STANDING COMMITTEE ON ENERGY

20

(2006-07)

FOURTEENTH LOK SABHA

MINISTRY OF POWER

DEMANDS FOR GRANTS
(2007-08)

TWENTIETH REPORT

LOK SABHA SECRETARIAT
NEW DELHI
April, 2007 / Vaisakha, 1929 (Saka)

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(FOURTEENTH LOK SABHA)

MINISTRY OF POWER

DEMANDS FOR GRANTS
(2007-2008)

Presented to Lok Sabha on 27.04.2007
Laid in Rajya Sabha on 27.04.2007

LOK SABHA SECRETARIAT
NEW DELHI
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COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2006-07)

Shri Gurudas Kamat - Chairman

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2.	Shri J.S. Chauhan	-	Deputy Secretary
3.	Shri Shiv Kumar	-	Deputy Secretary
4.	Smt. Juby Amar	-	Executive Officer

INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Twentieth Report (Fourteenth Lok Sabha) on Demands for Grants of the Ministry of Power for the year 2007-08.

2. The Committee took evidence of the representatives of the Ministry of Power on 14th March 2007 and 21st March, 2007.

3. The Committee wish to express their thanks to the representatives of the Ministry of Power for appearing before the Committee and for furnishing the replies to the points raised by the Committee in connection with examination of the Demands for Grants (2007-08).

4. The Standing Committee on Energy considered and adopted this Report at their sitting held on 16th April 2007.

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;
20th April, 2007
30 Chaitra, 1929 (Saka)

GURUDAS KAMAT,
Chairman,
Standing Committee on Energy

PART-I

CHAPTER – I

INTRODUCTORY

1.1.1 Electricity is a concurrent subject at Entry 38 in List III of the Seventh Schedule of the constitution of India. The Ministry of Power, which started functioning independently with effect from 2nd July, 1992 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 decision, monitoring of the implementation of power projects, training and manpower development and the administration and enactment of legislation in regard to thermal and hydro power generation, transmission and distribution.

1.1.2 The Ministry of Power is entrusted with the evolution of the general policy in the field of Energy. Under the Allocation of Business Rules, the Ministry is responsible for the following: -

i) General Policy in the electric power sector and issues relating to energy policy. (details of short, medium and long-term policies in terms of formulation, acceptance, implementation and review of such policies, cutting across sectors, fuels, regions and cross country flows).

ii) All maters relating to hydro-electric power (except small/mini/micro hydel projects of and below 25 MW capacity) and thermal power and transmission system network.

iii) Research, development and technical assistance relating to hydro-electric and thermal power and transmission system network.

iv) Administration of the Electricity Act, 2003 (34 of 2003) the Damodar Valley Corporation Act, 1948 (14 of 1948) and Bhakra Beas Management Board as provided in Punjab Reorganisation Act, 1966 (31 of 1966)

v) All matters relating to Central Electricity Authority and Central Electricity Regulatory Commission.

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

vii) Administrative control of Public Sector Undertakings, Statutory and Autonomous Bodies functioning under the Ministry.

viii) Other Public Sector Enterprises concerned with the subject included under this Ministry except such projects as are specifically allotted to any other Ministry or Department.

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

1.1.3 In all technical and economic matters, 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, hereinafter 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. It is headed by a Chairperson, who is also ex-officio Secretary to the Government of India and comprises six full time Members of the CEA 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 Systems), Member (Planning) and Member (Grid Operation and Distribution) 14 subordinate offices are functioning under the control of Central Electricity Authority.

1.1.4 Following the enactment of the Central Electricity Regulatory Commission's Act (1998) since submerged in Electricity Act, 2003 the Central Electricity Regulatory Commission (CERC) was constituted in July, 1998 with a Chairman & three full time members. The main functions of the CERC are to regulate tariff of Centrally owned or controlled generating companies, regulate inter-state transmission including tariff of transmission entities, to regulate inter-state Bulk Sale of Power, to advise the Central government in matters of tariff policy formulation, etc.

1.1.5 There are five Statutory Bodies, six Public Sector Undertakings, three Joint Venture Corporations, two Autonomous Bodies (Societies) under the administrative control of the Ministry. These are: -

a) STATUTORY BODIES (Non-Commercial):

1) Central Electricity Regulatory Commission (CERC)
2) Appellate Tribunal for Energy (ATE)
3) Bureau of Energy Efficiency (BEE), New Delhi;

b) STATUTORY BODIES (Commercial):

1) Damodar Valley Corporation (DVC), Calcutta;
2) Bhakra Beas Management Board (BBMB), Chandigarh;

c) PUBLIC SECTOR UNDERTAKINGS :

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

d) JOINT VENTURE CORPORATIONS :

1) Satluj Jal Vidyut Nigam Limited (SJVN), Shimla (HP);
2) Tehri Hydro Development Corporation (THDC), Rishikesh, Uttarakhand

e) AUTONOMOUS BODIES :

1) Central Power Research Institute (CPRI), Bangalore;
2) National Power Training Institute (NPTI), Faridabad.

1.1.6 **Programmes and Schemes Implemented by the Ministry**

i. Secretariat: This scheme takes care of Establishment matters for the Secretariat of the Ministry of Power. Ministry of Power has 12 schemes under its administrative supervision as explained hereafter.

ii. Central Electricity Authority: Provision under the scheme is made to the Central Electricity Authority coordinating the activities of the various agencies in relation to control and utilization of national power resources. It helps CEA in carrying out the survey and studies, collection and recording of data concerning generation, distribution, utilization and development of power resources.

iii. Research and Development: Scheme of Research & Development is implemented through the Central Power Research Institute, Bangalore. CPRI 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: This scheme intend to impart training in various aspects of power stations, operation and maintenance and implemented through the National Power Training Institute's training facilities in the country.

v. Central Electricity Regulatory Commission: Under the provision of the ERC Act, 1998, the Central Government has constituted the Central Electricity Regulatory Commission (CERC). The Central Commission is a statutory body with a quasi judicial status. The new Electricity Act, 2003 passed by the Parliament and notified in the Gazette of India on 2nd June, 2003 has come into force with effect from 10th June, 2003. The provision for the scheme is to meet the expenditure on establishment of CERC and other related costs.

vi. Appellate Tribunal for Electricity: Under the provision of Electricity Act,2003,the Central Government has set up the Appellate Tribunal for Electricity. It hears appeals against the orders of the adjudicating officer or the Appropriate Commissions under the Electricity Act, 2003. The provision under the scheme is for meeting the forums' running expenses..

vii. Consultancy charges for APDRP projects : A proposal for appointment of Advisor cum Consultants under APDRP has been made for studying the utility and effectiveness of APDRP Scheme. The scheme is meant for reduction of T&D losses, improvement in billing and revenue realisation require adoption of new technologies in the areas of IT, consumer indexing. GIS mapping, SCADA/DMS etc., for revival of distribution sector.

viii. Funds for evaluation studies and consultancy: This scheme provides funds for evaluation of specific projects regarding upgradation & Strengthening of Sub-transmission & distribution network including energy accounting & metering in the distribution circles.

ix. Rural Electrification / RGGVY: This scheme of rural Electricity Infrastructure and Household Electrification has been introduced in April, 2005 for achieving the National Common Minimum Programme objective of providing access to electricity to all rural households over a period of four years. As per census 2001 only 44% of the rural households have access to 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 Decentralised Distributed Generation (DDG) and Supply. REDB, VEI and DDG would also cater to the requirement of agriculture and other activities including irrigation pump-sets, small and medium industries, khadi and village industries, cold-chains, healthcare, education and IT. Under this scheme un-electrified below poverty line (BPL) households will get electricity connection free of charge, as per norms of Kutir jyoti Programme in all rural habitations.

x. Comprehensive Award Scheme: The scheme for awarding shields/ certificates is introduced by the Ministry of Power for outstanding performances of the Thermal Power Stations and Utilities.

xi. Accelerated Power Distribution Reform Programme During Xith Plan (Under Proposal for Restructuring): The focus of the restructured APDRP scheme has been proposed to be on establishment of base line data, which shall enable reduction of AT&C losses in major towns of the country through strengthening & upgradation of Sub-Transmission and Distribution network and adoption of Information Technology in the areas of energy accounting & auditing and improvement in consumer services through establishment of Bijlee Sewa Kendra. The programme will cover urban areas only, covering all District Headquarters and towns with population of more than 50,000. The programme would include preparation of Base-line data for the town/city covering consumer Indexing, GIS Mapping, Metering of distribution Transformers and Feeders, and Automatic Data Logging for all distribution Transformers and Feeders, Renovation, Modernization and strengthening of the sub-transmission and distribution network.

xii. Scheme for Equity Gap Funding: Government has sanctioned several hydroelectric projects in the Central Sector, some of which are under construction. It was envisaged to provide equity for these ongoing projects from gross budgetary support (GBS) of Government and internal accruals of the Central Public Sector Undertakings (CPSUs). Government has approved the proposal for augmentation of resources of National Hydroelectric Power Corporation (NHPC) through Indial Public Offer (IPO) route and the proposal for bringing out IPO of North East Electric Power Corporation (NEEPCO) is under consideration. However, the funds

mobilized from the IPO and the internal accruals of CPSUs would not be sufficient to meet the equity requirements of the sanctioned and ongoing projects. A new scheme namely "Equity Gap Funding" is proposed to be introduced for funding the gap in equity in respect of such projects.

xiii. Future Gen Project: Future Gen Project has been initiated as a multi-national programme in a public-private partnership model for developing emissiosn-free coal-based generation pilot project. Government of India is required to contribute US$ 10 million to this project. I would enable India to be a partner in development of this technology aimed at establishing techno-economically viable coal-fired emission-free plant. India has become a full charter member in the Future Gen Government Steering Committee (GSC), which is the mechanism to provide guidance, input and recommendations on the direction of the Future Gen Project.

xiv. Energy Conservation Related Activities: Provision under the scheme 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 school children.

xv. Investment in Public Enterprises: Provision under the scheme is towards capital investment in the generation and transmission projects taken upon in the Central Sector through CPSUs like NTPC, NHPC, NEEPCO, THDC, SJVNL, and POWERGRID.

1.1.7 The Committee in their 12th Report on Demands for Grants (2006-07) had given 17 recommendations. The Minister of Power made a statement regarding the status of implementation of recommendations made in the 12th report in the House on 25.08.2006 & again on 16.03.2007. The Minister in his statement maintained that all the 17 recommendations have been accepted by the Government. However, scrutiny thereof revealed that in one of the recommendations (Para No. 2.6) the Committee had desired that the planning and close monitoring should be strictly done by the Ministry to ensure full utilization of allocated funds during the year 2006-07. The Minister in his statement stated all efforts are made to ensure full utilization of allocated funds during the financial year but, however, sometimes it was beyond the control of the Ministry to utilize the allocated budget fully. In another recommendation (Para No. 2.9), the Committee had asked the Minister to ascertain the reasons for under-utilization of funds by the PSUs and take remedial action for full utilization of allocated funds during 2006-07. In response thereto the Minister has stated that though the primary responsibility of obtaining requisite approvals lie with the Ministry/Department but sometime it was beyond the control of Ministry of Power to obtain the necessary clearance within the time limit/within the financial year which, resulted in the surrender of funds. Another recommendation (Para No. 2.8) of the Committee was that instead of revising the allocated budget of the Ministry at RE stage, based on the performance of first two quarters of the financial year, it should be revised on the basis of utilization of the funds during the last financial year. In his reply the Minister has informed that Ministry of Finance has not agreed for change of

practice. The rest of the recommendations are at various stages of implementation.

1.1.8 The Minister for Power laid on the Table of the Lok Sabha, the detailed Demands for Grants (2007-08) relating to the Ministry of Power on 13th March, 2007. The detailed Demands for Grants, for the Ministry of Power show a budgetary provision of Rs. 5894.19 crore comprising of Rs. 5483 crore under Plan and Rs 411.19 crore under Non Plan.

1.1.9 The Committee have examined the Demands for Grants of the Ministry of Power in detail. The Committee on their part fully endorse the Demands of the Ministry subject to their observations/recommendations, which are contained in the next Chapter.

CHAPTER II

ANALYSIS OF DEMANDS FOR GRANTS AND PLAN BUDGET OF THE MINISTRY OF POWER

A. Plan Outlay

2.1.1 Financial Performance of the Ministry of Power during the last three years has been as under:

(Rs. in crore)

Year	Budget Estimates (BE)	Revised Estimates (RE)	Actuals	Utilisation (in percentage)
2004-05	15630.32	14041.06	12947.57	92.21
2005-06	23013.90	19150.11	16847.54	87.98
2006-07	27623.70	25325.77	14587.02*	57.60

* Till 14th February, 2007

2.1.2 The quarterly utilization of funds by the Ministry of Power during 2006-07 comprising of GBS of Rs.5500 crore and IEBR of Rs.22123.70 crores (BE) is as follows: -

(Rs in crore)

	GBS	IEBR	Total	% Utilization in financial year 2006-07 (w.r.t. BE)
Expenditure during 1st quarter	678.74	2860.40	3539.14	12.81%
Expenditure during 2nd quarter	627.17	3695.32	4322.49	15.65%
Expenditure during 3rd quarter	970.31	4846.36	5816.67	21.05%

2.1.3 The budgetary allocation of the Ministry of Power for the year 2007 - 08 is Rs.33153. 26 crore as per the details given below:-

(Rs. in crore)

		INTERNAL & EXTRA BUDGETARY RESOURCES (IEBR)		
SL. NO.	ORGANISATION/SCHEMES	INTERNAL & EXTRA BUDGETARY RESOURCES	GBS	TOTAL PLAN OUTLAY
A. CENTRAL PLAN				
1.	N.T.P.C.	**12792.00**	**0.00**	**12792.00**
2.	N.H.P.C.	**2500.95**	**1.00**	**2501.95**
3.	POWERGRID	**6500.00**	**0.00**	**6500.00**
4.	D.V.C.	**4271.38**	**0.00**	**4271.38**
5.	T.H.D.C.	**410.90**	**10.00**	**420.90**
6.	S.J.V.N.	**642.80**	**0.00**	**642.80**
7	NEEPCO	**552.23**	**706.47**	**1258.70**
8.	MOP(OTHER)	**0.00**	**4765.53**	**4765.53**
	A.TOTAL CENTRAL PLAN	**27670.26**	**5483.00**	**33153.26**
B. MOP SCHEMES				
Rural Electrification Scheme		0.00	3983.00	3983.00
N.P.T.I. (Training & HR)		0.00	28.13	28.13
C.P.R.I. (Research & Testing)		0.00	67.81	67.81
Programme & Infrastr-cture improvement of CEA		0.00	78.65	78.65
Consultancy charges for APDRP Projects		0.00	217.50	217.50
Scheme for Equity Gap Funding		0.00	289.49	289.49
Bureau of Energy Efficiency		0.00	69.40	69.40
Other MOP Schemes		0.00	31.55	31.55
Total -B		0.00	4765.53	4765.53
GRAND TOTAL		**27670.26**	**5483.00**	**33153.26**

(Rs.in crore)

2.1.4 On being enquired about the financial requirements of the Ministry during 2007-08 and as finally approved by the Planning Commission, the Ministry of Power informed the Committee as follows:

Name of Orgn.	Outlay proposed by Ministry of Power			Finally approved by the Planning Commission		
	GBS	**IEBR**	**Total**	**GBS**	**IEBR**	**Total**
NTPC	0.00	12792.00	12792.00	0.00	12792.00	12792.00
NHPC	1343.98	2500.95	3844.93	1.00	2500.95	2501.95
PGCIL	0.00	6500.00	6500.00	0.00	6500.00	6500.00
DVC	0.00	4271.38	4271.38	0.00	4271.38	4271.38
THDC	383.78	621.49	1005.27	10.00	410.90	420.90
SJVN	0.00	642.80	642.80	0.00	642.80	642.80
NEEPCO	706.47	552.23	1258.70	706.47	552.23	1258.70
MOP Schemes	12658.04	0.00	12658.04	4765.53	0.00	4765.53
	15092.27	**27880.85**	**42973.12**	**5483.00**	**27670.26**	**33153.26**

The amount approved by the Planning Commission was sanctioned by the Ministry of Finance.

