the implementation of the programme; firstly, the man who implements the scheme has to review the implementation of the quality. Then comes the REC. Then, at the National level by the Ministry of Power. The Chairman, REC is present here with us and he has noted down the points".

3.8.7 To a specific query on the electrification of BPL households inside the village putting up of transformers and other equipment for the purpose, the representative of the Ministry of Power clarified:

> "…the point is that the programme is basically aimed at giving connections to BPL. The programme at the village level starts from building the basic infrastructure. If any additional requirement is there on account of the APL, the State Government is expected to put in the extra transformers.
>
> ……we have not been able to cover the entire country. It is not that the State Government is not involved. This is a matter in which the Centre and the States work together. The Centre provides the minimum basic infrastructure and the State provides the extra transformers for any additional requirement. This is the simple point.
>
> ……..I stated two things; firstly the basic infrastructure covering the BPL families is provided by us. Transformer is not the only thing. Even the size of the transformer also does not matter much. You can have, instead of one 100 KVA transformer, four smaller ones. The experts feel that transformers should be smaller in size and should be placed closely to the people so that we can reduce the transmission losses. We are suggesting that they should take smaller transformers".

3.8.8 The Secretary Ministry of Power admitted before the Committee regarding the problems existing for electrification of households.

> "I agree. We only pay for the BPL connections in particular villages and hamlets. Unless the State Government also contributes by providing the additional distribution transformers, this problem remains".

3.8.9 For speedy and effective implementation of the scheme, the Ministry have stated that they have taken the following steps:

"(a) 65% of the villages under XI Plan scheme have been allocated to CPSUs for electrification. Total 56% of villages to be electrified under RGGVY are now in the scope of CPSUs.

(b) States have been asked to constitute State Level Committees under the chairmanship of Chief Secretaries and to hold its monthly meetings to resolve inter-departmental issues such as allotment of sub-station land, taxation issues, forest clearance etc.

(c) A three-tier quality monitoring mechanism has been introduced to ensure quality of material and work.

(d) A standard 18 month project implementation schedule after award has been finalized for speedy implementation. Progress based on the quarterly milestone targets is being reviewed

(e) Ministry has included RGGVY targets in the performance MoUs of CPSUs.

(f) In case CPSUs are not able to complete the RGGVY projects in time, their service charges will be reduced as a penalty for non-performance.

(g) Ministry has identified areas of focus and is constantly reviewing with the implementing agencies at various levels. Special reviews are being held for States in Eastern Region, which account for bulk of remaining targets under RGGVY."

3.8.10 In response to a pertinent query on the allocation made to the RGGVY scheme since its inception in 2005, the Ministry have informed that the RGGVY was sanctioned in 2005. However, allocation was made for Rs. 5000 crore only for last 2 years of X Plan. Though,

the Ministry of Power had initiated the proposal for continuation of RGGVY in XI Plan in September 2006, the sanction was made on January 2008, which delayed the programme by almost one year and disrupted the momentum of the scheme. After sanction of the scheme in XI Plan, the Ministry took various steps for speedy implementation of the scheme. Further, the allocations made to the programme had been continuously lower than the demands as shown below.

Year	Demand (Rs. in Crore)	Allocation (Rs. in Cr.)	Releases (Rs. in Cr.)
2005-06	1500	1500	1500
2006-07	3200	3000	3000
2007-08	8000	3,944	3,913.45
2008-09	13000	5,500	5,500
2009-10	9000	7,000	1249.75 (upto 30.9.09)

It is targeted to complete all the sanctioned 567 projects under the scheme by 2012 subject to allocation of required funds on yearly basis. The sanctioned projects target to electrify 1.18 lakh villages and to provide free electricity connections to 2.46 crore BPL households.

3.8.11 The Committee note that the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) is an ambitious programme launched by the Government of India and as per the revised target of the scheme all villages and BPL households are to be electrified by March, 2012. The scheme was sanctioned in the Xth Plan with a budgetary allocation of Rs. 5000 crore, the continuation of the scheme in XIth Plan was sanctioned in January, 2008 with an outlay of Rs. 28,000 crore against a demand of Rs. 42,000 crore for comprehensive and rural electrification of the country. The allocations made to the scheme have been continually lower than the demands of funds sought by the Ministry. The Committee therefore, reiterate their earlier recommendation made in their 25th Report on Demands for Grants (2008-09) that funds required for the scheme may be made available in time for implementation of the scheme taking note of the fact that the funds demanded have been curtailed in the previous years and the targets achieved have also been lower than those set.

(Rec. Sl. No. 17)

3.8.12 The Committee are also deeply concerned to note that the electrification of BPL households situated within the villages has not made much headway. The Committee have been informed that the programme is basically aimed at BPL and the programme in the village is initiated by providing the basic infrastructure and if any additional requirement is there on account of APL, the State Government is expected to put in the extra transformers/equipment. Needless to point out that the Centre and State Governments are required to work together in this field. The Committee feel that the Government should look at village electrification schemes with a holistic and integrated approach rather than selecting groups of BPL households located within a village, for the success of the programme. The planning and implementation of the scheme in these cases may require major thrust and initiatives. The Committee desire that the Ministry should look into these problems more realistically and then chalk out an action plan, for electrification of the village along with BPL households. The Secretary, Ministry of Power also admitted that there were various problems regarding implementation of the scheme in four States *i.e.* Assam, Bihar, Orissa and Jharkhand. The Committee feel that more stringent monitoring mechanism needs to be put in place not only in these States but also all over the country to ensure speedy implementation of this rural electrification programme.

(Rec. Sl. No. 18)

3.8.13 The Committee feel that the shortage of power is a major problem for the country and are apprehensive about the success of the Rajiv Gandhi Grameen Vidyutikaran Yojana, despite the fact that the revised terms and conditions of RGGVY laid a responsibility on the States for providing 6-8 hours of electricity to villages electrified under RGGVY. The Committee strongly feel that the success of the programmme, is heavily dependent on availability of additional power and therefore recommend that the Government to ensure that capacity addition programmes for the 11th by executing them in a time bound manner for additional power generation so as to make RGGVY a great success.

(Rec. Sl. No. 19)

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

3.9.1 The Ministry have stated that prior to the year 2001-02, utilities used to monitor Transmission and Distribution (T&D) losses.

Concept of Aggregate Technical and Commercial (AT&C) loss was introduced in 2001-02 and is widely used, presently to measure the distribution losses in the power sector. The report on Performance of State Power Utilities for the years 2004-05 to 2006-07 prepared by the Power Finance Corporation indicates that the AT&C Loss of the State Power Utilities at the national level for 2005-06, 2006-07 and 2007-08 was 33.02%, 30.59% and 29.24% respectively of the total energy available for sale. The target set in the Re-structured APDRP for 11th Plan is to achieve 15% AT&C loss level in project areas.

3.9.2 Giving details about the revised APDRP scheme, the Ministry have further stated that the CCEA (Cabinet Committee on Economic Affairs) approved the Re-Structured APDRP on 31.07.2008. The Power Finance Corporation (PFC) has been appointed as the 'Nodal Agency' for the operationalisation and implementation of the R-APDRP programme, under the overall guidance of the Ministry of Power (MoP). PFC is working as a single window service under R-APDRP. The Nodal Agency has worked out the action plan for accomplishment of various activities involved in the implementation of schemes. The State Utilities have to award the work to IT Implementation Agencies (ITIA) within three months from the date of sanction of projects under Part–A of RAPDRP. The Utilities are advised to complete the entire work as envisaged in the DPR within 18 months of award of contract to ITIA. The Nodal Agency has also advised the Utilities/Discoms to take up the work simultaneously to ring fence and install the boundary meters in the project areas to be taken up under the Part B of RAPDRP, so that at the time of sanctioning the schemes under Part B, the base line data of energy pumped, energy realized and the AT&C loss level of three billing cycles in project area could be established. The Utilities/Discoms have to complete the woks of Part B schemes with in thirty six months from sanctioning the projects.