2.1.5 The Committee observe that utilization of the budgetary allocation during the last few years has not kept pace with the allocation. Though the budgetary allocation to the Ministry of Power is being hiked every year, the utilization of the same keep on decreasing. During the year 2004-05, BE was Rs. 15630.32 crore whereas during the year 2006-07, it was increased to Rs. 27623.70 crore. However, the utilization of the same has declined from 92.21% in the year 2004-05 to only 57.6% in the year 2006-07. The Committee feel it is a matter of serious concern. The Committee, therefore, desire that the Government should retrospect and analyze the reasons for this trend so that the same story is not repeated during the year 2007-08. The Committee also note that quarterly utilisation of the funds has also not been on the desired norms. The Ministry should make all out efforts to improve quarterly utilisation of funds so that annual allocations can be fully utilised.

B. Power Generation And Capacity Addition

2.2.1 The All India installed capacity of electric power generation stations under utilities was 124287.17 MW as on 31.03.2006 consisting of 82410.54 MW thermal, 32325.77 MW hydro, 3360 MW nuclear and 6190.86 MW from Renewable Energy Sources (RES) which has increased to 129082 MW as on 08.03.2007 consisting of 84905 MW thermal, 34086 MW hydro, 3900 MW nuclear and 6191 from RES.

Hydro	34086 MW (26%)
Thermal Coal 66, 541 MW Gas 13, 582 MW	84905 MW (66%)
Nuclear	3900 MW (3%)
Renewables	6191 MW (5%)
Total	**1, 29,082 MW**

2.2.2 As informed by the Ministry of Power the overall generation in the country has increased from 515 Billion Units (BUs) during 2001-02 to 617 BUs during 2005-06. However, the peak shortages have increased over the years as shown below:

Year	Peak demand (MW)	Peak Met (MW)	Peak shortage (MW)	Peak Shortage (%)
2001-02	78441	69189	9252	11.8
2002-03	81492	71547	9945	12.2
2003-04	84574	75066	9508	11.2
2004-05	87906	77652	10254	11.7
2005-06	93255	81792	11463	12.3
2006-07* (*Upto Jan. 07)	100403	86425	13978	13.9

2.2.3 The Committee observed that one of the problems being faced by the power sector is the shortages during the peak hours. When asked whether introduction of two time- zones for the country will help in reducing the shortages, the Secretary during evidence responded as follows:

> "In respect of the two time zones, I think this is one of the suggestions which has periodically been making its round for decision making. To the best of my knowledge, I think in the year 1998, it was also considered. But an alternative suggestion is that since we are a country with a very long band along the longitude path, instead of having two time zones in the country, which could cause confusion in terms of train and plane timings and confusion of that sort, the office timings and school timings could be staggered in different parts of the country with the span

of about 1-2 hours so that the rush hours, the peak hours are staggered accordingly. That is an alternative suggestion which I think the committee can consider. It is because altering the time in different zones has its own implication in the country. Some countries do have it. Yes, but we can find another solution to it."

2.2.4 The Committee have been informed that a capacity addition of 41,110 MW had been targeted for 10th Five Year Plan. The Sector-wise details of the same are:

(in MW)

Source	Central	State	Private	Total
Hydro	8742	4481	1170	14393
Thermal	12790	6676	5951	25417
Nuclear	1300	-	-	1300
Total	**22832**	**11157**	**7121**	**41110**

2.2.5 The Ministry added that at the time of Mid Term Appraisal, a capacity addition of 36956 MW, against the target of 41110 MW, was found feasible for 10th Plan period as per the break –up given below:

(in MW)

Source	Central	State	Private	Total
Hydro	6177	4248	700	11125
Thermal	11070	7992	4199	23261
Nuclear	2570	0.00	0.00	2570
Total	**19817**	**12240**	**4899**	**36956**

2.2.6 According to the Ministry, a capacity addition of 23250 MW is likely to be achieved during 10th Plan as per the following sector-wise type-wise break-up:-

Sector-wise

(in MW)

Sector	Original Target	Units commissioned	Under Execution	Works to be awarded/ under approval	Overall capacity addition now anticipated
Central	22832	11115	2610	0	*13725
State	11157	5459.64	2135	0	7594.64
Private	7121	1930.6	0	0	1930.6
Total	**41110**	**18505.24**	**4745**	**0**	**23250.24**

* Including 220 MW nuclear project under construction

(in MW)

•The likely capacity addition is expected to be 23250MW which is about 56% of target.

Type-wise

(in MW)

	Original Target	Units commissioned	Under Execution	Works to be awarded/ under approval	Overall capacity addition now anticipated
Thermal	25417	10129.24	3535	0.00	13664.24
Hydro	14393	7196	990	0.00	8186
Nuclear	1300	1180	220	0.00	1400
Total	**41110**	**18505.24**	**4745**	**0.00**	**23250.24**

2.2.7 When asked about the targets fixed for capacity addition in Central, State and by the Private Sectors and actual achievements thereof during the 10th Five Year Plan, the Ministry submitted the following details: -

2.2.8 "The target fixed for capacity addition in central, state and private sectors and the likely achievement thereof during 10th five year plan is below :-

(All figures in MW)

Sector	**Hydro**		**Thermal**		**Nuclear**		**Total**	
	Target fixed	Likely achieve-ment	Target fixed	Likely achieve-ment	Target fixed	Likely achievement	Target fixed	Likely achieve-ment
Central	8742	4495	12790	7830	1300	1400	22832	13725
State	4481	2991	6676	4604	0	0	11157	7595
Private	1170	700	5951	1230	0	0	7121	1930
Total	14393	8186	25417	13664	1300	1400	41110	23250

2.2.9 The Achievement of the Ministry vis-à-vis the targets during the VIIIth, IXth & Xth Plans is, however, as follows: -

Plan wise	Target	Actual	
VIIIth	30,538/-	16,423	(54%)
IXth	40,245/-	19,015	(47%)
Xth	41,110/-	23,250 (likely)	(56%)

2.2.10 Asked about the actual capacity addition during the 10th Plan, the Ministry in a post evidence reply informed that the actual capacity addition during the 10th Plan has been 21180 MW.

2.2.11 When the Committee desired to know whether the reasons for 10th plan slippages have been analyzed, the Ministry in a written reply stated:

> "During the first year of 10th plan itself it became clear that a number of projects totalling to 3,009 MW in public and private sectors could not be taken up due to various reasons which included non availability of escrow cover by State Governments to IPP projects and fund constraints. The list of projects dropped from 10th Plan is given ahead. There was also delay in super critical technology tie-up by BHEL for six units of 660 MW to be taken up by NTPC, which resulted in delay in tendering. However, a total capacity of 16752 MW (excluding 3,009 MW projects which could not be taken up) is expected to slip to 11th Plan due to reasons mentioned against each, in the following table:

THERMAL PROJECTS

Name of the Agency	Name of the Project	Reasons of slippages	IC (MW)
NTPC	Barh STPP	Delay in Super Critical Technology	660
NTPC	Kahalgaon STPS Stage II Ph-I U-5	Delay in Super Critical Technology	660
NTPC	North Karanpura TPP U-1	Delay in Super Critical Technology	660
NTPC	Sipat STPP-I 2x660 U-1&2	Delay in Super Critical Technology	1320
NTPC	Sipat STPS II U-4	Delay in Super Critical Technology	660
NLC	Neyveli TPS II Exp 2*500 U-1&2	Delay in award of works/Order placement	500
NLC	Barsingsar lignite TPP U-1	Delay in award of works/Order placement	250
DVC	Maithon RBC TPP 4x250 U-1 to 4	Funds Tied Up/Delay in financial closure	1000
DVC	Chandrapura TPS Extn. U-7&8	Law & Order Problem	500
UPRVUNL	Anpara (c) TPS U-1	Funds Tied Up/Delay in financial closure	500
APGCL	Lakwa WH ST	Delay in award of works/Order placement	38
WBPDCL	Bakreshwer TPS-II U-4& U-5	Delay in award of works/Order placement	420
PSEB	Goindwal TPP U-I&2	Escrow cover (Private Sector)	500

PUNJAB	GHTPP	Delay in supplies by BHEL Placement of orders for BOPs	500
A.P.	Rayalseema	Delay in supplies by BHEL	210
A.P.	Bellary	Delay in supplies by BHEL	500
W.B.	Sagardighi	Delay in supply of Aux. Boiler	250
GUJ.	KLTPS	Delay in placement of order for material handling plant. Inadiquate manpower by BHEL	75
CHATT.	Korba East	Delay in supplies by BHEL. Placement of orders for BOPs	210
MAHA.	Ratnagiri gas (JV)	Funds constraint.	704
A.P	Konaseema	Non availability of gas	445
A.P	Gautami	Non availability of gas	464
TOTAL			**11026**

HYDRO PROJECTS

Name of the Agency	**Name of the Project**	**Reasons of slippages**	**IC(MW)**
NHPC/ J&K	Sewa –II	Delay in award of works/Order placement	120
SJVNL/HP	Rampur	Delay in preparation in DPR	400
THDC/Uttaranchal	Tehri St-.II (PSS)	Funds Tied Up/Delay in financial closure	1000
NHPC/ WB	Teesta Low Dam –IV	Delay in MOEF clearance	168 *
WB/ WBSEB	Purlia PSS	Court case	675
NHDC/ M.P.	Omkaresswer .	Delay in award of works/Order placement	520
MESEB/Meghlya	Myntdu (Leiska) – I	Delay in award of works/Order placement	84
SMHPCl/MP	Maheshwar	Funds Tied Up/Delay in financial closure	400
APGENCO/ A.P.	Jurala Priya	Delay in award of works/Order placement	78
TNEB/Tamil Nadu	Bhawani Kathalai	Delay in award of works/Order placement	60
THDC/Uttaranchal	Koteshwer	R & R issues	400
NHPC/ W.B.	Teesta Low Dam III	Delay in MOEF clearance	132
JKPDC/ J&K	Baglihar	Natural clamities	450
KSEB/ Kerala	Kuutiyadi Aug.	Delay in MOEF clearance	100

NHPC/ Sikkim	Teesta -V	Geological surprises	510
UTTARANCHAL	Maneribhali	HRT,Dam and Radial Gates	304
MAHARASHTRA	Ghatghar pss	Commissioning of GIS and cleaning of TRT	250
ORISSA	Balimela	Penstock erection and supply of expansion joints	75
TOTAL HYDRO			**5726**

* Capacity changed to 160 MW

It is pertinent to point out that a number of projects of 10th plan ordered on BHEL were delayed due to delayed and non-sequential supply of equipment and materials and inadequate manpower in commissioning teams. Some of the projects expected to be commissioned during the last quarter of 2006-07 are also running behind schedule due to the above reasons."

2.2.12 During evidence, the Ministry furnished the following details on the reasons for shortfall in achieving 10th Plan targets.

(figs. In MW)

	Original identified	**Additional projects**	**Total**	
1. Delay in technology tie-ups (6 units of 660 MW at Kahalgaon/ Barh /N. Karanpura)	**3,960**	**-**	**3,960**	**3,960**
2. Pre implementation stage delay				
i) Delay in award of works	**1,645**	**835**	**2,480**	
ii) Projects not taken up / financial closure not achieved / funds not tied up	**5,278**	**23**	**5,301**	**10,172**
iii) Delay in project clearance / investment decision	**2,391**	**-**	**2,391**	
3. Delay during implementation by suppliers / contracting agencies	**2,049**	**2,800**	**4,849**	**4,849**
4. Reasons beyond control of project authorities				
i) Delay in environmental clearance/ geological surprises/ R&R/ litigation	**3,155**	**-**	**3,155**	**3,715**
ii) Law & order problems	**560**	**-**	**560**	
5. Non availability of gas	**1,713**	**1,450**	**3,163**	**3,163**
6. Nuclear projects identified	**-**	**1,220**	**1,220**	**1,220**
7. Adjustment due to change of size of units	**(-) 990**	**91**	**(-) 899**	**(-) 899**
	19,761	**6,419**	**26,180**	**26,180**

2.2.13 During the course of the evidence the Committee made a strong observation that keeping in view the huge gap between the capacity addition targets and their actual achievement during the Xth Plan period, it was highly imperative that the Ministry should make best efforts to draw/firm up realistic targets only. To this the witness responded:

> "We entirely agree with you that the targets should be as realistic as possible but it is not possible to give clearances to all projects in the Five Year Plan because project development is a continuous exercise. Gestation period varies from four to almost 7-8 years, and many projects spill over in two Plan Periods. So, we will have to begin some preparatory work in some projects and assume that clearances would be there. Thus, I might submit that it will not be possible to include only those projects in a Plan whose clearances are with us at the moment. We will have to keep another shelf of projects whose clearances are under way or are in the process of being obtained."

2.2.14 As informed by the Ministry of Power the proposed capacity addition during the XIth Plan is envisaged as follows: -

(figs, in MW)

SECTOR	HYDRO	THERMAL	NUCLEAR	TOTAL
CENTRAL SECTOR	9,685	23,810	3,160	36,655
STATE SECTOR	2,637	20,352	0	22,989
PRIVATE SECTOR	3,263	5,962	0	9,225
ALL INDIA	15,585	50,124	3,160	68,869*

*In addition, 7,391 MW capacity under implementation slipping from last year of Xth Plan is likely to be commissioned during the XIth Plan.

2.2.15 Considering the performance of the Ministry during the 10th Plan, when asked to clearly state the steps taken to avoid slippages in the 11th Plan, the Ministry submitted: -

> "An analysis of reasons for slippages of 10th Plan projects, both hydro and thermal, has been carried out. While planning for capacity addition during 11th Plan, a cautious approach has been adopted.
>
> The approach adopted for selection of Hydro, Thermal and Nuclear projects has been as follows: -
>
> **Hydro**
>
> India is duly concerned about climate change and efforts are on to promote benign sources of energy. Hydro Power is one such source and is to be accorded priority also from the consideration of energy security. Irrespective of size and nature of hydro projects, whether ROR or Storage projects, these are all renewable technologies. However, execution of

hydro projects require thorough Survey and Investigation, preparation of DPR, development of infrastructure, Environment Impact Assessment (EIA) and other preparatory works, which are time consuming and require two to three years for their preparation. It would take about 5 years to execute a hydro project after the work is awarded for construction. Thus in order to achieve completion of a hydro project during 11th Plan, the project should either be already under construction or execution should start at the beginning of the Plan. The broad criteria adopted for selection of hydro projects for 11th Plan is as under: -

Those hydro projects whose concurrence has been issued by CEA and order for main civil works is likely to be placed by March 2007.

Apart from the above, a few hydro projects of smaller capacity which are ROR type having surface power houses and where gestation period is expected to be less than 5 years have also been included. These projects would need to be rigorously followed up for completion during the 11th Plan.

Nuclear

Nuclear is environmentally benign source of energy and over a period of time, its proportion in total capacity should increase. Keeping in view the availability of fuel, a moderate capacity addition of 3,160 MW nuclear plants has been programmed during the 11th Plan by the Nuclear Power Corporation. All projects are presently under construction. However, in view of the recent developments in the Nuclear Sector, capacity addition in nuclear plants during 12th Plan is expected to be much higher.

Thermal

Gas: Although gas is relatively a clean fuel, at present there is uncertainty about the availability, period of availability and price of gas. Only 2,114 MW gas based capacity has been planned for 11th Plan where gas supply has already been tied up. This does not include NTPC's gas based projects at Kawas and Gandhar, totalling to 2,600 MW. However more gas based projects could be taken up for construction as and when more clarity emerges about availability and price of gas.