3.9.3 The R-APDRP is expected to complete from its sanction issued, by 2011-12 and the conversion of loan into grant on basis of reduction of AT&C loss expected to be completed by 2013-14.

3.9.4 When the Ministry was asked to explain how the targets set for the 11th Plan for R-APDRP are to be achieved, the Ministry responded and stated that Cabinet Committee on Economic Affairs (CCEA) approved the "Re-structured APDRP" for XI Plan 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 are to be taken up in two parts. Part-A is the projects for establishment of baseline data and IT applications for energy

accounting/auditing & IT based consumer service centers and Part-B is regular distribution strengthening projects. Under Part A 1130 projects at the cost of Rs 4183.93 crore have been approved of eighteen States (Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttrakhand, Uttar Pradesh and West Bengal) under Part-A of the scheme. So far Rs. 1093.57 crore has been released under the R-APDRP. Year-wise target and achievement are as follows:

FY' 2008-09: (Figures in Rs. Crore)

Sanction of Projects	Target	1,100.00
	Achievement	1,947.70
Disbursement of Funds	Target	350.00
	Achievement	350.00

FY' 2009-10: (Figures in Rs Crore)

		1st and 2nd Quarter	3rd Quarter	4th Quarter	Total
Sanction of Projects	Target	925.00	1,750.00	2,325.00	5,000.00
	Achievement	2,236.23			2,236.23
Disbursement of Funds	Target	600.00	600.00	530.00	1,730.00
	Achievement	743.57			743.57

3.9.5 It is evident from the above that the implementation of the scheme is consistently ahead of its targets to date as explained by the Ministry. In the current year 2009-10, the balance projects of Part-A and some projects of Part-B are targeted to be sanctioned. Balance projects of Part-B would be sanctioned in next two financial years *i.e.* 2010-11 and 2011-12.

Funding under R-APDRP has been linked with the achievement of targets. 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 of 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. So the R-APDRP is formulated with an objective to achieve actual demonstrable performance by mean of reduction in AT&C losses by linking its conversion of loan to grant.

3.9.6 The Ministry have also informed that the target of achieving 15% AT&C loss reduction in project area mentioned in Guidelines for the restructured APDRP is a condition for conversion of loan to grant. If the Distribution Utilities achieve the target of 15% AT&C loss on a sustained basis for a period of 5 years in the project area and the project is completed within the time schedule fixed by the Steering Committee, which shall in no case exceed five years from the date of project approval, upto 50% (90% for Special Category States) loan against Part-B projects will be convertible into a grant in equal tranches, every year for 5 years starting one year after the year in which the base-line data system (Part A) of the project area concerned is established and verified by the independent agency appointed by MOP through the Nodal Agency. If the utility fails to achieve or sustain the 15% AT&C loss target in a particular year, that year's tranche of conversion of loan to grant will be reduced in proportion to the shortfall in achieving 15% Aggregate Technical & Commercial (AT&C) loss target from the starting base-line assessed figure.

3.9.7 It was brought out before the Committee that no projects had been sanctioned in the NER States which have high AT & C losses.

3.9.8 The Committee note that prior to the year 2001-02, utilities used to monitor Transmission and Distribution (T&D) losses and concept of Aggregate Technical and Commercial (AT&C) losses was introduced in 2001-02 and is now used as a measure on performance of distribution losses in the power sector. Further, according to the Report on the State Power Utilities prepared by Power Finance Corporation indicate that the AT&C loss of the State Power Utilities at the national level for 2005-06, 2006-07 and 2007-08 was 33.02%, 30.59% and 29.24% respectively of the total energy available for sale. The target for the Re-structured APDRP for the 11th Plan is to achieve 15% AT&C loss level in project areas. The Committee are extremely astonished to note that AT&C losses during last three to four years has been as high as around 35%. The Committee trust that the projects sanctioned under the scheme would be taken up expeditiously so as to help achieve the desired level of AT&C losses.

(Rec. Sl. No. 20)

3.9.9 The Committee note that 1130 projects at a cost of Rs. 4183.93 crore have been approved of eighteen States (Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana,

Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttrakhand, Uttar Pradesh and West Bengal) under part A of the APDRP scheme. So far Rs. 1093.57 crore has been released under the R-APDRP. As informed by the Ministry the funding under the scheme is linked with the achievement of targets, the entire amount of loan for part A gets converted into grant on completion of 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. The Committee hope that the projects sanctioned actually achieve the desired 15% AT&C losses on long-term basis and the Ministry of Power and Power Finance Corporation would effectively work in tandem to monitor the projects. As the special category States, especially in the North East region, have very high AT&C losses, the Committee recommend that all efforts should be made to sanction some projects in the region at the earliest so that these States can also benefit from the programme.

(Rec. Sl. No. 21)

C. Research & Development in the Power Sector

3.10.1 The Ministry of Power is funding Central Power Research Institute (CPRI), an autonomous institute under the Ministry for research and development in the power sector. The 11th Plan total Budget allocation towards-in-house research, collaborative research and capital schemes for building up infrastructure for R&D is Rs. 320.00 crore. So far upto June, 2009, Rs. 71.13 crore has been utilized for R&D.

3.10.2 The reasons specified by the Ministry for lower spending includes some projects like Establishment of Regional Testing Laboratories at Kolkata & Guwahati, Shifting of Regional Testing Laboratory, Muradnagar to Noida and Augmentation & Modernisation of CPRI Laboratories (spilled over from Xth Plan) involve civil works & co-ordinated efforts with other agencies. Besides, two projects being implemented under XI Plan at High Power Laboratory at Bangalore and at Ultra High Voltage Research Laboratory (UHVRL), Hyderabad involve procurement of specialised equipment & establishment of unique facilities. Due to these reasons, the progress on expenditure & implementation of the projects has lagged behind.

3.10.3 Regarding R&D in the hydro sector, THDC will establish Hydro Training Institute cum engineering College at Tehri and Budget

provision for its construction is being made beside THDC has adopted two ITI at Chamba, Distt. Tehri and Gopeshwar, Distt. Chamoli.

3.10.4 Regarding the objectives of CPRI to evolve criteria for standards of various equipment for operation under Indian conditions and effectivity participate in formulation of national standards, the Ministry have informed that various Sectional Committees of the Bureau of Indian Standards (BIS) are represented by Central Power Research Institute (CPRI) in different capacities of Chairman, Members etc. Director General, CPRI was Principal Member of Electro Technical Division Council (ETDC) of BIS under whom there are about 30 Sectional Committees. These Sectional Committees look into the requirement of modifications in standards from time to time and accordingly bring in modifications in standards for the benefit of the Nation.

3.10.5 Further, as informed by the Ministry contribution of CPRI towards standards of un-used & used transformer Mineral Insulating Oil to align with IEC standards & one new BIS standard for Furfural determination in transformer oil in service has been brought out. In the areas of Low Voltage Switchgear, High Voltage switchgear, CPRI has contributed to development of Indian Standard and alignment with corresponding International Electrotechnical Commission (IEC) standards. In respect of low voltage fuses & transformers, CPRI has contributed to development of relevant BIS standard. In the area of cables & wires, specifications for PVC wires being modified to cater to demands of Flame Retardant Low Smoke (***FRLS***) & zero halogen cables, and specifications for power cable & accessories are being revised to align with International Electrotechnical Commission (IEC) standards. The extensive work carried at the Vibration Laboratory of CPRI Bangalore has helped in Formulation of BIS 9708-2004 on Vibration Dampers for overhead transmission lines. CPRI is leading in formation of comparison standards for BIS specification parallel to IEC 62056 communication protocols for energy meters.

3.10.6 Further the Ministry have informed that NTPC, NHPC, PGCIL and DVC have signed an agreement on 25th March 2009 to set up a high power testing laboratory namely National High Power Test Laboratory Pvt. Ltd for short circuit testing of transformers upto 315 MVA as against the available testing facilities upto 90 MVA. The office of this Joint Venture company is in operation at the premises of NTPC, Noida. Further, a contract has been signed between National High Power Test Laboratory Pvt. Ltd. and CPRI on 22nd June 2009 to appoint CPRI as a Management Consultant in the implementation

of the project. Also, order has been placed on M/s. CESI, Italy as Technical Consultant for the project.

3.10.7 The Committee note that the Ministry of Power is funding the Central Power Research Institute (CPRI), an autonomous institute under the Ministry for Research and Development in the power sector. An allocation of Rs. 320.00 crore has been made to the Institute towards in-house research, collaborative research and capital schemes for building infrastructure for R&D in the 11th Five Year Plan. However, so far only Rs. 71.13 crore has been utilized for R&D. The Committee are appreciative of the fact the CPRI is working in various fields to evolve criteria for standards of various equipment for operation in Indian conditions and effectively participate in formulation of National Standards. Also various Sectional Committees of Bureau of Indian Standards (BIS) are represented by CPRI in different capacities. The Committee hope that the CPRI will strive for excellence in testing facilities for power sector equipment which is very essential for the power sector. The Committee hope the Institute will also be able to utilize the funds allocated to it for its various projects for achieving the set goals.

(Rec. Sl. No. 22)

3.10.8 The Committee also learnt that NTPC, NHPC, PGCIL and DVC have signed an agreement on 25th March, 2009 to set up a high power testing laboratory namely National High Power Test Laboratory Private Limited for short circuit testing of transformers upto 315 MVA as against the available testing facilities upto 90 MVA. CPRI has been appointed as management consultant for the project. The Committee consider it as a step in the right direction as there has been a need felt for testing and certification of transformers in the power sector and would like to be informed of the further developments in this regard.

(Rec. Sl. No. 23)

D. Energy Conservation

3.11.1 The conventional sources of energy such as Thermal, Hydro and Nuclear are major sources of generation of electricity in India. Conventional sources of energy are valuable, because their formation takes millions of years whether it is oil or coal. Moreover, the conventional sources of energy are exhaustible. Energy prices may rise in the long run to reflect the relative scarcity and high cost of exploration and extraction. Hence, all initiative has to be taken to

optimally use the available resources so that they can continue for a long duration. Energy efficient products not only reduce the energy consumed per unit but also improve energy security of the country to ensure sustained availability of energy at an affordable price.

3.11.2 In order to institutionalize energy conservation efforts in the country, the Government had enacted the Energy Conservation Act in 2001, and established the Bureau of Energy Efficiency, (BEE) under Ministry of Power, Government of India, on 1st March, 2002 to promote the efficient use of energy and its conservation. Ministry of Power, through BEE, has initiated a number of energy efficiency initiatives through a range of measures, including the launch of Energy Conservation Building Code for large, new commercial buildings; the launch of energy labeling scheme for appliances; the initiation of process for the development of energy consumption norms for industrial sub sectors and an annual examination to certify energy auditors and energy managers. The Ministry have informed that government has set up a targeted reduction of 5% energy consumption by the end of XI Five Year Plan. In order to do so, BEE has prepared eight programmes/schemes for this purpose.

3.11.3 During 2007-08 and 2008-09 energy savings relating to the programmes/schemes of the BEE, include electricity savings totalling 10.2 billion units during the two years equivalent to avoided capacity generation of 2,128,07 MW.

3.11.4 The Ministry have further informed that implementation of almost all the programmes of the Bureau of Energy Efficiency is through the private sector. These private sector players include manufacturers of energy efficient equipment & appliances, builders of energy efficient buildings, and both large industry as well as 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 CRISL/ICRA are 35. This is 4 fold increase as compared to earlier number of ESCOs. The exercise is being done again to increase the number of ESCOs. 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 by the private sector, ESCOs in these sectors. The energy saved equivalent to 2128 MW of avoided capacity has been achieved in the last 2 years.

3.11.5 The energy conservation potential as assessed by the Ministry is 20,000 MW, the target for XIth Plan period is 10,000 MW. The potential harnessed during Xth Plan was 877 MW. The achievement during 2007-08 & 2008-09 was only 2127 MW (savings of electricity – 10259.65 MU) fuel savings around 1% of total fuel use. The target fixed for 2009-10 is 2600 MW. The major schemes planned for the XIth Plan:—

- Bachat Lamp Yojana: Targeted avoided capacity—4000 MW.
- Standards & Labeling Scheme: Targeted avoided capacity—3000 MW.
- Energy Conservation Building Code (ECBC): Targeted avoided capacity – 500 MW.
- Agricultural and Municipal DSM: Targeted avoided capacity —2000 MW.
- Small and Medium Industries: Targeted avoided capacity—500 MW.
- Existing Government Buildings: Investment grade audits and thereafter implementation of recommendations through ESCO route.
- Operationalising EC Act by strengthening Institutional Capacity of State Designated Agencies (SDAs).
- Awareness Schemes.
- National Mission for Enhanced Energy Efficiency.

3.11.6 Regarding the tax benefits to energy efficient products as recommended by the Committee in their 29th Report, (14th Lok Sabha) the Ministry had taken up the matter with the Department of Revenue before the 2008-09 budget was to be finalised. Since the proposal had not been considered by Department of Revenue it was once again taken up with the Ministry of Finance before the budget of 2009-10 was to be finalised. The Minister of Power had raised this also in the meeting convened by Finance Minister. Letters have been sent to the MoF for considering this proposal including the concern expressed by the Standing Committee on Energy to expedite fiscal incentives. Recently the Department of Revenue, Ministry of Finance *vide* its communication No. 27012/4/2009-SO (ST) dated 18.08.09 has forwarded the proposal on tax concessions (VAT) to the Member Secretary of the Empowered Committee of State Finance Minister for consideration. However, in case of other proposals like reduction of Excise/Custom duty on CFL, Electronic Ballast, etc. no reply has been received from Department of Revenue.

3.11.7 Further, it has been informed in the meeting of the Prime Minister's Council on Climate Change chaired by the Prime Minister held on 24.8.09 to consider the National Mission on Enhanced Energy Efficiency, the Finance Minister informed that the New Direct Tax Code has been prepared and is likely to be introduced in Parliament during the Winter Session. From 1st April, 2010 the Goods & Service Tax (GST) is also likely to be implemented in the entire country. The taxation proposals would, therefore, need to be reviewed in light of the emerging taxation regime.

3.11.8 The Committee note that to institutionalise energy conservation efforts in the country, the Government had enacted the Energy Conservation Act in 2001 and established the Bureau of Energy Efficiency (BEE) under the Ministry of Power. The Ministry have informed that Government has set up a targeted reduction of 5% energy consumption by the end of the 11th five year Plan and a target of 10,000 MW has been kept as energy conservation in the XIth Plan. The Committee are dismayed to note that Xth Plan could only achieve a target of 877 MW and the achievement during 2007-08 and 2008-09 has been only 2127 MW which amount to fuel savings around 1% of total fuel use. The target fixed for 2009-10 is 2600 MW. The Committee hope that the targets set for energy conservation for 2009-10 are achieved by BEE and also that they strive to achieve the targets set for the XIth Plan as a whole.