Coal & Lignite based Thermal plants: Coal is expected to be the main stay of power generation in the years to come. The following criteria have been adopted for identifying the coal and lignite based projects for inclusion in the 11th Plan.

i) Such projects as have already been taken up for execution in the 10th Plan period itself and are due for commissioning in the 11th Plan period.

ii) Thermal projects where Letters of Award (LOA) have already been placed.

iii) Thermal projects where Letters Of Award (LOA) are expected to be placed by 30th Sept, 2008 and commissioning is expected during the 11th Plan"

2.2.16 During evidence when the Ministry was asked about their level of preparation for the 11th Plan, the Secretary, submitted: -

"In the Eleventh Plan, in the Central sector, we are planning 22,869 megawatts. I am talking of preparedness. My senior colleagues and myself are of the view that the project, which has taken off on the ground at the beginning of the Plan is the one which is going to fructify at the end of it. So, to reply to your question as to what is the level of preparedness and what precaution that we have taken, this is the kind of scenario at the moment. In the Central sector, it is 22,869 megawatts and in the State sector, it is 14,572 megawatts.

In the private sector it is 6,917 megawatt which give an all-India picture of 13,531 megawatt for hydro; 27667 megawatt is thermal and nuclear is 3,160 megawatt. Now about 50,000 megawatt thermal power projects are proposed, 46,000 megawatt will be coal fired and 83 per cent of them have already been given coal linkages or coal block allotments. So the concern that you had addressed, 83 per cent of these projects are already having their desired linkages for coal or coal block allotment. That, of course, will be an area again where they have been allotted coal blocks to test their entrepreneurial skills to be able to move into an area which they may not hitherto done so. But I am already informed that they are in touch with experts in that particular area and they are more confident of getting their supplies than they were before. The BHEL has been advised to handle over 10,000 megawatts per annum from its present capacity of 6,000 megawatts; out of which thermal is only 4,300 megawatts and 1,700 is the hydro capacity. We have been in touch with the BHEL and there is also a serious thinking in the Ministry of Power that why do not we develop another manufacturing agency, maybe with the inspiration from the NTPC which is our flagship and which is, in fact, having to bear the brunt of the non-supply of equipment and new technologies. There is also a philosophy in it that a person who is using that equipment will be concerned more to improve its performance and its timely delivery. So it is with that philosophy that we are actively considering that how do we enhance our equipment manufacturing capacity though no concrete plan is yet in shape which I can share with you"?

2.2.17 On the issue of non-availability of gas and the Ministry's plan to deal with the situation in the 11th Plan, the Secretary explained as follows:

> "While we are making every effort to procure gas, as you yourself know, may be with the new funds in the country, we shall get gas by the middle or by the end of the Eleventh Five-year-Plan. The situation could be much better. LNG is virtually not available for long term even for any price that you would ask for. Only spot cargos are available at the moment in the international market. From our side, we know that some projects are on hold because of non-availability of gas. So, we have been extremely conservative in trying to include any project for gas in this Plan. But we shall be open to a review. We have asked the States also to keep themselves in readiness for any gas project, the moment gas becomes available."

2.2.18 When the Committee categorically asked why the same was not resorted to since the last 3-4 years, the Secretary added:

> "We have been doing it, but I think, at one point of time, we were wanting to encourage as much BHEL as we could because there was a little comfort that we have had the experience of handling 250 megawatt or 500 megawatt projects which are standardized BHEL equipment. We have the spares; we have the capacity for replacement in the country. But the last few years have shown that a few projects of 300 megawatts and 600 megawatts also from the foreign sources have started coming. It was a beginning from the Chinese supplies. Now these equipment are coming into our market. NTPC is also looking at the possibility of entering into some on-going business somewhere and we have to see how fast they can come on. So it is a mind set that we would ask for a location, l ask for tenders for 500 megawatts or 1,000 megawatts at a site. Now if you want other players to come, you have to have plus or minus this megawattage."

2.2.19 The Committee expressed their apprehension that they think it was seemingly impossible to meet the targets that the Ministry had set for themselves keeping in view the equipment supply capacity of BHEL because both hydro and thermal sectors combined could just give only 50 per cent of the target, the Secretary replied, during evidence:

> "Sir, I entirely agree with you. We see that writing on the wall. But I think the answer to this is our international competitive bidding. We have to get other suppliers to supply us equipment."

2.2.20 He further added:

> "I say this because the machine size standardization across the world is not 250 MW or 500 MW. It could vary. For example, the equipment, which the Chinese are using at the moment is about 300 and 600 MW in the

corresponding range. So, in respect of some of the projects, we have now begun to do that. In fact, in one or two projects which we were shoring up for the Commonwealth Games, we did run into a dilemma. We have environmental clearance for a 1000 MW for a site. If we invite tenders for a combination of 1200 MW, it will mean that we would be going in for an environmental clearance again for any enhancement. Given the tight time schedule that we wish to bring a project into play, can we afford that risk? It may not be in this kind of a time-bound programme. but generally, yes, we have advised that when we go for environmental clearance, we should try and take a clearance for an upper limit of alternate technology that may be going around….."

2.2.21 When asked about the difference between a 1000 MW project and a 1200 MW Project in terms of environmental impact and whether a good, imported system at 1200 MW be as environmentally good as an 800 MW system which is locally produced. The Ministry was categorically asked to state as to whether it has made any assessment to this effect. The Secretary, Ministry of Power, submitted:

"I would say that the equipment that BHEL is also making today conforms to international standards. But when you go in for higher efficiencies, higher efficient equipment, the machine's per unit of fuel that you are using is lower. So, to that extent, if you are going in for a higher level of technology, say, super critical technology or other technology, you are handling that problem. You are taking care of that to some extent. But still when you suggest a 1200 MW site, the Environment Ministry will ask us to do a model run on a certain fuel consumption."

2.2.22 Upon this, it was categorically asked from the Ministry as to whether it was possible that in the clearance for 1000 MW project itself, a 1200 MW could be put up, the Secretary stated:

"We have not done a very direct one. Then, we could attempt that one. You said about that. Next time, may be, we will apply our mind to that. It is a very useful thought that we could put in those parameters there with that technology. But we will see to it. Then, the assessment of the proposal itself, the formulation itself will need to have a re-look. But it is a very useful thought. We shall certainly attend to that. The key-limiting factor is really the environment clearance which we cannot mess around. If you do not have it, it could even take a year or two years or it could even come out in six months. In any case, I am informed that at present the BHEL's orders are about 60 per cent. There are other suppliers also at the moment. But this will gradually get, I think, altered with the kind of capacity programme that we have in mind.

2.2.23 The Committee pointed out that the States are not getting the desired encouragement and securitization to State sector in terms of fuel linkages, etc. from the Ministry was missing, the Secretary, responded:

> "I think what they need to do is….they have to treat electricity as an industrial commodity which is manmade and it is not gifted by God and must be paid for. Until that realization comes both at the social and executive levels, this sector will continue to be a problem in the State Sector. We will share the figures with you as regards the T&D losses. Unless the revenue stream gets back to the person who is supplying you electricity, he will not be able to save enough for the next plant and if he wishes to keep the tariff down to a low level, he is barely able to pay the coal bills and he does not have the muscle to build the next plant. And if he does not have the muscle to build the plant, the demand will keep on growing and the existing plants are going on ageing and finally, it is losing battle. The Central Government has intervened to set up its generating stations. It is the responsibility of the Central Government to help as much as possible in the given situation. But is essentially a problem of the States because even when we set up a central generating station, we would be setting up a station whose power has to be allocated in terms of the allocation formula. That formula does not take into account the demand growth in the individual States because the formula has some other basis of allocation. I would again say that the key of the matter is that we have got to run the sector by the cost that is attributable to it and with such eminent persons here like you, Sir, we have to probably take a conscious decision in the States. It is all right that a certain segment of the population where it is very necessary and which needs our support will continue to get the support but for future generation (Capacity), if it is to come up in a fast time, it will have to be entirely self supporting in terms of tariff and return, whether it is generation or transmission or distribution."

2.2.24 The Committee observed that, more responsibility should be assigned to the States regarding capacity addition. In this context, when asked about the Ministry's views, the Secretary, during evidence stated: -

> "You are absolutely right that we only wish that the States were to lift 60 to 70 per cent of the capacity addition because consumption is essentially in the States. In fact, in the States, you find that there is rising energy shortage. The reason is that they have not done the capacity addition which they were required to do."

2.2.25 The Committee noted with concern during the evidence that the Ministry of Power, Government of India, had launched an initiative for development of coal based Ultra Mega Power Projects (UMPPs) in India, each with a capacity of 4000 MW or above. These projects are to be awarded to developers on the basis of tariff based competitive bidding. To facilitate tie-ups of inputs and clearances some project specific Shell companies have been set up as wholly owned subsidiaries of the Power Finance Corporation Ltd. These companies are to undertake preliminary studies and obtain necessary clearance including water, land, fuel, power selling tie-up etc. prior to award of the Project to the successful bidder. Nine sites for development of 4000 MW each have been identified as yet. These include four pithead sites, one each in Madhya Pradesh, Chhattisgarh, Jharkhand and Orrisa and five coastal sites, one each in Gujarat, Karnataka, Maharashtra, Andhra Pradesh and Tamil Nadu. The bidding process had been initiated in respect of four projects i.e. Sasan (Madhya Pradesh), Mundra (Gujarat) and Krishnapatnam (Andhra Pradesh), Tilaiya (Jharkhand). In respect of first two sites of Sasan and Mundra, there was overwhelming response as 10 developers submitted their bids for Sasan and six submitted their final bids for Mundra UMPPs. In respect of Sasan (Madhya Pradesh), financial bids were opened on 18th December, 2006 and the lowest tariff of Rs. 1.196 per KWh (levelised tariff for 25 years and first year tariff as 93 paise per unit) was quoted by consortium of M/s. Globeleq Singapore, PTE Ltd. and M/s. Lanco Infratech Pvt. Ltd. In respect of Mundra (Gujarat) financial bids were opened on 18th December, 2006 and the lowest tariff as Rs. 2.264 per KWh (levelised tariff for 25 years and the first year tariff as Rs. 1.91 per unit) was quoted by Tata Power Company Ltd. Apex Evaluation Committee evaluated the financial bids on 18th December, 06 itself and its recommendations were finalized. Letter of Intent was handed over to successful developers on 28th December, 2006.

2.2.26 However, as was widely reported in media, the Globeleq Singapore Ltd. has been sold by its parent company to Prince Stone Investments, a holding Company for Lanco Consortium Limited and Jindal Steel and Power Limited.

2.2.27 When asked about the present status of the Sasan Ultra Mega Power Project after this development, the Ministry informed that legal opinion has been sought in the matter.

2.2.28 The Ministry of Power has further informed as under:

"Central Vigilance Commission (CVC) vide its letter dated 26th March, 2007, addressed to the Ministry has also directed the CVO of the Ministry of Power to conduct an investigation into a complaint received by the CVC regarding the controversy concerning the Sasan Ultra Mega Power Project. The CVC has sought the investigation report within 12 weeks of the receipt of its order by the Ministry of Power".

2.2.29 The Committee are concerned to note that peak shortages have increased from 11.8% in 2001-02 to 13.9% in 2006-07. The Committee feel that apart from capacity addition and generation of more power, there is a need to consider other solutions also like having different time zones for the country and by staggering the office timings and school timings by about 1-2 hours so that peak hour/rush hour are also staggered. The Committee desire that these suggestions should be considered at the appropriate level and the Committee may be informed of the action taken in the matter.

2.2.30 The Committee note that a target of 41110 MW was fixed for 10th Plan, which was reduced to 36956 MW during the Mid Term Appraisal. However, the Committee further note with great concern that at the end of 10th Plan only 21180 MW has been achieved. The performance of the Ministry regarding capacity addition in the 10th Plan is thus abysmally disheartening. The actual achievement has been only 51.5% of targeted capacity addition. It is a matter of great concern in a fast growing economy like India where generation of power has to grow almost in direct proportion to the growth of Gross Domestic Product (GDP). The Committee find many a reasons responsible for this scenario. Delay in the award of works/order placement, delay in supplies by BHEL, delay in supply of Aux. Boiler, delay in placement of order for material handling plant, etc., are the reasons which show slackness on the part of executing agencies and should have been tackled through proper monitoring. Starting from the planning stage, the Committee feel that the targets for the plan period are seemingly unrealistic. Since gestation period for development of Power Project varies from 4 years to almost 7-8 years, many projects spill over into two plans. The Committee fail to understand as to how the proposed capacity addition of 68,869 MW for the 11th Plan would be achieved – especially when the 10th Plan target of 41110 MW could not be achieved. The Committee recommend that to reduce the seemingly mismatch between targets and achievements, targets should be drawn more realistically. Only those projects for which all the clearances have been secured and are likely to be available quickly should be included – while setting the plan targets. The Committee, therefore, desire that the annual and plan targets for capacity addition should be fixed realistically.

2.2.31 The Committee observe that out of the target of 7121 MW set for the private sector during the 10th Plan the likely achievement is only 1930 MW which cannot be termed as satisfactory at all. Despite allowing and facilitating the entry of private sector in the power sector as per promise of the Electricity Act, 2003, its participation remains very poor. The Committee desire that a detailed study should be made by the Government to know the reasons for poor participation, the difficulties faced by the private sector and the steps proposed to be taken to resolve those difficulties. The Committee would like to be apprised of the details in this regard.

2.2.32 The Committee note that 53% of capacity addition target has slipped to 11th Plan. Out of this, major slippage has been due to delay in Supercritical technology and supply of equipment & materials by BHEL. Since BHEL is the sole supplier of equipment, it seemed to be overburdened with work. Extremely worried by the situation as obtaining presently in regard to the equipment supply for the Power Plants, the Committee strongly recommend that to ensure that the capacity addition does not suffer during the 11th Plan due to delay on the part of BHEL, the Government should go for international competitive bidding for procuring equipment from other suppliers as well.

The Committee further desire that the proposal of the Government to enhance equipment manufacturing capacity in India, under the flagship of NTPC and other players, should be vigorously pursued to its logical conclusion in a fixed time frame and the Committee be apprised of the same. Similarly, the proposal of NTPC for looking at the possibility of entering into some on-going equipment manufacturing business should also be pursued simultaneously. The Committee also strongly endorse that in order to avoid delays in the setting up of higher capacity power projects which are caused mainly due to non-availability of advance environment clearances for the same, the Government should invariably try and secure clearances in advance. The Government should also make all out efforts to get Super Critical alternate technologies available worldwide for the setting up of Power Plants as a number of NTPC projects have been held up due to non-availability of this technology.

2.2.33 The Committee observe that out of the three sectors viz, Central, State & Private, the performance of the State Sector, in terms of capacity addition during the 10th Plan has been better as compared to Central and Private Sectors. Though Central & Private Sectors could manage to achieve only 60% and 27% respectively, of the targets – the achievement of State Sector has been 68%. However, out of 68,869 MW proposed capacity addition during the 11th Plan, State Sector has been given the target of only 22,989 MW.

Considering the performance of the State Sector during 10th Plan, the Committee feel that more responsibility could have been assigned to State Sector. The Central Government, on its part could extend the required support, as necessitated by the States to achieve this objective. Moreover, exemptions which are given to Mega Power Projects should also be available to the State Sector power projects of 1000 MW and above.

2.2.34 The Committee appreciate the initiative of the Ministry of Power regarding the development of Ultra Mega Power Projects, which the Committee feel will help in meeting the rising demand of power in the country to a great extent. During the course of evidence on Demands of Grants for the year 2007-08, Members raised a number of queries regarding the setting up of Ultra Mega Power Projects expressing concern as to whether these projects would come up as scheduled earlier. Also an apprehension was expressed that the targets fixed by the Government for achieving the generation of 1,00,000 MW by 2012 to meet the goal of electricity for all may be jeopardized, if some of these Mega Power Projects do not come up during 11th Plan. During evidence, the representative of Ministry of Power, however, explained that they have set upon themselves the target of 1,00,000 MW capacity addition along with transmission links and related activities by the year 2012.

The Committee, however, are greatly concerned with the present status of development of Sasan Ultra Mega Power Project, which was awarded to Globleq Singapore Private Limited and Lanco Consortium. However, Globleq Singapore was later on sold by its parent company to Prince Stone Investments, a holding Company for Lanco Consortium Limited and Jindal Steel and Power Limited.