(Rec. Sl. No. 24)

3.11.9 The Committee learn that despite the recommendation of the Committee made in their 29th Report (14th Lok Sabha) tax benefits have still not been given to energy efficient products. The Committee reiterate the same and hope that tax benefits will be given to energy efficient initiatives in the next budget. The Committee desire that much more efforts are needed to popularize the energy efficiency campaign by holding seminars and conferences all over India on regular basis involving the active participation of concerned institutes and individuals. Action should also be taken to give publicity in print and electronic media in regional languages in the country.

(Rec. Sl. No. 25)

NEW DELHI;
December 16, 2009
Agrahayana 25, 1931 *(Saka)*

MULAYAM SINGH YADAV,
Chairman,
Standing Committee on Energy.

STATEMENT OF OBSERVATIONS/RECOMMENDATIONS
OF THE STANDING COMMITTEE ON ENERGY
CONTAINED IN THE REPORT

Sl. No.	Reference Para No. of the Report	Observations/Recommendations
1	2	3
1.	2.10	The Committee note that during 10th Five year Plan, the Government initiated reforms in the power sector starting with the enactment of Electricity Act, 2003. Many of the States restructured or corporatised their power sector and transformed their electricity boards into separate entities for transmission, distribution and generation. States also constituted or notified the constitution of SERCs, the Central Government notified the National Electricity Policy in 2005 and National Tariff Policy 2006. The Central Government also notified the Rural Electricity Policy in August, 2006. The Central Government constituted the Appellate Tribunal for Electricity and the same became operational in July, 2005. Open access was also technically allowed and also made functional for inter-state transmission. Guidelines were formulated on Merchant Power Plants with an aim to restructure the electricity industry in November, 2006. The launch of the Ultra-Mega Power Projects (UMPPs) was also one of the initiatives in the 10th Plan as the Electricity Act, 2003 required competitive tariff based bidding from independent power producers. The Committee, however, observe that despite major mile-stones achieved during 10th Plan through various policy initiatives, as claimed by the Ministry, no marked improvement has been noted in the field of power generation.

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		The Committee hope that the 11th Five Year Plan projects/programmes would be accomplished ensuring growth and development of the power sector leading to more generation. The Committee hope that the public sector will continue to play a dominant role in the 11th Plan while reforms will induce the private sector for greater participation for progress.
2.	2.11	The Committee observe that the proposed capacity addition in the 11th Plan is three and a half times of that achieved in the 10th Plan. The Committee note that as against the proposed capacity addition in the 11th Plan, of 78,700 MW a capacity of 16,712 MW is slipping to the 12th Plan. Since most of the power projects including Ultra Mega Power Projects (UMPPs) envisaged in the 11th Plan are likely to be commissioned only in the 12th Plan and capacity addition of 78,700 MW may not be achieved. Moreover, against an outlay of Rs. 3,09,231.38 crore approved by the Planning Commission for the 11th Plan (comprising GBS of Rs. 30,451.91 crore and IEBR of Rs. 2,78,458.33 crore) during the first two years out of a total Plan outlay of 73,613.36 crore, the actual expenditure was only Rs. 60,879.31. The Committee further note that there had been project specific reasons which had retarded the physical and financial performance of power sector PSUs during the 10th Plan. The Committee therefore, would like the Ministry to identify the project specific reasons halting the progress of power projects in 11th Plan and address them in right perspective. The Xth Plan also showed similar trends in achievement of physical and financial targets. The effective implementation and execution of the XIth Plan targets is also contingent upon fuel linkages being firmed up

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		and the early start of work on new projects. The Committee therefore, recommend that Ministry of Power should expedite their efforts for fuel linkages and placement orders for early procurement of equipment/machinery necessary for the power sector in the next two years for the success of the present plan period.
3.	2.12	The Committee note that recently the Ministry of Power has completed the mid-term appraisal of 11th Five Year Plan. The Committee have not examined the detailed results of this exercise. The Committee would however, like the Government to take necessary action on the weak areas identified in the review so as to achieve the set targets of the 11th Plan in the remaining period of the Plan.
4.	3.1.2	Since the budgetary provisions have already been passed by the Parliament, the Committee endorse the same. The programmes/schemes under the Ministry *vis-a-vis* budgetary provisions have been discussed in the succeeding paragraphs. The Committee would like the Ministry to take note of the recommendations of the Committee while carrying out the programmes and schemes within the approved budgetary provisions.
5.	3.2.13	The Committee note that the Budget Estimates of Ministry of Power for the year 2009-10 including IEBR have been placed at Rs. 53,126.27 crore. While the Budget Estimates (2008-09) including IEBR were Rs. 40,460.10 crore and Revised Estimates were Rs. 36,306.47 crore, the actual utilization was Rs. 35,231.44 crore comprising of Rs. 6,044.86 crore as GBS and Rs. 29,186.58 crore as IEBR which was 87.08% of Budget Estimate and 97.04% of Revised Estimate respectively. The Committee also note that the utilization of funds

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		quarterwise was 9.87%, 15.50%, 18.27% and 43.43% in the 1st , 2nd, 3rd and 4th quarter of 2008-09 respectively. Although the Ministry have justified that the expenditure in the first quarters is low and it picks up in the susequent quarters, the Committee are apprehensive whether this situation would be overcome in the subsequent years. Although a mechanism is reportedly in place to monitor new and ongoing projects for early sanction and utilization of funds, no perceptible improvement has been observed in this regard. Even for the schemes like RGGVY, the Ministry have stated that funds are demanded on the basis of expected progress by the States torwards implementation of the sanctioned projects. Also due to reasons like delay in awards, delay in allotment of land for substations, supply of materials, execution of work, actual utilization of funds does not take place. Since some of the projects/schemes are spill over from the previous year, the Committee find no reason as to why the Plan outlay expenditure in the first quarter should be as low as 8 or 9% as against the stipulated expenditure of about 25%. The Committee therefore, would like the Government to review the project planning/monitoring system of various PSUs/Bodies under the administrative control of the Ministry with a view to improve the same so as to ensure that funds are utilized evenly during the year. This would ensure proper utilization of funds as also achieving the physical targets set for various programmes/schemes in the power sector.
6.	3.2.14	The Committee also find that under utilization has also been observed in Plan oulays of NTPC, NHPC, DVC, THDC and NEEPCO. The main reasons for lesser utilization of funds by these PSUs are stated to be withdrawal of

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		water commitment by the State Governments, delay in technical bids in case of NTPC, ban on procurement of sand and aggregate from any mining in District Kullu for Mega Projects, non-availability of forest clearance for Kotli – BHEL, IA, IB and II; delay in transfer of forest land and non-starting of civil works in respect of Teesta Low Dam IV in case of NHPC, delay in supply of material, scarcity of cement and steel, delay in land acquisition etc. in case of DVC. The Committee feel that as an administrative Ministry, the Ministry of Power, should have been in a position to provide requisite help to power PSUs, which are facing these nagging problems since long and adversely affecting the planned power generation. The Committee would like the Ministry to prepare an action plan for taking conclusive action in this direction in coordination with other Central Ministries/ State Governments.
7.	3.3.15	The Committee note that the capacity addition target of the Ministry of Power is 78,700 MW in the 11th Plan. The capacity achieved in 2007-08 was 9263.00 MW as against a target of 16335.2 MW and the achievement in 2008-09 was 3454.00 MW as against a target set of 11061.2. The target set for this year was 14507 MW and so far 5383 MW has been achieved on 8.10.2009. The total achievement so far is 18100 MW in the 11th Plan out of a target of 78700 MW. The Committee are doubtful whether these targets would be achieved given the pace of achievements made in previous plans and in the first two years of the 11th Plan. The main reasons given by the Ministry for delay in the execution of projects include delay in placement of orders, delayed and non-sequential supplies, shortage of skilled manpower/commissioning teams, delay in