The Committee had categorically desired to know from the Ministry as to how the matter concerning award of contract for Sasan Project consequent on change of ownership of the successful bidder was proposed to be resolved. The Ministry had informed that they were seeking legal opinion in the matter and considering all legal opinions they would take appropriate decision. The Committee, however, have now been informed on 23rd April, 2007 by the Ministry that the matter is now under consideration of the Central Vigilance Commission (CVC). The Committee feel that an urgent action is required to resolve the issue at

the earliest and desire that all possible steps be taken to ensure that the setting up of the Project is as per schedule without any time and cost overruns. But considering the fact that there arose a need for Central Vigilance Commission's involvement in the beginning of the project itself, the Committee feel apprehensive about the project as due diligence was not shown by the Ministry of Power in award of the project. The Committee, therefore, desire that responsibilities be fixed in the matter and stern action be taken against the guilty. The Committee should be apprised of the position at the earliest regarding the development of this project – clearly analyzing the matter as to how far this controversy is likely to affect the time and cost overrun of the project.

The Committee are surprised to note that while the former Power Secretary assured the Committee in meeting held on 2.8.2006 that some units of Mega Power Projects would come up by the end of 11th Plan, the new Secretary in his evidence before the Committee on 21.3.2007 stated that it was not possible to complete Ultra Mega Power Projects in the 11th Plan and these would spill over to 12th Plan. The Committee note that a programme for completion of 1,00,000 MW capacity to ensure electricity for all by 2012 was announced by the Government with much fanfare. The Committee are concerned with the turn of events in the case of Sasan Project and feel that apart from non-achievement of the targets, it may give bad publicity to the Government's move to set up other Ultra Mega Power Projects and ultimately affect the goal of electricity for all. The Committee note that having achieved only 21180 MW capacity addition during 10th Plan and with a target of 68,869 MW during 11th Plan, there is no likelihood of achieving 1,00,000 MW generating capacity by 2012 as had been envisaged by the Government. The Committee desire that no effort should be spared to achieve this target if the goal of

electricity for all is to be accomplished. The Committee feel that the power situation in the country requires daily monitoring and accountability to ensure progress as envisaged by the Government.

C. Fiscal Concessions to the power sector

2.3.1 Since Power sector is the backbone of Indian economy, it is desired that it gets the desired impetus. The Committee wanted to know whether the Government is planning to extend the income tax holiday to power sector developers up to 2015 and the manner in which it would make a difference in the cost of power production, the Ministry replied: -

> **"**It is evident from FM's Budget Speech of 28-02-2007 that no proposal to extend the income-tax holiday to power sector developers up to 2015 has been made by the Government of India.
>
> However, it was pointed out during the evidence that it is mentioned in the finance Bill that an undertaking owned by an Indian company and set up for reconstruction or revival of a power generating plant is eligible for ten years tax benefit if it begins to generate or transmit or distribute power before the 31st March, 2008. Section 80 1(a) of the Income Tax Act 1961 provides for the ten years tax benefit to an enterprise based in the development of infrastructure facilities, industrial power, special economic zone, generation and distribution of power. It is there in clause (v) of said sub-section (4), if it fulfills the following conditions: "Such company is formed before 31.12.2005…. These amendments will take effect from 1st April 2008 and will, accordingly, apply in relation to the assessment year 2008-09."

2.3.2 The Committee also wanted to know whether any exemption in excise and customs duty has been proposed in the current budget for the equipment to be used in power sector and the impact it would have on the development of power sector in the country. In reply, the Ministry stated:

> **"**It is evident from FM's Budget Speech of 28-02-2007 that no exemption in Excise Duty and Customs Duty has been proposed in the current budget for equipment to be used in power sector. As regards the Operation and Maintenance expenditure for the power stations, the general reduction in peak rate of Customs Duty from existing 12.5% to 10% will only have a marginal impact.
>
> Reduction in taxes and duties acts as an incentive for both foreign and domestic players to participate in the bidding process depending upon the particular tax/ duty for which the rate has been reduced. With the reduced rates, the prices quoted by bidders become competitive thereby resulting in increase competition. This is in turn result in lowering of the total equipment cost for the project and also reducing cost of power generated."

2.3.3 When asked further to what extent cuts in excise and customs duty has promoted the power sector in the past. The Ministry informed:

"Earlier, the Mega power projects have been exempted from the incidence of Excise and Customs Duty which has given a substantial relief in reducing the capital cost of the plant. This has reduced for example the cost of a mega thermal power project of 1000 MW capacity by Rs.450 crore. With corresponding reduction of fixed cost by around 10 paise per unit."

2.3.4 The Committee note with concern that no exemption in Excise and Customs Duty has been proposed in the current budget for equipment to be used in the power sector. The capacity addition during the 10th Plan has suffered due to delay in supply of equipment by BHEL. To meet the increasing demand of equipment it is necessary to procure equipment through international competitive bidding. In this light, there is a need for exemption in Excise & Customs Duty for equipment as exemption in taxes and duties will act as incentive for both foreign and domestic players to participate in the bidding process. Exemption in duties will encourage competition which will ultimately lead to reduction in cost of generation of power. Hence, the Committee strongly recommend that Ministry of Power should take up the matter of exemption of Excise & Customs Duty on equipment/materials useful for the development of power with the Ministry of Finance as they feel that exemption in Customs and Excise duties will not only ensure the supply of equipments, but would also reduce the cost of plant and power production and thereby leading to reduction in per unit tariff of power and thus making the projects viable. In view of the pace of development as envisaged by the Government, such exemptions need to be thought of urgently.

D. Hydro Power Generation

2.4.1 The use of hydel and wind energy sources which do not rely on fossil fuels and avoid carbon emissions need to be encouraged. India has an estimated unutilized hydro-power potential of more than 1,50,000 MW. A study by the Central Electricity Authority (CEA) has identified 399 potential hydel projects with an aggregate capacity of 1,07,000 MW. Preparation of pre-feasibility reports (PFRs) of 162 schemes with aggregate installed capacity of 49,930 MW has already been completed by CEA.

2.4.2 The share of hydro power in the generation of hydro power during the 9th & 10th Five Year Plan is as follows: -

Plan	Target for hydro capacity addition (Original) (MW)	Capacity Addition Achieved (MW)	Total capacity added during the Plan (MW)	%age of hydro power in total capacity added during the Plan	%age of hydro share in aggregate capacity at the end of the Plan
9th Plan - Actual	9,818	4,538	19,015	23.86	25.40%
10th Plan - Actual	14,393	7,196	18,505	38.89	26.53%
- Anticipated	-	8,186	23,250	35.21	26.27%
11th Plan - Tentative	15,585	-	68,869	22.63	25.03%

2.4.3 During evidence, the Committee wanted to know the appropriate ratio between thermal & hydro generation, the Secretary replied: -

> "You have rightly pointed out that there is a desired mix of thermal, nuclear, hydro and renewable. As you all know, coal and nuclear are essentially base-load stations. Their capacity cannot be varied once they come into operation. Seeing our grid behaviour, the peaks and the troughs, we had thought a combination of approximately 60:40 between the thermal generation and the hydro generation.

We have tried our utmost to improve the hydro generation. With the establishment of a nationwide grid as you will come to see, this ratio can be tinkered with somewhat, though not to a very large extent. So, our effort always is that we attain as much hydro capacity as we can because it gives us peaking time generation. But there are some limitations to that. Where there is hydro it is also seasonal at time at places. So, you may not be able to depend entirely on hydro. But, yes, by a broad rule of thumb we would have wanted a ratio of about 60:40 and also to keep some spinning reserves behind us….."

2.4.4 On the reasons for delay in harnessing hydro potential in North Eastern Region States, the Ministry informed as follows:

i) "Remote locations requiring construction of long roads and transmission lines for evacuation of power.
ii) Delays in environment and forest clearance.
iii) Delay on the part of State Governments in allotting projects, forming Joint Venture or signing of Implementation Agreements.
iv) Fund constraints at the State level and delays in investment decisions by the State Governments.
v) Law and order problems.
vi) Delay in land acquisition.
vii) Rehabilitation & Resettlement problems.
viii) Geological surprises like rock fall slope failures.
ix) Flash floods heavy rains, land slides etc.
x) Delay in signing of Power Purchase Agreement by the States."

2.4.5 In this context, during the course of the evidence, the Secretary, however, further submitted:

"There is multiplicity of agencies and authorities in the implementation and execution of power projects, both horizontally and vertically. So, we make an effort to ensure that we get all clearances, but in respect of hydro projects, the position is more complex. The States reserves the right to allot and re-allot projects. We have formulated a policy. All of them are not entirely happy with it. We are having a re-look at it and we will try and proceed on a path that gives the best result, and at the same time bring justice and equity to consumers also."

2.4.6 Government of India has announced the National Electricity Policy in February, 2005, which, among others, lays emphasis on harnessing hydro potential speedily to facilitate economic development of States, particularly that of North-Eastern States, Sikkim, Uttaranchal, Himachal Pradesh and Jammu & Kashmir.

2.4.7 On being enquired whether the Ministry of Power is planning a new hydro policy moving away from the tariff based competitive bidding regime and the time by which it was likely to be formulated, the Ministry in a written reply stated: -

> "In order to develop the vast untapped Hydro-electric potential in the Himalayan States and North-eastern States and to boost participation of IPPs, the Ministry of Power has mooted a proposal to extend the exemption available to the public sector under Clause 5.1 of Tariff Policy to the private sector also.
>
> Under the Constitutional provision, water including hydro power is a State subject. The initiative of allocation of sites for development of H.E. Projects rests with the State Governments. During the recent past a number of States have started allocating projects to private developers on considerations other than tariff. In fact, no uniform criteria is followed by the States in this regard. The States, where the maximum hydro potential is located, consider this as their asset and want to maximize returns/benefits for themselves.
>
> As per the existing guidelines issued by the Ministry of Power for allocation of hydroelectric projects, the projects with capacity of upto 100 MW can be allocated on MOU basis while higher capacity projects are required to be developed through the process of competitive bidding. Even for projects below 100 MW allocated through MOU route, the EPC contracts for development of these projects must be awarded through ICB process. It has been provided under the Electricity Act, 2003 that if tariff is determined through a transparent process in accordance with the guidelines issued by the Central Government, then such tariff shall be adopted by the appropriate Commission without any further examination. The guidelines for tariff based bidding process have been notified by the Ministry of Power on 19.1.2005. However, the tariff policy notified on 6.1.2006 requires that all distribution utilities shall procure power only through competitive bidding (except in case of expansion of existing projects or projects set up by the Public Sector Utilities).
>
> Whereas the tariff policy has mandated tariff based bidding for procurement of power by all distribution utilities, the States having hydro potential are either surplus in power or do not have capacity to absorb the entire power generated from the projects located in these States. In such a situation, the developers are expected to either respond to tariff based bids invited by the distribution companies elsewhere or function on "Merchant Power Plants" making use of open access to transmission or alternatively, function as captive/group captive power plants wheeling their power by using the open access.
>
> There are uncertainties and risks associated with construction of hydro projects like geological surprises, resettlement and rehabilitation problems inaccessibility of sites law & order problems, inter-State aspects

etc. This renders tariff based bidding as a difficult proposition for hydroelectric projects. Unless good quality DPRs are prepared and long arrangements for procurement of power are put in place, the developers of these projects would find it difficult to get financial closure for their projects. Further, allowing `merchant sales` of power from hydro plants may not be beneficial to the consumers as the special characteristic of hydro i.e. "fuel provided free of cost by nature", which results in lower tariff after repayment of the debt, may not be captured in this scenario.

Keeping in view the unique problems associated with hydro projects, it has been suggested that the exemption available to the public sector under Clause 5.1 of Tariff Policy for a period of 5 years till January, 2011 may also be extended to the private sector. This arrangement would have several advantages. While initiative for allocation of project would remain with the State Government, the scrutiny of the Regulator and the CEA would ensure that the project is designed and built in the most optimal and economic manner and the interest of the consumers is also adequately protected. From the point of view of the developer, this procedure would reduce numerous risks associated with construction of hydro project, which would facilitate financial closure of these project.

Through this arrangement, power will continue to be sold by the developer through the mechanism of long term Power Purchase Agreement (PPA) and the tariff of the project would be decided by the appropriate Regulatory Commission under Sections 61 and 62 of the Electricity Act, 2003. However, to facilitate competitive electricity market, over a period of time, a maximum of 15% of the capacity may be allowed to be kept outside the long term PPA for promoting trading of power.

The draft proposal has been circulated to all concerned Ministries/Departments and State Governments of Himalayan States for their comments. The policy will be finalized only after comments are received from all concerned and a consensus emerges."

2.4.8 The Committee feel that the hydro power generation has not been given the desired impetus. The percentage of hydro share in aggregate capacity during the 9th & 10th Plan has been only 25% & 26% respectively whereas the ideal ratio between thermal & hydro should be 60:40. Considering the shortage of coal and gas and also combined with the fact that India has an estimated unutilized hydro-power potential of 1,50,000 MW, the Committee strongly desire that more emphasis should be given to hydro power generation. The Committee, therefore, recommend that Government should work out a strategy for exploiting the hydro power and increasing the share of hydro power generation to an ideal 40% during the 11th Plan.

The Committee note that the tariff policy notified in January 2006 requires that all distribution utilities shall procure power only through competitive bidding. But there are uncertainties and risks associated with construction of hydro projects like geological surprises, resettlement and rehabilitation problems inaccessibility of sites, law and order problems etc. This renders tariff based bidding as a difficult proposition for hydroelectric projects. The Committee are happy to note that to address this complex issue, the Central Government has prepared a policy, which is yet to be firmed up after having a re-look at the same and taking into consideration the concerns expressed by the States in regard thereto. The Committee expect the Government to come up with this policy within a definite time frame so that the road blocks or irritants in the way of exploiting huge unexploited hydro-power potential in the country could be removed on due priority. Since delay in getting environment clearance is a major reason for delay in hydro power projects, the

Committee feel that there is a need to reassess and remap the forest area in the country so as to ensure that the environment clearances are secured early. The Committee desire that the Ministry of Power should take up this matter with the Ministry of Environment and Forests. The Committee further desire that a Joint Coordination Committee – consisting of the representatives of the Ministry of Power and the Ministry of Environment and Forests be formed to address and resolve the issues involved in power generation. The Committee desire that this matter should also be brought to the notice of PMO for necessary action.

E. National Hydroelectric Power Corporation Limited. (NHPC)

2.5.1 National Hydroelectric Power Corporation Ltd.(NHPC) is a schedule "A" Enterprise of the Government of India with an authorized share capital of Rs.15,000 crore and an investment base of more than Rs.24,000 crore. NHPC was set up in 1975, and has now become the largest organization for hydro power development in India, with capabilities to undertake all the activities from conceptualization to commissioning of Hydro Projects. The main objects of NHPC include, planning, promoting and organizing an integrated and efficient development of hydroelectric, Wind, Tidal and Geothermal in all aspects such as transmission, distribution and sale of power generated at power stations.

2.5.2 The Ministry has informed that during X plan, approved capacity addition programme of NHPC was 4357 MW with total fund requirement of Rs. 32226 crore. During the Mid-term Appraisal of the 10th Plan capacity addition target was revised to 3252 MW and the fund requirement was also revised to Rs.20107 crore. Till 31.01.2007, NHPC has achieved installed capacity of 1590 MW with total fund utilization of Rs. 10225.96 crore during X plan. Anticipated Capacity Addition during X plan of NHPC is 1970 MW with total fund utilization of Rs. 10982.98 crore. Project wise & Year-wise capacity addition and fund requirement during X plan of NHPC is as follows:

Year Wise Targeted Capacity Addition Programme as per Mid Term (Physical)

Since 2002-03 & Anticipated realization (till 31.03.07)

Sl No	Name of the Scheme	Original Target (MW)	Mid Term Appraisal Target	2002-03		2003-04		2004-05		2005-06		2006-07		Total	
				Target	Achievement	Target	Achievement	Target	Achievement	Target	Achievement	Target	Likely Achievement	MTA Target	Achievement
1.	Dulhasti	390	390	Nil	Nil			390					390	390	390
2.	Chamera-II	300	300			300	300							300	300
3.	Dhauliganga-I	280	280					280			280			280	280
4.	Teesta-V	510	510									510		510	
5.	Teesta Low Dam-III	132	132									132		132	
6.	Teesta Low Dam-IV	168													
7.	Sewa-II	120	120									120		120	
8.	Bav-II	37													
	Under JV			Nil	Nil										
9.	Indira Sagar Project	1000	1000			500	500	500	500					1000	1000
10	Omkareshwar	520	520									520		520	
11	Purulia Pumped Storage Scheme	900													
12	Total	4357	3252	0	0	800	800	1170	500	0	280	1282	390	3252	1970

X PLAN OUTLAY

Year	As Originally Approved			Now Anticipated		
	GBS	IEBR	Total	GBS	IEBR	Total
2002-03	1800	1126	2926	875	956	1831
2003-04	4028	1005	5033	1388	699	2087
2004-05	4988	1976	6964	1381	1120	2501
2005-06	2770	5172	7942	692	1389	2081
Sub Total Upto 2005-06	13586	9279	22865	4336	4164	8500
2006-07	614	8747	9361	646	1837	2483
Total	14200	18026	32226	4982	6001	10983

2.5.3 On being enquired about the reasons for shortfall in achieving the targets by NHPC, the Ministry in a written reply informed:

"Major reasons for Non-achievement of Scheduled Targets (Financial & Physical)

since 2002-2003 are as follows:-

1. Commissioning of **Dhauliganga** project got delayed due to forest / wild life clearances for the Transmission line.

2. Delay in excavation of tunnel of **Dulhasti** project because of adverse geological conditions, law & order and local labour problems etc.

3. There was delay in commissioning of **Teesta-V** due to adverse geological conditions and less progress in HRT.

4. Delay in finalization of DPR of 168 MW **Teesta Low Dam-IV** due to change in layout of the project to avoid Mahananda Wild Life sanctuary resulted in less likely utilization of funds during X Plan.

5. Delay in start of execution of Sewa-II and **Teesta Low Dam-III** because of delay in sanction, as these were not ripe for CCEA approval. This resulted in less utilization of funds during 10^{th} Plan.

6. Delay in approval for Joint Venture formation for execution of **Purulia Pump Storage Scheme**. The scheme was finally dropped from capacity addition programme of NHPC as per the decision of Government of West Bengal. Accordingly, the funds for this project could not be utilized.

7. **Bav-II** Project was not found commercially viable by CEA. The capacity of the project was revised to 20 MW. Commercial viability was accorded for revised capacity in Jan. 2004. Maharashtra Government agreed to purchase the entire power from this project only in Jan.2005. DPR was submitted to CEA. However, CEA has returned the same, as the scheme was unviable. This has resulted in less likely utilization of funds during X Plan.

In addition to above, following reasons with regard to schemes yielding benefits beyond X Plan has resulted in less utilization of X Plan outlay till 2005-06.

1. **Upper Krishna** (810 MW), Karnataka & **Farakka Barrage** (125MW) , West Bengal - Projects were abandoned due to non availability of commercial viability. Hence outlays in respect of these projects could not be utilized.

2. **Cauvery** Power Projects, Karnataka/Tamil Nadu could not be taken up due to Non settlement of interstate issues between Govt. of Karnataka and Govt. of Tamil Nadu. Hence outlays in respect of these projects could not be utilized.

3. **Subansiri Lower** (2000 MW) Arunachal Pradesh - Formal forest clearance was delayed because of NPV issue. Further, works got slowed down due to local resistance resulting in less utilization of outlay.

4. Non-availability of Site clearance stage-II from MOEF for Subansiri Upper (2000 MW) , Arunachal Pradesh and **Subansiri Middle** (1600 MW), Arunachal Pradesh due to decision of Hon'ble Supreme Court of India that " there will be no construction of dam upstream of Subansiri river in future", Therefore the DPRs for these two projects could not be finalized and work could not commence, hence the outlay could not be utilized as envisaged.

5. Work on Pakal Dul (1000 MW) and **Bursar** (1020 MW) J&K suffered due to non-availability of Security Coverage & for want of settlement of issue of Kishtwar High Altitude National Park as some of components of the project fall inside the boundaries of the National park. Therefore work for preparation of DPR and the subsequent activities got delayed and the outlay could not be utilized as envisaged.

6. CCEA sanction in respect of Parbati-III (520MW), H.P Uri-II (240MW) , J&K and **Chamera Stage-III** (231 MW), HP were available at a later date than as envisaged originally and subsequent activities also got delayed resulting in less utilization of outlay than envisaged.

7. For **Nimoo Bazgo** (45MW) and **Chutak** (44MW), J&K Govt. sanction was available at a latter date than envisaged, resulting in less utilization of outlay.

8. Due to delay in Survey & Investigation works related to **Siang Upper** Project, (11000 MW) and Siang lower project (1600 MW) in Arunachal Pradesh.

9. Work on **Loktak Downstream** Project (90 MW), Manipur held up due to non-availability of security coverage at Project and revision of project parameters. The PIB for approval of the revised project was held on 23.11.2006.

10. Works on **Koel Karo** HE Project (710 MW), in Jharkhand could not be started due to Land acquisition and R&R problems. Finally CCEA sanction for closure of the project has been issued on 30.9.2005.

11. DPR for **Siyom** HE Project (1000 MW), Arunachal Pradesh was submitted to CEA on 16.9.2003. Both TAC clearance and TEC of the project are still awaited, thus delaying the sanction schedule of the project resulting in less utilization of outlay than envisaged.

12. Reduction in the equity portion of NHPC for **Omkareshwar** Project because of more equity participation of Govt. of M.P."

2.5.4 During evidence CMD, NHPC further clarified:

"I will submit before the august committee the reasons as to why we have not been able to utilise the funds in the Tenth Plan…. starting with original approved capacity for the Tenth Plan, with eleven projects, it was decided that we will add 4,357 megawatts during the Tenth Plan. Out of these 11 projects, during the mid-term review, which took place in the year 2004, it was decided to drop three projects. One was Purulia Pump Storage Scheme 900 megawatts. It was decided in the meeting held in the Ministry of Power with the West Bengal officials that they are not interested to undertake the joint venture route. Hence, this project was called off. So, 900 megawatt was out from the planned capacity of 4,357 megawatts. Another project Teesta low dam IV with the capacity of almost 160 megawatts was there. There, the State Government had transferred on this project to NHPC. Earlier, it was with the West Bengal Government. After we took over, revised DPR was prepared because Mahananda Wild Life was coming into the picture. Then, we had to re-submit the DPR. Earlier, it was planned in the Tenth Plan. But because of re-scheduling when we submitted the DPR it was cleared by the CCEA some time in the month of September 2005 itself. So, this project which comprise almost 4 projects, gets shifted to the Eleventh Plan instead of Tenth Plan. The third one was Bhav II in Maharashtra. It was of 20 megawatt project, a very small project. But it was found uneconomical both by the CEA as well as by the Maha Discom of the Maharashtra Government. The State Government has given us in writing that they are not interested to lift the power. They have cancelled the PPA. The rate was coming to Rs. 7.72 per unit. So, we were forced to call it off. These three projects were called off during the mid-term appraisal."

2.5.5 He further added:

"Teesta V in Sikkim, with 510 megawatts had many geological surprises. We were scheduled to commission it in February 2007. But because of our tunnel problem, and geological reasons, which were beyond our control, we could not complete it. Now, we are hoping that it will be commissioned in the month of November or December 2007. The work is going on in full swing. We are not expecting any problem now. So, there is certainly slippage so far as Teesta V is concerned. Another is

Sewa II, as per the CEA original programme, it was to come in September 2007. So, in any case it was not a Tenth Plan project at all. But on best effort basis, it was kept in the Tenth Plan. But as per the CEA approval, it has to come in September 2007. Of course, we are trying to catch up fast on this project. The last project is Omkareshwar. As per the CEA approval, it has to come in February 2008. It is not a Tenth Plan project. But on the best effort basis, it was put in the Tenth Plan. But we are hoping to spin one unit of this in the month of March 2007. We are trying our best to catch up on the one unit of 65 megawatts. The total capacity is 520 megawatts. Hopefully, it will come in the next three to four months."

2.5.6 Asked about the corrective steps NHPC/CEA/MOP has taken to see that the budgeted amount earmarked for NHPC was spent prudently, the Ministry in a written reply stated:

"Construction of Projects are monitored by NHPC as well as Ministry of Power / CEA / Ministry of Programme implementation / Planning Commission. The following measures have been taken to see that the projects are completed in time and the budgeted amount earmarked for NHPC is spent prudently: -

i) Progress review meetings are held alternatively at project level and Corporate Office level once in two months.

ii) Co- ordination meetings are held at Corporate Office once in two to three months with all Head of Projects (HOP) and Head of Divisions (HOD).

iii) Progress is reviewed at Board level for resolving major bottlenecks.

iv) Exhaustive in-depth review of NHPC projects by Secretary (Power) during Quarterly Performance Review Meeting.

v) Monitoring at the highest level by Ministry of Power / CEA/ Ministry of Programme implementation / Planning Commission in respect of mega & major projects for resolving matters related to Government / inter-ministerial issues."

2.5.7 The Committee wanted to know about the plans of NHPC regarding capacity addition during the 11th Five Year Plan. The Ministry informed.

"NHPC has planned to add 10 projects with total installed capacity of 5233 MW (including 1 project in Joint Venture with installed capacity of 520 MW) during XI plan. In addition, 4 projects with total installed capacity of 604 MW have been targeted for completion with Best Efforts."

2.5.8 Considering that NHPC was not able to achieve the targets set for the 10th Plan, the Committee wanted to know how NHPC would ensure achievement of projected / proposed target during the 11th Plan. In reply, the Ministry submitted:

> "In order to achieve the proposed targets during the 11th Plan, only those projects that have been sanctioned by GOI has been included for benefit during the plan. Even out of sanctioned projects, two projects viz. Nimoo Bazgo (45 MW) and Chutak (44 MW) have been targeted only under "Best Effort" category due to location of these projects in hostile climatic conditions of Laddakh region.
>
> The contracts for all the projects (10 Nos with aggregate installed capacity of 5233 MW) included in 11th Plan have been awarded and the works are progressing well. These projects are being monitored closely at the Corporate level as well as by the Board of Directors. Besides, regular monitoring of these projects is being done by Central Electricity Authority (CEA). Further, all projects under construction are reviewed regularly at the level of Ministry through Quarterly Performance Review (QPR) meetings, Video Conferencing, field visits by Secretary (Power) etc. All bottlenecks in implementation will be sorted out as and when they arise and for this purpose coordination is effected with State Governments and other concerned organization at the Centre or State level."

2.5.9 The Committee are concerned with the poor performance of NHPC during the 10th Plan. NHPC failed to achieve both physical as well as financial targets set for the Plan period. Out of financial outlay of Rs. 32226 Crore, the anticipated expenditure is only Rs.10983 crore. Similarly, against the target capacity addition of 4357 MW, the anticipated capacity addition is only 1970 MW. The Committee note that in a number of cases, CCEA sanction was delayed like Parbati-III; HP Uri-II and Chamera Stage III resulting in delay of subsequent activities. In case of Nimoo Bazgo and Chutak projects, sanction from the State Government was delayed. In case of Siang Upper and Siang Lower projects, there was delay in Survey and Investigation. There are some other projects also where delays were due to small problems, which could be visualized and resolved in advance. Inspite of an elaborate monitoring mechanism of review meetings being held at the highest level in the Ministry, the non-achievement of targets is a matter of serious concern. Now, the target for the 11th Plan has been set at 5233 MW. In addition four projects with installed capacity of 604 MW have been targeted for completion under best efforts category. The Committee desire that before embarking on the ambitious plan for the 11th Plan period, the reasons for shortfall in achieving the targets should be analyzed deeply so that repetition of same could be checked while executing projects during the 11th Plan.

The Committee further note that the Ministry had informed during the examination of Demands for Grants(2006-07) that the procedure for sanction of hydro-electric schemes has been streamlined. Moreover, a Committee had been set up under the Chairmanship of Cabinet Secretary to examine the existing

procedures relating to environment, forest and wild life clearances and give its recommendations to streamline the procedures. Since, delays at various levels lead to avoidable delays in implementation of projects, the Committee desire that the time schedule fixed for implementation of power projects be strictly adhered to. Further, the Committee desire to be apprised of the outcome of the report submitted by the Committee set up for the purpose.

F. North Eastern Electric Power Corporation Limited. (NEEPCO)

2.6.1 North Eastern Electric Power Corporation Ltd. (NEEPCO) was constituted in 1976 under the Indian Companies Act, 1956 with the objective of developing the power potential of the North Eastern Region of the country through planned development of power generation projects, which in turn would effectively promote the development of the North Eastern Region. Its authorized share capital is Rs. 3,500 Crore. Having an installed capacity of 1,130 MW (755 MW hydro & 375 MW thermal), which meets more than 60% of the energy requirements of the N.E. Region. The main objectives of the Corporation are to add to the power generating capacity in the North Eastern Region by ensuring optimum utilization of Commissioned generation projects, to generate adequate internal resources ensuring justifiable return on investment, to continue sustained efforts to obtain the receivables from State Electricity Boards/ Departments, to execute and commission power projects, both hydro and thermal, within prescribed time frames, and to undertake long term feasibility studies for optimum development of hydro power resources of the North Eastern Region.

2.6.2 The 10th Plan outlay for NEEPCO was Rs. 4224 crore. Out of this the likely utilization is Rs. 832.62 Crore. Financial performance of NEEPCO during the last three years is as given below: -

(Rs. in crore)

Years	BE	RE	Actuals
2003-04	**414.49**	**173.19**	**61.17**
2004-05	**482.00**	**240.00**	**166.53**
2005-06	**996.79**	**323.49**	**206.00**
2006-07	**1181.13**	**327.15**	**229.67**

2.6.3 The above table makes it clear that there has been low utilization of allocated funds during these years. When asked about the reasons for this, the Ministry of Power in a reply submitted as follow: -

Year	Reasons for low utilization
2003-04	Saving of Rs.353.33 crore in case of NEEPCO was due to the non approval of new schemes namely Tipaimukh HEP, Tripura Gas and Kameng. Increase in the cost of Tipaimukh was due to the security concerns and commercial unviability of tariff was the reason for non approval .Tripura Gas Project had to be reconfigured to 280 MW in light of less availability of Gas, while Kameng HEP was not fully prepared for grant of approval.
2004-05	a) The major reason for saving is the non-approval of Tripura Gas based project for which Rs. 190 crore was earmarked at BE stage. This is because the associated transmission line, which was originally planned by Powergrid, was not matching the commissioning schedule of the generation project. The transmission project has now been revisited and is now slated to be constructed by NEEPCO itself, pari passu with the schedule of generation project. As a result of generation project, not been cleared by the PIB, the transmission project could not be taken up for investment approval. b) The Turial HE project, which is an on-going project, has been held up due to adverse law and order situation in Mizoram. There has been no work on the project since May 2004. Total savings- Rs. 315.47 crore
2005-06	➢ Tripura Gas Based Power Project - due to dropping of the project in the absence of gas linkage. ➢ Kameng HEP – Due to slow progress of the project. Total savings- Rs. 790.79 crore

2.6.4 The Plan outlay for NEEPCO for the year 2007-08 is Rs. 1258.70 Crore. During the year 2007-08, the construction activities of Kameng H.E. Project are expected to be in full swing and the revival of Tuirial H.E. Project likely to be taken up. In addition survey and investigation works alongwith activities on new projects like Pare H.E. Project, Tipaimukh H.E. Project, Tripura Gas Based Power Project and other coal based thermal projects are likely to be taken up.