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		resolution of contractual issues, constraints in movement of heavy equipment due to bottlenecks in road transportation, IT based monitoring not implemented, inadequate deployment of construction machinery, delay in Environment and Forest clearance, land acquisition problems, shortage of fuel etc. The capacity addition programmes also faced similar problems during 10th Plan as a result of which targets set have fallen short of achievement. The Ministry have therefore, not learnt any lesson from past experience in overcoming such problems during 11th Plan. The Committee feel that some of the problems like delay in Environment and Forest clearance, land acquisition problems, shortage of fuel etc. could have been solved by having effective coordination with the concerned Ministries at the highest level. The Committee, therefore, recommend that expeditious action needs to be initiated and the Ministry of Power should co-ordinate with the various agencies and other Ministries to remove all bottlenecks and hurdles in capacity addition programme.
8.	3.3.16	The Committee have been informed that another problem coming in the way of capacity building programmes is of shortage of skilled manpower. The Committee find it difficult to understand why the shortage of manpower is a factor for executing the capacity addition programme as the country abounds in educated, unemployed youths. The Committee would like the Ministry to tie up with technical institutes like IITs, ITIs and State Government Poly-techniques to arrange the skilled manpower, trainers and teaching staff etc. The Committee would also like the Ministry to set targets for each PSUs for adopting ITIs. This would go along way in solving shortage of technical manpower for establishing new power plants.

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9.	3.3.17	The Committee would like to stress that optimal output of existing power producing units could not be achieved without proper and continous supply of coal and gas. The Committee therefore, desire that the matter of availability of fuel for the power sector should be taken up at the highest level with the Ministry of Coal and Ministry of Petroleum & Natural Gas to work out the fuel linkage for the power sector.
10.	3.3.18	The Committee are happy to note that NTPC has signed an MoU with Bharat Forge Limited on 19.06.2008 to promote a Joint Venture Company to establish a facility, subject to establishment of techno-commercial viability to take up manufacture of castings forgings, fittings and high pressure pipings and also Balance of Plant (BoP) equipment for the power sector. NTPC and BHEL have also formed a joint venture for EPC (Engineering, Procurement and Construction) activities and equipment manufacturing for power projects. The Committee feel that these Joint Ventures should work out details of production lines to be set up and start the manufacturing units within a time schedule to ensure that they deliver all the equipments required to achieve the capacity addition targets set for this plan period and also the 12th Plan period. The Committee would appreciate if more such Joint Ventures are formed to boost capacity addition programme.
11.	3.4.10	The Committee note that hydro power is a clean and continuous source of Energy and does not require the use of heavily exploited fossil fuels. The country abounds in hydro power potential, especially in the North East region of the country. The Government had launched, the 50,000 MW hydro power

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		initiative way back in 2003. The Ministry of Power have informed that under the scheme, pre-feasibility Reports (PFRs) of 162 hydro electric projects having aggregate installed capacity of 47,930 MW were prepared during 2003-04 which includes 62 schemes with aggregate installed capacity of 30,416 MW in North East region and 10 schemes in Sikkim with total installed capacity of 1469 MW. As a follow up, the Ministry decided to take up 77 schemes with an aggregate capacity of 33951 MW for preparation of DPR/implementation for likely benefits during the 11th Plan and beyond. The Committee would like the Ministry to take up for execution of these projects for which DPRs have been prepared in a time bound manner. The Committee also like the Ministry to facilitate various statutory clearances for 34 Schemes which have been held up for non-availability of clearances. According to the Ministry a shelf of 109 projects having aggregate capacity of 30,920 MW have been kept for the 12th Plan. The Committee desire that all ground work in regard to the projects envisaged in the 12th Plan needs to be undertaken immediately as the gestation period of hydro projects is quite long and in order to reap the benefits, work has to be initiated 5-7 years before the target dates.
12.	3.4.11	The Committee have been informed that an Inter-Ministerial Group (IMG) has been constituted to evolve a suitable framework to guide and accelerate development of hydropower in the North east and Secretary, Ministry of Power is one of the Members of the IMG. The Group shall go into the details of identified issues and evolve suitable frame work to guide and accelerate development of hydropower in the North East region. The

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		Group shall submit its Report in 4 months. The Committee are also dismayed to note that a number of projects of NEEPCO have suffered time and cost overruns. The Kameng project was scheduled for commissioning in 2009-10 but may not be ready before 2012-13. The Turial project was scheduled to be commissioned in 2005-07 but has been called off on account of local agitation and revival of the works is under the consideration of the Government. The Committee would like to be apprised of the latest developments in this regard and hope that early solution to the problems related to development of hydro power in the North East region of the country are arrived at. The Committee would await the findings/Recommendations of the IMG.
13.	3.4.12	The Committee note that survey and investigation is an important part of setting up of hydro-projects. The funds kept for the same were reduced from Rs. 30 crore (IEBR) in respect of NEEPCO at R.E. stage (2008-09) to Rs. 11.52 crore. The Secretary (Power), Government of Arunachal Pradesh had in February, 2007 informed that the Government of Arunachal Pradesh had withdrawn all authorization issued to NEEPCO for undertaking works relating to survey and investigation and preparation of DPRs for development of Hydro Electric projects without prior MOU/MOA/implementation agreement signed with the State Government for the project sites identified in Kameng, Subansiri and Lohit Basins located within the territory of Arunachal Pradesh except Kameng-I/Bhareli-I (HEP), pare HEP and on going Kameng. The Committee also learn that some projects were also being given to private developers. The Committee desire that the Ministry of Power to look into this matter seriously and try to

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		resolve the issues between NEEPCO and the State Government. The Committee desire that the issue may also be referred to Inter-Ministerial Group for their consideration. The Committee hope that projects of survey and investigation, for which money has been allocated will not be surrendered and work will continue on the same in the future. The Committee specifically would like the Ministry to take up the matter with the State Government of Arunachal Pradesh for allocating projects to NEEPCO for which DPR was carried out by them instead of handing over to private players.
14.	3.5.6	The Committee note that according to section 9 of the Indian Electricity Act, 2003 sanction/ licence for setting up of captive power plant is not required. The total installed generating capacity of captive power plants in the country is 24,976.4 MW. The National Electricity Policy emphasises the need for bringing power from standby generating stations to the grid, the tariff policy also urges the creation of an enabling environment by the Regulatory Commission that encourages captive plants to be connected to the grid. However, the prevalent scenario is not so conducive for the captive power plants since their generating capacity is not fully utilized for lack of adequate fuel linkages. The Secretary, Ministry of Power admitted during evidence that in case of fuel linkage priority was given to the Central PSUs, State PSUs and Companies which supplied power to the grid. The captive generators were to arrange their own fuel. The Committee find that although the Government have been involved in moderating the charges/ duties, providing grid connectivity, specifying guidelines on open access etc. to benefit the captive generators, however, the Committee