2.6.5 The Committee note that 10th Plan outlay for NEEPCO was Rs.4224 crore out of which only Rs.832.62 crore are likely to be utilised. The Committee are, however, unhappy to note that even at BE stage annually, funds were not allocated as per 10th Plan outlay. At RE stage these were further reduced drastically every year and actual utilisation turned out to be much less. The Committee are concerned to note that NEEPCO have totally failed to achieve the prescribed financial and physical targets of 10th Plan. The Committee feel that this is a clear case of poor planning. Where the Ministry of Power, Government of India does not appear to have taken any corrective steps. Considering the immense importance of NEEPCO and the objective behind its establishment – exploiting the power potential of North Eastern Region which would lead to development of North Eastern Region, the under utilization of funds is a serious matter. The Committee desire that the reasons for gross under-utilization of funds by NEEPCO during the 10th Plan be analyzed in details and the corrective steps taken accordingly. The Committee desire that 11th Plan targets, both physical and financial, should be based on more realistic assessment keeping in mind the various factors which have led to gross under-utilisation of 10th Plan outlay.

The Committee also find that most of the reasons cited by the Ministry of Power, for under-utilisation of funds are such which could have been easily known if any serious examination of those projects would have been done. But this is perhaps lacking even when review meetings are held for the projects in hand. The Committee desire that every review meeting should identify various reasons for

delays and also take immediate steps to remove those reasons. This should be a standard practice for all the review meetings.

G. Satluj Jal Vidyut Nigam Limited (SJVNL)

2.7.1 The Satluj Jal Vidyut Nigam Limited – SJVN (formerly Nathpa Jhakri Power Corporation Limited - NJPC) was incorporated on May 24, 1988 as a joint venture of the Government of India (GOI) and the Government of Himachal Pradesh (GOHP) to plan, investigate, organize, execute, operate and maintain Hydroelectric power projects in the river Satluj basin in the State of Himachal Pradesh and at any other place. The present authorized share capital of SJVN is Rs. 4500 crore. The Nathpa Jhakri Hydro – Power Station – NJHPS (1500 MW) was the first project undertaken by SJVN for execution.

2.7.2 As informed by the Ministry, the details of budgetary allocation to SJVNL and its actual utilization during the last three years is as follows:

(Rs. in crores)

Year	Budget Estimate	Revised Budget Estimate	Actual Expenditure
2003-04	963.05	819.30	637.60
2004-05	592.00	522.74	110.23
2005-06	442.07	135.20	54.73
2006-07	290.51	516.62	105.09

These figures includes GOHP share.

2.7.3 Asked about the reasons for under-utilization of funds, the Ministry stated: -

> "The shortfall in the budget utilization is mainly due to savings resulted in settlement of the Extension of Time (EOT) Claims in respect of the Major Civil works of NJHEP. For the purpose of settlement of EOT claims of Major Civil works, Additional Dispute Review Boards were constituted in respect of each major civil contract who submitted their reports, which were examined and decisions for settlement of claims/ recoveries were taken. Further, payment on account of Gates and Hoist were not made as the same were still to be claimed by the Gates and Hoists contractor. The provision kept on account of enhanced land compensations were also not spent due to the non awards of the same by

the Hon'ble Courts. The provision on account of Catchment Area Treatment Plan (CAT Plan) in respect of NJHEP, were also not utilized due to the slow progress of the CAT Plan works by the executing agency namely H.P. State Forest Deptt..

FY 2005-2006

Works related to the raising of dam height suffered due to damage caused to the approach road by flooding caused by bursting of Pareechu Lake, restricted blasting as per direction of HPSEB & local administration and the frequent agitations by local people. Accordingly, the provision made for raising of dam height was under utilized.

Payment on account of Gates and Hoists has still not been made as the same were not claimed by the Gates and Hoists contractor. The provisions kept on account of enhanced land compensations were also not spent due to the awards not being settled for by the Hon'ble courts. The provision on account of Catchment Areas Treatment Plan (CAT Plan) in respect of NJHEP, were not utilized due to the underutilization of funds of the CAT Plan works by the executing agency namely H.P. State Forest Deptt."

2.7.4 When asked about the position of vacancies in SJVNL, the Ministry submitted the following details: -

OVERALL SANCTION, IN-POSITION & VACANCY POSITION OF SJVN

Level	Himachal Projects						Uttrakhand Projects				Overall Sanction	Overall inposition	Vacancy
	Corporate Center	NJHEP	Bal. Works of NJHEP	RHEP	LHEP	KHEP	LO-D/Dun	Devsari HEP	Jakhol HEP	NM HEP			
Executive	308	159	27	118	82	81	3	27	11	11	827	576	251
Supervisor	72	51	9	32	12	12	0	1	0	0	189	192	3
Workmen	202	418	15	110	130	130	2	22	13	11	1053	950	103
Total	582	628	51	260	224	223	5	50	24	22	2069	1718	351

Note: Manpower of 51 personnel for Balance Works of NJHEP is approved upto 31.03.2007

2.7.5 The Committee are concerned to note that in Satluj Jal Vidyut Nigam out of the sanctioned strength of 2069, only 1718 positions have been filled, that is, almost 315 posts at various levels, i.e., the executive, supervisor and workmen are lying vacant. The existence of so many vacancies is a matter of concern as in the absence of proper manpower the work stands to suffer. Moreover existence of so many vacancies in the background of rising unemployment in the country does not present a good scenario. The Committee desire that all the vacancies on SJVN be filled up within six months and the Committee be apprised of the same.

The Committee are unhappy to note the gross under-utilisation of budgetary allocation by SJVNL year after year. The reasons cited are not such which could not be visualized in advance. The Committee desire that the Ministry should take immediate steps to make review meetings meaningful to ensure that the funds are utilised fully.

H. Power Grid Corporation of India Limited (PGCIL)

2.8.1 Transmission projects continue to be accorded a high priority in the context of the need to evacuate power from the generating stations to the load centres, system strengthening and creation of National Grid.

2.8.2 When asked about the achievements (both financial & physical) of PGCIL during the 10th Plan, the Ministry informed:

> "The development of transmission system is dependent upon the generation capacity addition in the grid. Accordingly, various transmission schemes have been taken up by Power Grid Corporation of India Ltd. (PGCIL) in X Plan commensurate with the generation capacity addition and system requirement. Originally, an Outlay of Rs.21,370 Crore was approved for PGCIL for X Plan.. However considering the actual investment in 2002-03, 2003-04, 2004-05, 2005-06 and anticipated outlay for 2006-07 (RE), an investment of Rs.18,181 Crore is envisaged for X Plan by PGCIL.
>
> X Plan Outlay as envisaged now is as follows: -

(Rs. In Crore)

Outlay	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**X Plan**
Original – Proposed	3352	5117	4866	4139	3896	**21,370**
Actual/ Now anticipated	2759 (actuals)	2421 (actuals)	3222 (actuals)	4134 (actuals)	5645 (RE)	**18,181**

> Decrease in outlay in X Plan is mainly due to: (i) deferment and rescheduling of generation projects, (ii) cost reduction in transmission schemes, (iii) certain System Strengthening projects which were earlier envisaged to be implemented by PGCIL are now being implemented by States, (iv) change in scope of business in Telecom etc. PGCIL has

confirmed that there has been no evacuation problem from generation projects due to reduction in outlays.

Considering the progress of various projects based on power evacuation and system strengthening requirements, annual targets for Stringing by PGCIL are finalised every year and Memorandum of Understanding (MoU) is signed with Ministry of Power. The year-wise stringing target of transmission lines as per MOU and actual achievements are as given below: -

Stringing of Transmission Lines (in Ckt. Kms)						
Year	**2002-03**	**2003-04**	**2004-05**	**2005-06**	**2006-07**	**X Plan**
MOU Target (Prepared on yearly basis)	3985	1580	3355	3100	5200	**17220**
Actual/Anticipated	3845 (actuals)	2487 (actuals)	4268 (actuals)	4376 (actuals)	5200 (anticipated)	**20176"**

2.8.3 The Committee wanted to know about the proposed investment transmission sector during the 11th Plan. In reply, the Ministry stated:

> "Development of transmission network is in tandem with growth in generation capacity addition. For XI Plan period, projects have been finalized based on envisaged generation capacity addition in Central sector and other generation projects for which transmission system is to be built by PGCIL. Transmission schemes so planned for XI Plan shall cater to the evacuation of power from about 40,600 MW of central sector generating stations and for Ultra Mega Power Projects.
>
> Based on above, investment programme of PGCIL for XI Plan is estimated to be about Rs.55,000 crore."

2.8.4 The Ministry of Power has informed that the Ministry has notified guidelines for encouraging competition in development of transmission projects. Guidelines for tariff based bidding for transmission projects have also been notified by the Ministry. In terms of para 13 of the guidelines for Encouraging Competition in Development of Transmission Projects, an Empowered Committee has been constituted for identification of projects and selection of developers. The Empowered Committee has identified 14 transmission projects for development through competitive bidding. Expression of

interest for four transmission projects have been invited by PFC and REC for tariff based competitive bidding.

2.8.5 When asked about the present level of investment by private players in the transmission sector, the Ministry in a written reply stated:

> "Under Joint Venture (JV) route, First Public-Private JV between PowerGrid and M/s Tata Power in Indian Power Sector for implementation of Transmission System associated with Tala HEP has been commissioned successfully. On similar lines, PowerGrid is in the process of forming Joint Venture for implementation of Transmission System associated with Koldam and Parbati – II HEP where PowerGrid's equity will be 26%. PowerGrid has also signed MoUs with five private generators for establishment of joint ventures for building up their transmission network, who otherwise, as per Electricity Act, 2003 could have taken up construction of the same on their own. Powergrid's stake in such ventures would be limited to 26% of the equity.
>
> Thus, considering private investment through JV route alone for projects identified, Xth Plan outlay of private entities in central transmission network works out to about Rs.1400 crore based on the present status.
>
> An investment of Rs. 9,100 crore was envisaged from the private sector during the Tenth Plan. Since this target could not be met, therefore, under the provisions of the Electricity Act, 2003 (section 63) and the National Electricity Policy, the Ministry of Power, issued guidelines for encouraging competition in development of transmission projects and for tariff based competitive bidding for transmission services in April, 2006. Fourteen projects have been identified by the Empowered Committee constituted under these guidelines. The details of the projects are as under: -
>
> Evacuation System for North Karanpura (1980 MW)
> Talcher Augmentation System
> Evacuation System for Maithon RB (1000 MW)
> Schemed for enabling import of NER/ER surplus by NR
> SR-WR Synchronous Inter-Connector
> Kawas-Navsari 400 kV D/C
> Navsari-Mumbi New location 400 kV D/C
> Evacuation System for Barh-II (1320 MW)
> Evacuation System for Nabinargar (100 MW)
> Evacuation System for Daripally Integrated Project 3200 MW, 800 MW in 11^{th} Plan
> Evacuation System for Koderma 500 MW

Evacuation System for Mejia ext. 1000 MW
Evacuation System for Lara Integrated Project 4000 MW in 11th Plan
Evacuation System for Simhadri Ext. (1000 MW)

Total investment of these projects will be of the level of Rs.20,000 crore approximately. Rural Electrification Corporation (REC) has been requested by the Ministry of Power to formulate the DPRs and conduct competitive bidding and select a developer under the supervision of Empowered Committee for the following transmission projects:-

(i) Evacuation system for North Karanpur (1980 MW)
(ii) Talcher Augmentation System

PFC has invited Expression of Interest for the following transmission projects.

Evacuation system for Maithon RB (1000 MW), Kodarma (1000 MW) and Bokaro Ext. (500 MW).

Scheme for Enabling Import of NER/ER surplus by NR."

2.8.6 During the course of evidence, the Committee desired to know as to whether the strategy to attract the investment of Rs.20000 Crore out of the proposed 75000 crore for the proposed increase of inter-regional transfer capacity from 11,500 MW to 37,000 MW by 2012 during the 11th Plan was in conformity to the provision of the Electricity Act, 2003. To this the Secretary responded:

"Mention has been made about inter-regional capacity and whether the private sector would be competent to enter into that area in view of the Electricity Act. Quite co-incidentally, the same sentiments have been raised by some quarters in the Power Grid Corporation also."

2.8.7 The Committee note that out of 10th Plan Outlay of Rs.21,370 crore, PGCIL could spend only Rs.18,181 crore. However, with this lesser outlay, the physical achievements have been more than the 10th Plan targets. The Committee while appreciating the work done by PGCIL in the field of transmission of power, would suggest that financial targets should be properly assessed. There is a need to encourage the participation of private sector in the power sector as a whole and in transmission sector as well. With this purpose the Government has notified guidelines for encouraging competition in the development of transmission projects. A Committee has been set up and 14 projects have been identified for development through the competitive bidding route. The Committee desire that these projects be taken up for development by the private sector at the earliest and the participation of private sector be allowed only in conformity with the provision of the Electricity Act, 2003. Presently, the Committee note, most of the private investment has come through Joint Venture route only. Considering the fact that 11th Plan target is to attract Rs.20,000 crore investment for creating inter-regional transfer capacity of 11500 MW, the Ministry should identify sufficient projects in advance, which can be offered to the private sector. The Committee should be informed of the action taken in the matter.

I. Rural Electrification

2.9.1 Rural electrification has been regarded as a vital programme for the development of rural areas. In 1947, only 1500 villages were electrified in India. The per capita consumption was 14 units. The initial focus was on electrification for irrigation to enhance agricultural produce which was reflected in the definition of village electrification accepted till 1997 – that "a village was deemed to be electrified if electricity is being used within its revenue area for any purpose whatsoever." This definition of village electrification was reviewed in consultation with the State Governments and State Electricity Boards and a new was adopted after 1997. "A Village will be deemed to be electrified if electricity is used in the inhabited locality within the revenue boundary of the village for any purpose whatsoever." In February 2004, the definition was made even more encompassing as also target specific. "A village would be declared electrified if:

i) Basic infrastructure such as distribution transformer and distribution lines are provided in the inhabited locality as well as the dalit basti/hamlet where it exists. (For electrification through Non-conventional Energy Sources a distribution transformer may not be necessary
ii) Electricity is provided to public places like schools, panchayat offices, health centers, dispensaries, community centers, etc. and
iii) The number of households electrified should be at least 10% of the total number of households in the village.

2.9.2 Government of India from time to time had launched the following programmes for electrification of rural areas in the country.

i) Rural Electrification under Minimum Needs Programme (MNP)
ii) Pradhan Mantri Gramodaya Yojana (PMGY)
iii) Kutir Jyoti Scheme
iv) Accelerated Rural Electrification Programme (AREP)
v) Accelerated Electrification of One lakh villages and One crore households
vi) Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

2.9.3 Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) has been introduced in April, 2005 for achieving the National Common Minimum Programme objective of providing access to electricity to all Rural Households over a period of four years. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under this scheme, 90% Capital Subsidy will be provided for rural electrification infrastructure through: -

(i) Creation of Rural Electricity Distribution Backbone (REDB) with one 33/11 kV (or 66/11 kV) substation in every block where it does not exist.

(ii) Creation of Village Electricity Infrastructure (VEI) for electrification of all un-electrified villages/habitations and provision of distribution transformer(s) of appropriate capacity in every village/habitation.

(iii) Decentralized Distributed Generation (DDG) and Supply System from conventional sources for Villages/ Habitations where grid supply is not cost effective and where Ministry of New and Renewable Energy would not be providing electricity through their programme(s).

2.9.4 Balance 10% will be loan assistance on soft terms by REC. The scheme inter-alia provides for financing of electrification of all un-electrified Below Poverty Line (BPL) households with 100% capital subsidy. The scheme aims at electrifying all un-electrified villages over a period of four years and provide access to electricity to all rural households.

2.9.5 About the status of rural electrification under RGGVY, the Ministry has informed as follows:

> "All the States except Delhi & Goa have signed Agreements under RGGVY. CPSUs are implementing the scheme in 134 districts. Projects for 316 districts have been sanctioned at the cost of Rs. 11514.22 crore covering 69534 un-electrified villages and 2750784 BPL households. Since April 2005, till 23rd February, 2007, 30562 unelectrified villages in Rajasthan, Uttar Pradesh, Uttranchal, Karnataka, Bihar and West Bengal have been electrified under this scheme. Besides above intensive electrification of 7175 already electrified villages has also been achieved. In 2006-07, 20743 unelectrified villages have been electrified as on

23.02.2007. Franchisees are in place/operation in 12 states namely, Uttar Pradesh, Uttranchal, Karnataka, West Bengal, Assam, Nagaland, Haryana, Orissa, Madhya Pradesh, Andhra Pradesh, Rajasthan and Bihar covering 39113 villages. Revenue collection has improved in the states where franchisees are in operation. All the 27 states participating in RGGVY have notified constitution of district committees & all the 26 states except Manipur have notified rural areas."