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		would like to see the proactive role of the Ministry of Power for helping in providing fuel linkages to the captive generators who are unable to generate to their full capacity and also prevail upon them to supply additional power to the grid.
15.	3.6.5	The Committee note that the Ultra Mega Power Projects (UMPPs) have been taken up with an objective to overcome the general energy shortage in the country, encourage the private sector participation so as to make electricity available to the consumer at low tariff for a longer period of time. However, out of the nine UMPPs originally envisaged for development way back in 2006-07 only four projects *viz.* Sasan in Madhya Pradesh, Tilaiya in Jharkhand, Mundra in Gujarat and Krishnapatnam have completed the bidding and SPVs (Special Purpose Vehicles) have been transferred to the identified bidders. For the remaining projects *i.e.* Cheyyur UMPP, Tamil Nadu, Sundergarh UMPP, Orissa, Chhattisgarh UMPP, Maharashtra UMPP and Karnataka UMPP, the Ministry have explained that they are in the process of finalization of sites, acquisition of land, availability of water etc. The Ministry have also informed that they are also proposing second UMPPs in Andhra Pradesh and Gujarat. In this prevalent situation, it is unlikely that power would be produced and transmitted from these UMPPs in the remaining part of the 11th Plan period. The Committee would like to be apprised of the developments in this field and desire that work on all UMPPs envisaged commence in this plan period itself, so as to reap the benefits of the power produced by these projects at the earliest.
16.	3.7.7	The Committee note that Renovation and Modernisation is an important exercise and an

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		ongoing process to renovate and extend the life of power plants and also to increase their Plant Load Factors (PLF). The Committee note that in this connection a programme called Partnership In Excellence (PIE) was initiated by the Ministry of Power in August, 2005 with a view to improve the performance of low performing units of power utilities with assistance from better performing power utilities like NTPC. The Committee are happy to note that the exercise which concluded in June, 2008 there was an overall increase in Plant Load Factor ranging from 43.9% to 52.1% during 2007-08 from the units, as per the data supplied by the Ministry. The Committee hope that such programmes will be initiated again in the near future in partnership with Central PSUs, who have a credible degree of experience in this field, so that many of the old units can be revived for increased generation of power. The Committee find that in the recent years the plant load factor in the private sector has grown to 91.0 level much above the Central Sector *i.e.* at 84.3 level for the year 2008-09. The Committee hope that the power PSUs under the Central Sector also strive to achieve plant load factors of 90% and above.
17.	3.8.11	The Committee note that the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) is an ambitious programme launched by the Government of India and as per the revised target of the scheme all villages and BPL households are to be electrified by March, 2012. The scheme was sanctioned in the Xth Plan with a budgetary allocation of Rs. 5000 crore, the continuation of the scheme in XIth Plan was sanctioned in January, 2008 with an outlay of Rs. 28,000 crore against a demand of Rs. 42,000 crore for comprehensive and rural electrification of the country. The allocations

1	2	3
		made to the scheme have been continually lower than the demands of funds sought by the Ministry. The Committee therefore, reiterate their earlier recommendation made in their 25th Report on Demands for Grants (2008-09) that funds required for the scheme may be made available in time for implementation of the scheme taking note of the fact that the funds demanded have been curtailed in the previous years and the targets achieved have also been lower than those set.
18.	3.8.12	The Committee are also deeply concerned to note that the electrification of BPL households situated within the villages has not made much headway. The Committee have been informed that the programme is basically aimed at BPL and the programme in the village is initiated by providing the basic infrastructure and if any additional requirement is there on account of APL, the State Government is expected to put in the extra transformers/equipment. Needless to point out that the Centre and State Governments are required to work together in this field. The Committee feel that the Government should look at village electrification schemes with a holistic and integrated approach rather than selecting groups of BPL households located within a village, for the success of the programme. The planning and implementation of the scheme in these cases may require major thrust and initiatives. The Committee desire that the Ministry should look into these problems more realistically and then chalk out an action plan, for electrification of the village along with BPL households. The Secretary, Ministry of Power also admitted that there were various problems regarding implementation of the scheme in four States *i.e.* Assam, Bihar, Orissa and Jharkhand. The Committee feel that more stringent

1	2	3
		monitoring mechanism needs to be put in place not only in these States but also all over the country to ensure speedy implementation of this rural electrification programme.
19.	3.8.13	The Committee feel that the shortage of power is a major problem for the country and are apprehensive about the success of the Rajiv Gandhi Grameen Vidyutikaran Yojana, despite the fact that the revised terms and conditions of RGGVY laid a responsibility on the States for providing 6-8 hours of electricity to villages electrified under RGGVY. The Committee strongly feel that the success of the programmme, is heavily dependent on availability of additional power and therefore recommend that the Government to ensure that capacity addition programmes for the 11th Plan by executing them in a time bound manner for additional power generation so as to make RGGVY a great success.
20.	3.9.8	The Committee note that prior to the year 2001-02, utilities used to monitor Transmission and Distribution (T&D) losses and concept of Aggregate Technical and Commercial (AT&C) losses was introduced in 2001-02 and is now used as a measure on performance of distribution losses in the power sector. Further, according to the Report on the State Power Utilities prepared by Power Finance Corporation indicate that the AT&C loss of the State Power Utilities at the national level for 2005-06, 2006-07 and 2007-08 was 33.02%, 30.59 and 29.24% respectively of the total energy available for sale. The target for the Re-structured APDRP for the 11th Plan is to achieve 15% AT&C loss level in project areas. The Committee are extremely astonished to note that AT&C losses during last three to four years has been as high as around 35%. The

1	2	3
		Committee trust that the projects sanctioned under the scheme would be taken up expeditiously so as to help achieve the desired level of AT&C losses.
21.	3.9.9	The Committee note that 1130 projects at a cost of Rs. 4183.93 crore have been approved of eighteen States (Andhra Pradesh, Bihar, Chhattisgarh, Goa, Gujarat, Haryana, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Punjab, Rajasthan, Sikkim, Tamil Nadu, Uttarakhand, Uttar Pradesh and West Bengal) under part A of the APDRP scheme. So far Rs. 1093.57 crore has been released under the R-APDRP. As informed by the Ministry the funding under the scheme is linked with the achievement of targets, the entire amount of loan for part A gets converted into grant on completion of 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. The Committee hope that the projects sanctioned actually achieve the desired 15% AT&C losses on long-term basis and the Ministry of Power and Power Finance Corporation would effectively work in tandem to monitor the projects. As the special category States, especially in the North East region, have very high AT&C losses, the Committee recommend that all efforts should be made to sanction some projects in the region at the earliest so that these States can also benefit from the programme.
22.	3.10.7	The Committee note that the Ministry of Power is funding the Central Power Research Institute (CPRI), an autonomous institute under the Ministry for Research and Development in the power sector. An allocation of Rs. 320.00 crore

1	2	3
		has been made to the Institute towards in-house research, collaborative research and capital schemes for building infrastructure for R&D in the 11th Five Year Plan. However, so far only Rs. 71.13 crore has been utilized for R&D. The Committee are appreciative of the fact the CPRI is working in various fields to evolve criteria for standards of various equipment for operation in Indian conditions and effectively participate in formulation of National Standards. Also various Sectional Committees of Bureau of Indian Standards (BIS) are represented by CPRI in different capacities. The Committee hope that the CPRI will strive for excellence in testing facilities for power sector equipment which is very essential for the power sector. The Committee hope the Institute will also be able to utilize the funds allocated to it for its various projects for achieving the set goals.
23.	3.10.8	The Committee also learnt that NTPC, NHPC, PGCIL and DVC have signed an agreement on 25th March, 2009 to set up a high power testing laboratory namely National High Power Test Laboratory Private Limited for short circuit testing of transformers upto 315 MVA as against the available testing facilities upto 90 MVA. CPRI has been appointed as management consultant for the project. The Committee consider it as a step in the right direction as there has been a need felt for testing and certification of transformers in the power sector and would like to be informed of the further developments in this regard.
24.	3.11.8	The Committee note that to institutionlise energy conservation efforts in the country, the Government had enacted the Energy Conservation Act in 2001 and established the Bureau of Energy Efficiency (BEE) under the

1	2	3
		Ministry of Power. The Ministry have informed that Government has set up a targeted reduction of 5% energy consumption by the end of the 11th five year Plan and a target of 10,000 MW has been kept as energy conservation in the XIth Plan. The Committee are dismayed to note that Xth Plan could only achieve a target of 877 MW and the achievement during 2007-08 and 2008-09 has been only 2127 MW which amount to fuel savings around 1% of total fuel use. The target fixed for 2009-10 is 2600 MW. The Committee hope that the targets set for energy conservation for 2009-10 are achieved by BEE and also that they strive to achieve the targets set for the XIth Plan as a whole.
25.	3.11.9	The Committee learn that despite the recommendation of the Committee made in their 29th Report (14th Lok Sabha) tax benefits have still not been given to energy efficient products. The Committee reiterate the same and hope that tax benefits will be given to energy efficient initiatives in the next budget. The Committee desire that much more efforts are needed to popularize the energy efficiency campaign by holding seminars and conferences all over India on regular basis involving the active participation of concerned institutes and individuals. Action should also be taken to give publicity in print and electronic media in regional languages in the country.

ANNEXURE I

(*Vide* para 3.1.1. of the Report)

DEMANDS FOR GRANTS
MINISTRY OF POWER
DEMAND NO. 74

A. The budget allocations, net of receipts are given below:

(In crores of Rupees)

			Budget 2008-09			Revised 2008-09			Budget 2009-10		
		Major Head	Plan	Non-plan	Total	Plan	Non-plan	Total	Plan	Non-plan	Total
1		2	3	4	5	6	7	8	9	10	11
		Revenue	5693.44	75.00	5768.44	5690.63	-46.26	5644.37	7341.00	-28.00	7313.00
		Capital	306.56	—	306.56	409.37	—	409.37	1889.00	—	1889.00
		Total	6000.00	75.00	6075.00	6100.00	-46.26	6053.74	9230.00	-28.00	9202.00
1.	Secretariat-Economic Services	3451	1.00	13.09	14.09	1.00	17.18	18.18	2.00	23.00	25.00
	Power										
	General										
2.	Central Electricity Authority	2801	8.45	45.24	53.69	8.89	64.68	73.57	11.00	86.14	97.14
		4801	6.55	—	6.55	6.55	—	6.55	4.00	—	4.00
		Total	15.00	45.24	60.24	15.44	64.68	80.12	15.00	86.14	101.14

1		2	3	4	5	6	7	8	9	10	11
3.	Research and Development 3.01 Central Power Research Institute, Bangaluru	2801	50.00	..	50.00	30.00	...	30.00	55.00	...	55.00
4.	Training 4.01 National Power Training Institute (NPTI)	2801	20.00	2.00	22.00	18.75	7.28	26.03	20.00	2.00	22.00
5.	Setting up of JERC for Manipur & Mizoram	2801	1.50	...	1.50	1.44	...	1.44	1.25	...	1.25
6.	Central Electricity Regulatory Commission	2801	...	6.50	6.50	...	7.27	7.27	....	7.00	7.00
7.	Interest Subsidy to Power Finance Corporation	2801	0.01	...	0.01	0.01	...	0.01	...	...	...
8.	Subsidy for Rural Electrification-RGGVY	2801	5055.00	....	5055.00	4933.82	....	4933.82	6300.00	....	6300.00
9.	Consultancy Charges for APDRP Projects	2801	0.01	...	0.01	...	....	....	30.00	....	30.00
10	Funds for Evaluation Studies and Consultancy	2801	2.90	....	2.90	2.90	....	2.90	1.00	....	1.00
11	Appellate Tribunal for Electricity	2801	....	5.50	5.50	.....	5.00	5.00	...	6.00	6.00
12	Setting up fo Joint SERC for UTs and Goa	2801	....	2.67	2.67	....	2.91	2.91	....	3.00	3.00
13	Comprehensive Award Scheme for Power Sector	2801	0.57	....	0.57	0.65	....	0.65	0.74	...	0.74

1		2	3	4	5	6	7	8	9	10	11
14.	Future Gen Project	2801	6.00	....	6.00	...	...	....	...	...	...
15.	Energy Conservation	2801	10.00	.....	10.00	28.70	.....	28.70	56.00	....	56.00
16.	Bureau of Energy Efficiency	2801	90.00	....	90.00	70.00	...	70.00	82.00	.....	82.00
17.	APDRP	2801	1.00	....	1.00	25.00	....	25.00	80.00	.....	80.00
18.	Assistance to FoR for Capacity Building	2801	2.00	....	2.00	1.25	.....	1.25	2.00	....	2.00
19.	Scheme for Equity Gap Funding	4801	0.01	....	0.01	.....	....	....	.....	.....	.....
20.	World Bank grant under PHRD to THDC	2801	…..	…..	…..	2.04	.....	2.04	0.01	.....	0.01
21.	Loan to PFC for APDRP	6801	.....	.....	.....	325.00	.....	325.00	1477.00	.....	1477.00
	Total-General		5254.00	61.91	5315.91	5455.00	87.14	5542.14	8120.00	104.14	8224.14
Thermal Power Generation											
22.	Badarpur Thermal Power Station										
	22.01 Revenue Expenditure	2801	—	320.76	320.76	—	170.18	170.18	—	149.59	149.59
	22.02 Less Revenue Receipts	0801	—	-320.76	-320.76	—	-320.76	-320.76	—	-304.73	-304.73
	Net Expenditure		—	—	—	—	-150.58	-150.58	—	-155.14	-155.14
Transmission and Distribution											
23.	Lumpsum provision for projects/ Schemes for the benefit of N.E. region & Sikkim										
	23.1 Subsidy for Rural Electrification–RGGVY	2552	445.00	—	445.00	566.18	—	566.18	700.00	—	700.00

1		2	3	4	5	6	7	8	9	10	11
	23.2 Loan to PFC under APDRP	6552	—	—	—	—	—	—	173.00	—	173.00
	23.3 Investment in Public Enterprises in N.E. Region	4552	155.00	—	155.00	43.82	—	43.82	50.00	—	50.00
	Total		600.00	—	600.00	610.00	—	610.00	923.00	—	923.00
	Total-Power		5854.00	61.91	5915.91	6065.00	-63.44	6001.56	9043.00	-51.00	8992.00
24.	Investments in Public Enterprises other than NE Region										
	24.01 Capital Outlay on Power Project	4801	111.00	—	111.00	—	—	—	—	—	—
	24.02 Loans for Power Projects	6801	34.00	—	34.00	34.00	—	34.00	185.00	—	185.00
	Total		145.00	—	145.00	34.00	—	34.00	185.00	—	185.00
	Grand Total		6000.00	75.00	6075.00	6100.00	-46.26	6053.74	9230.00	-28.00	9202.00

B. Investment in Public Enterprises (In crores of Rupees)

			Budget 2008-09			Revised 2008-09			Budget 2009-10		
		Head of Dev	Budget support	IEBR	Total	Budget Support	IEBR	Total	Total	Budget Support	total
		1	2	3	4	5	6	7	8	9	10
23.03	Project/Schemes for the Development of North Eastern Areas & Sikkim by PSUs	12801	155.00	.....	155..00	43.82	....	43.82	50.00	.....	50.00
24.01	National Thermal Power Corporation	12801	.....	13588.00	13588.00	.....	12670.00	12670.00	.....	17700.00	17700.00
24.02	National Hydro Electric Power Corporation	12801	34.00	4351.19	4385.19	34.00	3416.00	3450.00	185.00	4482.99	4667.99