2.9.6 On being asked about the physical & financial targets under RGGVY during the year 2006-07, the Ministry informed:

"Under Rajiv Gandhi Grameen Vidyutikaran Yojana, it has been targeted to electrify 40,000 villages during the year 2006-07. Against this, however, there is a budgetary provision of only Rs. 3000 crore. Against this target, till 9th February 2007, 18,422 villages have been electrified. Besides this, 4.87 lakhs connections have been released to BPL households. It is anticipated that we may fall short of funds to achieve the target of 40,000 villages."

2.9.7 Asked further about the reasons for shortfall in achieving the targets, the Ministry stated:

"Following are the reasons for shortfall in achieving the targets in 2006-07.

i) Delay in finalization of awards because of high cost of bids resulting in no. of negotiations and re-tendering in a few cases.

ii) Lead time of 4-6 months for pre-award activities.

iii) Delay in issue of tenders by state power utilities and state government departments. Due to non-acquaintance with turnkey contracts.

iv) Non-availability of sufficient equipments, contractors & manpower due to unprecedented demand.

v) Slow progress for 3 to 4 months in U.P. and West Bengal due to problem in issuance of Road Permit.

vi) Delay in issue of authenticated BPL list by State Authorities in Bihar, U.P., West Bengal.

vii) Delay in allocation and subsequent acquisition of land for new sub-stations in Bihar."

2.9.8 About the targets set under RGGVY during the 11th Five Year Plan and the plan outlay, the Ministry informed:

> "For the year 2007-08, the Planning Commission has approved Rs. 3983 crore for Rajiv Gandhi Grameen Vidyutikaran Yojana. However, it has been clarified by Planning Commission that the provision for RGGVY is subject to an independent evaluation of the programme as implemented in the 10th Plan. This was mandated at the time of approval of RGGVY. Ministry of Power will have to seek approval for continuing this scheme in the 11th Plan based on the findings of the independent evaluation already commissioned by the Planning Commission. On the basis of above provision for 2007-08, the target for Village Electrification for 2007-08 would be 20,000 villages. The balance 45,000 villages will be covered in 2008-09 provided the scheme is approved for its continuance in the 11th Plan.
>
> The targets for the 11th Plan will be set as and when we get the approval for continuing the scheme in the 11th Plan based on at what time approval has been given."

2.9.9 Asked about the time by which all villages and households would be electrified the Secretary, Ministry of Power replied during evidence:

> "One broad objective of the Ministry is very clear that electricity to all by the year 2012." Sir the initial slogans of the Ministry and the objective, you might recall, of Electricity for all by 2012 which also means the physical availability of power to all. It is with that objective that we have set upon ourselves the target of 100,000 MW capacity additions along with transmission links and related activities by the year 2012. The Rajiv Gandhi Grameen Vidyutikaran Yojana was launched meanwhile in the year 2005. We had stated there that we would try and cover all the un-electrified villages by the year 2009. Rs.5,000 crore was sanctioned for the Tenth Plan. However, there was a caveat in it that the scheme was to be reviewed and for its continuation in the Eleventh Plan, this review would be taken into account and any mid-course correction in the content as well as in the manner of execution of the scheme would be taken up. Just today we had a meeting with the Planning Commission and they are in the process of review. Very soon the review report would be with us and we would know in the coming months how we wish to proceed further."

2.9.10 He further added:

> "I may wish to inform you that in the last month or so, we have sanctioned 75 plus 35 new projects under the scheme in the country and have now covered every State in the country including all the States in the North-East, the most backward States like Orissa, Jharkhand and J&K. They all

stand covered now in the 235 list of projects. We would like to expedite the completion of this programme. But there is a limitation of availability of contractors and material also at the ground level. Sometimes the estimates that come, rather the tenders which come are much higher than the estimates. So, those tenders can obviously not be accepted because otherwise the financing of the project would go haywire.

However, we are taking steps to ensure that BPL households, Scheduled Caste, Scheduled Tribe households' electrification get the highest priority. We will see that wherever the existing infrastructure allows for taking up of electrification of BPL households, independently of the strengthening of the backbone of rural electrification, we shall take up this on priority with the concurrence of the Ministry of finance."

2.9.11 Emphasizing on the role to be played by the States, he added:

"When the rural electrification policy was notified on 23rd August 2006, the State Governments were required to prepare and notify the RE plan within six months. So far, no State Government has forwarded to the Ministry its rural electrification plans. I have personally written to all the Chief Secretaries to expedite the same. The Committee is absolutely right in observing that the States must draw up their plans for showing from where the power is going to come, what their plans are. In the Central Government, we have made a unique scheme of 90 per cent grant and 10 per cent loan. But I think, a lot of efforts will have to come from the State Governments.

A mention has been made of very good execution by some of our CPSUs. We are there to extend whatever we can, in terms of our capability, and set some benchmark of performance. But I think, this work is essentially of the State Governments and of the private contractors.

I would say that beyond a point we may not labour or distract organisations like NTPC, Power Grid and other organisations in the work of rural electrification. They can set some benchmark and give some models but there are certain limitations in all these works."

2.9.12 The Committee note that the Government of India had launched a number of schemes/programmes for electrification of rural areas in the country. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) has now been introduced by the Government in April 2005 with an objective of providing access to electricity to all rural households over a period of 4 years. Rural Electrification Corporation is the nodal agency for the programme. RGGVY proposed to electrify 40,000 villages during 2006-07 with a budgetary allocation of Rs. 3,000 crore. The Committee note that till 09.02.2007, only 18,422 villages have been electrified and 4.87 lakh connections have been released to BPL households. One of the reasons given by the Government is that "lead time of 4-6 months is required for pre-award activities." The Committee feel that this should have been preconceived of while setting the ambitious targets. Another reason is "delay in issue of tenders by State power utilities and State Government departments." The reasons cited by the Government for their poor performance only reflect poor planning and lack of coordination. The Committee note that PSUs like Powergrid, NTPC, NHPC, DVC & NEEPCO are providing their services in the implementation of this scheme. Hence, any difficulties being faced by State Governments in implementation of RGGVY should have been removed / addressed in consultation with these organizations, which does not seems to be the case.

The Committee, therefore, recommend that firstly targets should be realistic and secondly, various PSUs and REC – which is the nodal agency – in implementation of RGGVY should be asked to provide all necessary technical and training support to State Governments in their respective areas. The Committee

further recommend that first a thorough assessment be made about the targets to be achieved during 11th Plan and the funds required for the same. Then the sufficient funds should be made available under the RGGVY in each of the five years of XIth Plan to achieve the set target.

2.9.13 The Committee strongly feel that rural electrification means not only electrification of households and villages but also catering to the needs of farmers and small scale industries which are the backbone of the rural economy. However, this aspect seem to have been ignored by the Government as no mention has been made about achievements in this regard under RGGVY. The Committee, therefore, recommend that in addition of electrification of households, electricity for agriculture and industrial activities should also be given due importance under RGGVY.

J. Accelerated Power Development & Reforms Programme

2.10.1 The Ministry of Power took various initiatives towards reforms and other policy measures for helping the state power utilities to bring improvement in their efficiency towards bringing about commercial viability in the power sector. Some of the major initiatives were establishment of regulatory mechanism at central and state level, restructuring of the state power utilities, metering of feeders & consumers, energy accounting & auditing, securitization of outstanding dues of CPSUs. Ministry of Power signed the MOU with states to undertake distribution reforms in time bound manner. 27 states (including Delhi), so far have either constituted or notified their regulatory commission and 21 states have issued tariff orders in the direction of rationalizing the tariffs. Now the states are moving towards Multi-Year Tariff, Time of Day Metering and intra state availability based tariff. Thirteen SEBs and one Electricity Department have been unbundled & corporatised. All the states have securitized their outstanding dues towards CPSUs.

2.10.2 In the Cabinet meeting on 31.03.2003, the Government approved an Additional Central Assistance of Rs. 40,000 Crore during X Plan, out of which Rs.20,000 Crore was allocation under Investment component (Grant + Loan) and Rs. 20,000 Crore (Grant) under Incentive component under the Accelerated Power Development and Reform Programme (APDRP). The loan component was withdrawn w.e.f. 2005-06 on recommendation of the 12th Finance Commission.

2.10.3 The main objective of the programme was reduction of AT&C losses from the existing around 60% to around 15% in five years to begin with in the urban areas and high density/ consumption areas. Further, it was also targeted to reduce commercial and cash loss of the utilities.

2.10.4 Under Investment Component, the Government provided an Additional Central Assistance for strengthening and upgradation of Sub-transmission and Distribution Network to SEBs/Utilities. The assistance was in form of 25% grant and 25% loan of the project cost. Special category states were provided 90% grant and 10% loan. However,

the loan portion was discontinued w.e.f. April 2005 on recommendation of 12th Finance Commission.

2.10.5 Under Incentive Component SEBs/Utilities were incentivised for cash loss reduction to motivate them towards reduction of their losses. . Funds are released for actual cash loss reduction, for every Rs.2 of cash loss reduction Rs.1 is given as grant.

2.10.6 Right from the beginning, it was made clear to the states that the programme was reform oriented and not budget and expenditure oriented. The off take by the states was obviously slow as they had to agree for various conditionalities for becoming eligible for APDRP assistance (signing of MOA), standardise their technical specification, streamline their bidding process and switch over to turnkey contracting. Only a few states like Andhra Pradesh, Goa, Gujarat, Himachal Pradesh, Karnataka, Tamilnadu and Uttaranchal took early initiatives and most of their districts headquarter towns have been covered under the programme. These states have shown significant improvement in reduction of AT&C loss and commercial loss as well. At the town level, wherever they were able to complete the projects even up to 75-80%, visible improvements have been seen in most of such cases. Other states were late in signing the Memorandum of Agreements and in submission of schemes. Further unrealistic DPRs, heavy quantum of work, increase in price of material, poor availability of contractors, etc. also resulted in delay in implementation of the scheme. The states of North-eastern region and J&K were especially late starters. Due to these constraints APDRP projects of only Rs. 17033.58 Crore could be sanctioned by the Ministry covering 395 district headquarter towns.

2.10.7 The implementation of the sanctioned projects was also delayed due to delays in transfer of fund by State Government to the distribution companies. Under the Additional Central Assistance fund mandatorily pass through the State Government and on account of delay in release to the implementing distribution companies fund were not available in time for the project execution. In many instances, it took even more than a year to release funds to the implementing agency after release by the Central Government. This was a major cause of delay in implementation of the scheme. Keeping this in view, Task Force

headed by Sh. P. Abraham former Secretary (P) for restructuring APDRP recommended transfer of the programme from State Sector to Centrally Sponsored Scheme.

2.10.8 As informed by the Ministry, the limited disbursal by Government during 2005-06 and 2006-07 due to limited budgetary provisions also affected implementation of the schemes. The total provisions of APDRP fund made during implementation of the programme are: -

Year	BE (Rs. Crore)	RE (Rs. Crore)			Remarks
		Investment	Incentive	Total	
2002-03	3500.00	1755.52	379.28	2134.80	*The Budget provision for 2005-06 and '06-'07 has grant portion only ** Actual up to Jan.'07
2003-04	3500.00	2356.51	503.30	2859.81	
2004-05	3500.00	1428.73	73.00	1501.73	
2005-06*	1172.00	590.94	581.06	1172.00	
2006-07**	650.00	443.18	50.88	494.06	
TOTAL	**12322.00**	**6574.88**	**1587.52**	**8163.40**	

2.10.9 When asked about the achievements of APDRP in the 10th Plan, the Ministry in a written reply informed:

> "Under Investment Component, 571 projects were sanctioned with an estimated outlay of Rs.17033.58 Crore involving APDRP grant component of Rs.6445.84 Crore and loan component of Rs.2274.23 Crore. The Government has so far released Rs.4300.66 Crore grant and full component of loan amounting to Rs.2274.23 Crore (total: Rs.6574.89 Crore). The distribution companies have drawn counterpart fund of Rs.4225.16 Crore from Financial Institutions/own sources. They have shown expenditure amounting to Rs.10139.24 Crore till December 2006. The details are shown at 41 projects have been completed, above 90% work has been completed in 67 projects, above 75% work completed in 106 projects and more than 50% work has been completed in 140 projects. Other projects are below 50% of completion.
>
> Under Incentive Component, Ministry received proposals from 19 Distribution Companies. Nine states have achieved cash loss reduction of Rs. 4946.94 and became eligible for incentive of Rs. 2473.48 Crore. The Government has released Rs. 1587.52 Crore. Balance could not be released due to low availability of budget. Claims of Andhra Pradesh (2005-06), Himachal Pradesh (2004-05), Madhya Pradesh (2003-04) and West Bengal (2005-06) are under scrutiny.

At town level, AT&C Losses have been brought below 20 percent in 212 APDRP towns in the country of which 169 towns have brought AT&C losses below 15 percent. The results would have been better, if State Departments were paying their electricity dues especially for water pumping and street lighting.

The AT&C losses of the state distribution companies at national level were reduced from 38.86% in 2001-02 to 34.02% for 2004-05. Preliminary reports indicate that it has been further reduced to 33.55% if 2005-06 (for 25 states).

The loss of the distribution companies as percentage of turnover reduced from 36.55% in 2001-02 to 20.70% in 2004-05.

The Aggregate Commercial Loss (without subsidy) of the State Power Utilities, which was reported as Rs 29331 Crore in 2001-02 reduced to Rs. 24,634 Crore during 2004-05. The cash loss on subsidy received basis, which was Rs. Rs. 10832 Crore in 2001-02, was turned into profit of Rs. 1819 Crore during 2004-05. In accordance with the preliminary report for 2005-06, Aggregate Commercial Loss (for 25 states) reduced from 21328 Crore in 2004-05 to Rs. 16541 Crore during 2005-06. (Source: PFC). The cash profit on subsidy received basis was reported as Rs. 3992 Crore for these States.