1		2	3	4	5	6	7	8	9	10	11
24.03	Damodar Valley Corporation	12801	....	6612.65	6612.65	.....	5120.69	5120.69	.....	8313.34	8313.34
24.04	North Eastern Electric Power Corporation	12801	.....	617.50	617.50	.....	403.76	403.76	....	774.70	774.70
24.05	Satluj Jal Vidyut Nigam Ltd.,	12801	....	556.84	556.84	.....	417.76	417.76	....	580.06	580.06
24.06	Tehri Hydro Development Corporation	12801	111.00	693.92	804.92	.....	554.26	554.26	.....	535.18	535.18
24.07	Power Grid Corporation	12801	.....	8040.00	8040.00	.....	7624.00	7624.00	.....	11510.00	11510.00
	Total		300.00	34460.10	34760.10	77.82	30206.47	30284.29	235.00	43896.27	44131.27
C.	PLAN OUTLAY										
	Central Sector plan										
1.	Power	12801	5400.00	34460.10	39860.10	5490.00	30206.47	35696.47	8307.00	43896.27	52203.27
2.	North Eastern Areas	22552	600.00	.....	600.00	610.00	.....	610.00	923.00	.....	923.00
	Total		6000.00	34460.10	40460.10	6100.00	30206.47	36306.47	9230.00	43896.27	53126.27

ANNEXURE II

STANDING COMMITEEE ON ENERGY

MINUTES OF THE THIRD SITTING OF THE STANDING COMMITTEE ON ENERGY (2009-10) HELD ON 14TH OCTOBER, 2009 IN COMMITTEE ROOM '62' PARLIAMENT HOUSE, NEW DELHI

The Committee met from 1100 hrs. to 1420 hrs.

PRESENT

Shri Mulayam Singh Yadav — *Chairman*

MEMBERS

Lok Sabha

2. Mohammad Azharuddin
3. Shri Adhir Ranjan Chowdhury
4. Shri Ram Sundar Das
5. Shri Paban Singh Ghatowar
6. Shri Arjun Munda
7. Shri Shripad Yesso Naik
8. Shri Sanjay Nirupam
9. Shri Jagdambika Pal
10. Shri Ravindra Kumar Pandey
11. Shri Nityananda Pradhan
12. Shri M.B. Rajesh
13. Dr. K.S. Rao
14. Shri Ganesh Singh

Rajya Sabha

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

19. Shri Veer Pal Singh Yadav
20. Shri Govindrao Wamanrao Adik
21. Shri Mohammad Shafi

SECRETARIAT

1. Shri Brahm Dutt — *Joint Secretary*
2. Shri Shiv Singh — *Director*
3. Shri Shiv Kumar — *Additional Director*
4. Shri Rajesh Ranjan Kumar — *Deputy Secretary*

REPRESENTATIVES OF THE MINISTRY OF POWER

Ministry of Power

1. Shri Hari Shankar Brahma — Secretary
2. Shri Anil Kumar — Additional Secretary
3. Shri Rakesh Jain — Joint Secretary & FA
4. Shri Sudhir Kumar — Joint Secretary
5. Shri Devender Singh — Joint Secretary
6. Shri Srikara Naik — Economic Advisor

Central Electricity Authority

1. Shri Rakesh Nath — Chairperson
2. Shri S.M. Dhiman, — Member
3. Shri Gurdial Singh — Member
4. Shri V. Ramakrishna — Member
5. Shri S. Sheshadri — Member

Public Sector Undertakings/Autonomous Bodies/Statutory Bodies

1. Shri R.S. Sharma — CMD, NTPC
2. Shri S.K. Garg — CMD, NHPC
3. Shri S.K. Chaturvedi — CMD, PGCIL
4. Shri P. Umashankar — CMD, REC
5. Shri H.K. Sharma — CMD, SJVNL
6. Shri Satnam Singh — CMD, PFC
7. Shri S. Biswas — Secretary, DVC
8. Shri Ajay Mathur — DG, BEE
9. Shri Alok Kumar — Secretary, CERC

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 Direction 58 of the Directions by the Speaker.

2. The representatives of the Ministry made a power-point presentation on overall functioning of the Ministry, targets and achievements under various programmes and, in particular, on Demands for Grants of the Ministry of Power for the year 2009-10.

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

(i) Low utilization of funds/low achievement of targets by the Ministry.

(ii) Need to accelerate Capacity Addition Programme.

(iii) Impact of shortage of gas and coal on power generation.

(iv) Low plant load factor for power plants in public sector and State Sector *vis-a-vis* private sector.

(v) Slow pace of implementation of the Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).

(vi) Need to cover North Eastern States in the R-APDRP Programme.

(vii) Captive Power Generation.

(viii) Use of super-critical technology in power generation.

(ix) Ultra Mega Power Projects (UMPPs).

(x) Transmission and Distribution losses.

(xi) Energy conservation.

(xii) Supply of power generation equipment.

(xiii) Steps for making available technically qualified manpower for upcoming power plants and adopting more ITIs by PSUs in power sector.

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.

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

The Committee then adjourned.

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

The Committee sat on Monday, the 14th December, 2009 from 1500 hrs. to 1530 hrs. in Committee Room 62, Parliament House, New Delhi.

PRESENT

Shri Santosh Bagrodia — *in the Chair*

MEMBERS

Lok Sabha

2. Mohammad Azharuddin
3. Shri Paban Singh Ghatowar
4. Shri Jagdambika Pal
5. Shri Ravindra Kumar Pandey
6. Shri Nityananda Pradhan
7. Shri Ganesh Singh
8. Shri Subhash Bapurao Wankhade

Rajya Sabha

9. Shri Rama Chandra Khuntia
10. Shri Bhagat Singh Koshyari
11. Shri Shivpratap Singh
12. Shri Shyamal Chakraborty
13. Shri Govindrao Wamanrao Adik
14. Shri Mohammad Shafi

SECRETARIAT

1. Shri Brahm Dutt — *Joint Secretary*
2. Shri Rajesh Ranjan Kumar — *Deputy Secretary*

2. In the absence of the Chairman, the Committee chose Shri Santosh Bagrodia, a Member of the Committee to act as Chairman for the sitting in accordance with Rule 258 (3) of the Rules of Procedure and Conduct of Business in Lok Sabha.

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

(i) Draft Report on the Demands for Grants (2009-10) of the Ministry of Power.

(ii) Draft Report on the Demands for Grants (2009-10) of the Ministry New and Renewable Energy.

(iii) Draft Report on Action Taken by the Government on the Recommendations contained in the 31st Report (14th Lok Sabha) on the subject 'Implementation of Rajiv Gandhi Grameen Vidyutikaran Yojana'.

The Committee adopted the draft Reports without any change(s)/ modifications.

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

The Committee then adjourned.

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The Souvenir items with logo of Parliament are also available at Sales Counter, Reception, Parliament House, New Delhi. The Souvenir items with Parliament Museum logo are available for sale at Souvenir Shop (Tel. No. 23035323), Parliament Museum, Parliament Library Building, New Delhi. List of these items are available on the website mentioned above."

INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this First Report on Demands for Grants of the Ministry of Power for the year 2009-10.

2. The Committee took evidence of the representatives of the Ministry of Power on 14th October, 2009. The Committee wish to express their thanks to the representatives of the Ministry of Power for appearing before the Committee for evidence and furnishing the information, desired by the Committee in connection with examination of the Demands for Grants (2009-10).

3. The Report was considered and adopted by the Committee at their sitting held on 14th December, 2009.

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 the body of the Report.

NEW DELHI;
December 16, 2009
Agrahayana 25, 1931 *(Saka)*

MULAYAM SINGH YADAV,
Chairman,
Standing Committee on Energy.