In accordance with the preliminary reports for 2005-06 (for 25 states compiled by PFC), there has been improvement in the revenue gap position also as shown below:

Revenue Gap- Rs/kwh

Region	Without subsidy basis		Subsidy booked basis		Subsidy received basis		Subsidy & Rev realized basis	
	04-05	05-06	04-05	05-06	04-05	05-06	04-05	05-06
Eastern	0.18	0.08	0.18	0.08	0.18	0.08	0.11	0.06
North	0.80	0.56	0.50	0.24	0.48	0.28	0.67	0.45
Southern	0.35	0.33	0.06	0.06	0.10	0.08	0.18	0.15
Western	0.13	0.11	0.01	0.01	0.04	0.02	(-)0.07	0.15

2.10.10 Asked about the percentage reduction of the Technical and Commercial Losses (AT&C) since inception of the programme the Ministry furnished the following:

> "The Aggregate Technical and Commercial Losses (AT&C), which was reported as 38.86% during 2001-02 reduced 34.02 in 2004-05 and the preliminary report (for 25 states) for 2005-06 indicates that it has been further reduced to 33.55% during 2005-06. The state/utility wise details are given below:

APDRP INVESTMENT STATUS As on 31st December, 2006					
(Rs. Crore)					
Sl. No.	**State**	**Project Outlay**	**Releases**	**Utilisation**	
				Total	**%**
Non-Special Category State					
1	**Andhra Pradesh**	1127.12	566.76	961.34	85
2	**Bihar**	823.15	313.18	481.63	59
3	**Chattisgarh**	353.33	159.21	170.93	48
4	**Delhi**	211.02	105.51	211.02	100
5	**Goa**	288.94	113.40	159.18	55
6	**Gujarat**	1083.22	400.26	872.07	81
7	**Haryana**	431.95	168.99	231.57	54
8	**Jharkhand**	423.65	153.87	217.59	51
9	**Karnataka**	1186.31	460.47	798.69	67
10	**Kerala**	858.50	230.55	362.23	42
11	**Madhya Pradesh**	663.20	149.87	283.11	43
12	**Maharashtra**	1643.12	374.13	880.82	54
13	**Orissa**	206.73	74.02	30.58	15

14	**Punjab**	715.57	178.74	333.37	47
15	**Rajasthan**	1193.25	403.33	734.18	62
16	**Tamil Nadu**	948.12	441.82	724.14	76
17	**Uttar Pradesh**	1069.25	236.62	744.00	70
18	**West Bengal**	441.85	92.92	286.57	65
Total		**13668.28**	**4623.65**	**8483.02**	**62**
Special Category State					
19	**Arunachal Pr.**	82.69	36.68	25.44	31
20	**Assam**	650.73	349.28	358.92	55
21	**Himachal Pr.**	322.77	277.72	285.65	88
22	**J & K**	1100.13	550.05	377.80	34
23	**Manipur**	141.62	11.67	2.67	2
24	**Meghalaya**	227.44	90.45	60.63	27
25	**Mizoram**	108.74	78.01	67.31	62
26	**Nagaland**	122.27	68.58	52.83	43
27	**Sikkim**	152.09	154.73	146.44	96
28	**Tripura**	146.74	54.31	47.84	33
29	**Uttaranchal**	310.08	279.76	230.69	74
Total		**3365.30**	**1951.24**	**1656.22**	**49**
GRAND TOTAL		**17033.58**	**6574.89**	**10139.24**	**60**

2.10.11 When the Ministry was asked about the details of reduction of financial losses by State Utilities, State-wise and year-wise since the launch of APDRP, the Ministry in a written reply stated:

> "The Aggregate Commercial Loss (without subsidy) of the State Power Utilities, which was reported as Rs 29331 Crore in 2001-02 reduced to Rs. 24,634 Crore during 2004-05. The cash loss on subsidy received basis, which was Rs. Rs. 10832 Crore in 2001-02, was turned into profit of Rs. 1819 Crore during 2004-05. In accordance with the preliminary report for 2005-06, Aggregate Commercial Loss (for 25 states) reduced from 21328 Crore in 2004-05 to Rs. 16541 Crore during 2005-06. (Source: PFC). The cash profit on subsidy received basis was reported as Rs. 3992 Crore for these states. State wise details are given below:

SL.	STATE	CLAIM YEAR	CASH LOSS REDUCTION	ELIGIBLITY	INCENTIVE RELEASED
1	Andhra Pr.	'02-03	530.22	265.11	265.11
2	Gujarat	'01-02	472.76	236.38	236.38
		'02-03	296.16	148.08	148.08
		'04-05	733.64	366.82	12.50
3	Haryana	'01-02	210.98	105.49	105.49
4	Kerala	'02-03	129.86	64.94	64.94
		'04-05	159.94	79.97	20
5	Maharashtra	'01-02	275.78	137.89	137.89
6	Punjab	'03-04	503.88	251.94	77.78
7	Madhya Pradesh	'02-03	595.02	297.51	
8	Rajasthan	'01-02	275.42	137.71	137.71
9	West Bengal	'02-03	146	73	73
		'03-04	605.52	302.76	302.76
		'04-05	11.76	5.88	5.88
	TOTAL		**4946.94**	**2473.48**	**1587.52**

2.10.12 On being asked whether the Government is planning to restructure APDRP during the 11th Five Year Plan, the Ministry in a written reply explained:

> "It is proposed to continue APDRP during the XI Plan with the revised terms and conditions with Central Sector Assistance in the following manner: -
>
> The focus of the programme shall be on establishment of base line data and fixation of accountability at the lowest level, which shall enable reduction of AT&C losses through strengthening & upgradation of Sub-Transmission and Distribution network and adoption of Information Technology.
>
> The States/Distribution Companies will be required to commit time frame for achieving reform conditions. They would be required to achieve minimum targets for reduction of AT&C losses based on their status after establishment of base line data for towns covered under the programme.

> The proposal is to merge investment and incentive components. The funding would be in the form of loan assistance, with a provision of conversion up to fifty percent (up to 90% for special category states) of the loan into grant; based on achievement of predetermined milestones and parameters. For the States/utilities which do not achieve predetermined milestones and parameters, the loan will remain loan and they will not be eligible for any grant. There would be a provision of incentive to the employees of the Utilities also in project areas, which achieve agreed targets. However, the APDRP scheme in the revised format is yet to be approved."

2.10.13 Asked further about the plan outlay for APDRP during the 11th Five Year Plan, the Ministry informed:

> "It is being proposed to continue APDRP during the XI Plan with the revised terms and conditions and with the new name "Accelerated Power Distribution Reform Programme" with Central Sector Assistance. The allocation for the scheme has not yet been approved for the 11th Five Year Plan."

2.10.14 The Committee observed that though there is a system of incentives for rewarding the performing States, the provision of penal clause for defaulting States was absent. On being asked whether the Government is planning to include a provision of penal clause to take action against the states which fail to utilize the allocated funds within one year of its release in the 11th Plan, the Ministry in a written reply stated:

> "It is proposed in the restructured APDRP to be implemented during the XI Plan, the assistance from the Government shall be in form of loan with the provision of conversion of it into grant basis on achievement of pre-determined milestones and parameters within specified time frame. For the States/utilities which do not achieve predetermined milestones and parameters, the loan will remain loan and they will not be eligible for any grant. Specified time frame for completion of the projects will also be specified and in case utility fails to achieve the completion in time, the loan will not be converted into grant.
>
> However, the APDRP scheme in the revised format is yet to be approved."

2.10.15 When asked further about any proposal to focus on rural areas under the modified APDRP; and how the rural areas in the country are going to benefit under the modified scheme, the Ministry in post evidence reply stated as follows:

“The modification of APDRP for XI Plan is under consideration in the Ministry. It is being proposed to focus on reduction of AT&C loss in towns only as the quantum of AT&C loss in towns is very high in comparison to the rural areas. There is no proposal to cover rural areas under APDRP during XI Plan. Ministry has separately taken up electrification of villages and strengthening of rural electricity backbone under RGGVY. Further, utilities may take up work in rural areas from the savings achieved through reduction of AT&C loss resulting due to implementation of APDRP in towns.

2.10.16 APDRP was launched by the Government in 2002-2003 with the objective of reducing Aggregate Technical & Commercial (AT&C) losses to around 15% in five years from the then existing which were around 60%. The Committee, however, observe that even after completion of five years, AT & C losses could only be reduced to 33.5% by 2005-06. The Committee would like to know the reasons for such slow progress in reduction in AT & C losses. The Committee note that in a number of States, both Non-Special Category and Special Category States, utilisation of APDRP investment is less than 50% as on 31.12.2006. These are Chattisgarh, Kerala, Madhya Pradesh, Orissa, Arunachal Pradesh, Manipur and Meghalaya etc. Similarly, in a number of cases, loss reduction cash incentive has also not been released to a number of eligible States like Gujarat, Kerala, Madhya Pradesh etc. The Committee would like to know the reasons for less utilisation of funds by certain States as well as reasons for the non release of loss reduction cash incentives to some States.

2.10.17 The Committee further note that APDRP is proposed to be continued during 11th Plan also with revised terms and conditions to make it more result oriented. The Committee desire that the scheme should be finalized at the earliest in consultation with the State Governments. The Committee, however, recommend that the new scheme should not adversely affect the State Governments in regard to the liabilities which they might have committed under the pre-revised APDRP.

K. Research & Development

2.11.1 Central Power Research Institute (CPRI), Bangalore serves as a National Laboratory for applied research in the field of electrical power and also functions as an independent authority for testing evaluation and certification of electrical equipment and components. The Institute is headed by Director General and has several research laboratories and testing facilities and employ about 221 qualified Scientists and Engineers besides other supporting staff.

2.11.2 The Ministry of Power was asked about the 10th plan allocation and its utilization in the area of research and development. The Ministry in its reply stated as follows:-

"10th Plan total fund Budget allocation towards R&D - Rs.90.00 Crore

Research Scheme (RC & RSoP)	- Rs.25.00 Crore
Other grant in Aid for capital project	- Rs.65.00 Crore

Utilisation of Funds

Research Schemes(CPRI)	- Rs.11.87 Crore (upto Jan. 31, 2007)
Research Schemes on Power (RSoP)	- Rs. 6.75 Crore (upto Jan. 31, 2007)
R&D Infrastructure	- Rs.35.12 Crore (upto Jan. 31, 2007)
Commitment	- Rs.9.40 Crore"

2.11.3 When asked about the reasons for shortfall in achieving the targets, the Ministry informed:

"Reasons for shortfall are as follows:

i) Delay in approval of the project proposals in absence of regular Director General for first 3 years of X Plan period.

ii) Civil Works in some of the projects were delayed due to:-

(a) Sharp rise in cost of Steel & Cement
(b) Sand quarrying was stopped by the Govt. of Karnataka for about six months
(c) Heavy rainfall during 2004-05, 2005-06
(d) Discontinuity in approval of new RSoP projects because of review of RSoP schemes.
(e) Approval of National Perspective Plan were delayed."

2.11.4 When asked about the studies undertaken so far by CPRI in the field of energy conservation alongwith the results thereof, the Committee were informed:

"CPRI contributions in the area of energy conservation can be classified under four heads: -

1. Product development
2. Testing and certification of energy related products
3. Consultancy services especially diagnostic and instrumented energy audits
4. Knowledge dissemination through conduct of Workshops, Seminars and Conferences and through facilities for B.Tech. & M.Tech. Students to do their project works.

A number of products have been developed and patents have been obtained for the following products: -

1. Biomass gasifier
2. Condensate depression monitor
3. Coal flow measuring system
4. Thermal energy meter

The CPRI has facilities for testing and evaluation of energy efficient and renewable energy devices and systems such as :-

- Solar photovoltaic Lighting system test facility (Approved by MNES).
- Compact fluorescent lamp testing facility.
- Refrigerators Test Facility.
- Air-conditioners on site as per the client's requirements.

Energy audit are undertaken both on thermal and electrical systems in a wide range of industries and power stations. CPRI had conducted instrumented and diagnostic energy audits in nearly 75 thermal power plants and some of the salient audits are given as follows: -

1. Sponsored by Ministry of Power. Govt. of India, New Delhi – 20 units. The energy audits have identified potential for energy savings to the tune of 1-2 t/h of coal, 100-500 kl/year of fuel oil and 100-800 MWh/year of electric power (auxiliary power).

2. Performance enhancement in thermal power plants through tuning of equipment during capital/annual overhaul for 7 thermal power plants sponsored by Ministry of Power, Govt. of India, New Delhi. In this scheme, we had conducted energy audit/performance test before overhaul, suggested simple energy conservation measures, participated in overhaul for implementing the energy conservation measures and conducted performance test after the overhaul to quantify the energy saving. Thereby we have demonstrated energy saving to the tune of 3.7-8.1 t/h of coal,

300-800 kl/year of fuel oil and 270-1450 MWh/month of electric power (auxiliary power).

3. For National Thermal Power Corporation (NTPC) and Electricity board owned thermal power plants for improvement in the performance of boilers, turbine, generators, auxiliary power systems, coal handling plants, ash handling plant, water circulating system, compressed air systems, etc.

4. For the purpose of renovation, modernisation and uprating of TPS in nearly 10 plants where the focus is on regaining of lost capacity, restoring of efficiency to design values or better and meeting new environmental norms.

Special consultancy is provided in the following areas: -

- Energy audits in industries and establishments
- Energy audits in thermal power stations
- Performance enhancement studies in power stations
- Studies in refineries
- Studies on retrofitting of turbines with new 3-d blades-dispute resolution
- RLA, R & M and LE studies
- Fixing of rational heat rate for a thermal power plant- dispute resolution

CPRI has been conducting periodic Workshops on new advances in technology and training programmes for professionals from thermal power stations and industries.

CPRI has over a quarter century of experience in energy technology development. It is fully equipped to provide energy services and meet upcoming challenges in technology development, system studies and implementation in the areas of renewable and fossil fuel energy and in the electric power sectors."

2.11.5 The Committee categorically desired to know as to whether CPRI is feeling financially constrained to carry out its mandate effectively as also to become an internationally competitive Institute, the Ministry stated:

"CPRI has asked for a substantial investment in 11th Plan to meet present requirements. During 10th plan a number of efforts have been made towards increasing revenue earning through Consultancy, Third Party Testing & Field services. As on date the total expenditure on R&D & Infrastructure during 10th Plan is Rs.63.14 Crore (including committed expenditure of Rs.9.40 crore) which is very less. No big facility addition could be planned, as approved fund was low. Recent repairs carried out in Short Circuit Generators alone would cross Rs.5.00 Crore which is funded from internal sources. Replacement of one Generator would cost more than Rs.300.00 crore."

2.11.6 When asked further whether financial help has also been sought from the central government to tide over the situation; and the response of the government thereto, the Ministry in a written reply stated:

> "CPRI's revenue earning through testing meets it's non-planned expenditure, but for capital investment for improving infrastructure and R&D, CPRI depends on Governments grants.
>
> During 10th plan a fund of Rs.63.14 Crore was utilized as grant-in-aid.
>
> CPRI is asking for a grant of Rs.761.00 crore for 11th Five Year Plan to carry out major upgradations.
>
> Government's response has been good. Of late, Government is investigating the possibility of Corporatising CPRI to improve its functional freedom."

2.11.7 During the study-visit of the Committee to Banglore in October,2006, the Committee held discussion with the representatives of Central Power Research Institute. The discussion inter alia included, contribution of CPRI in terms of reduction of cost of power and also technical contribution made by the Institute in terms of inputs to control huge Transmission and Distribution losses reported – in the country. Further, the issues like increased R&D funding for CPRI, its increased manpower requirement and overall funding required to make the Institute internationally competitive research body in the wake of fast changing research scenario as also stiff competition it faces from other private players in the research arena like, GE etc.- were also discussed at length.

2.11.8 Scheme of research and development in the field of electric power is implemented through CPRI. However, the R&D activities of CPRI suffered during the 10th Plan as outlay Rs. 90.00 crore could not be fully utilized. One of the reasons given by the Government for this is 'delay in approval of the project proposals in absence of a regular Director General for first three years of the Plan period.' The Committee find it to their utter dismay that such an important organization remained without any Head for three long years. The Committee feel that this amply illustrates the casual approach of the Government towards such a vital area which is so instrumental in the growth and development of the power sector.

The Committee note that some research schemes on Power were discontinued midway after a review of these schemes. The Committee feel that a lot of precious Government money could have been saved if these schemes were judiciously selected. The Committee feel that the Ministry should ask various power utilities and CEA to prepare the list of such areas based on their day to day work experience which need further research to seek their solutions. This should be a continuous process.

2.11.9 The Committee appreciate the work done by CPRI in the field of energy conservation. The Committee recommend that CPRI should undertake some research activity with the objective of reducing the cost of generation of power. The Committee feel if the cost of generation could be reduced it will ultimately benefit the consumers. The Committee further desire that some devices should also be developed by CPRI to reduce transmission and distribution losses – as these losses constitute a major chunk of the losses in the power sector and have a direct bearing on the financial health of the state utilities and, as such, viability of generation of power.

2.11.10 The Committee observe that CPRI was financially constrained during the 10th Plan and hence could neither undertake new research activities nor invest in improvement of the infrastructure. The allocation under the 10th Plan was only Rs. 63.14 crore which according to CPRI was insufficient to meet its demands. The Committee are of the considered view that research & development activities in the power sector should not suffer due to resource constraints. Hence the Committee recommend that 11th Plan outlay of CPRI be substantially increased so as to enable CPRI to not only carry out its research activities but also to establish itself as an internationally competitive research institute of excellence.

NEW DELHI;
20th April, 2007
30 Chaitra, 1929 (Saka)

GURUDAS KAMAT,
Chairman,
Standing Committee on Energy

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

Sl. No.	Reference Para No. of the Report	Conclusions/Recommendations
1	2	3
1.	2.1.5	The Committee observe that utilization of the budgetary allocation during the last few years has not kept pace with the allocation. Though the budgetary allocation to the Ministry of Power is being hiked every year, the utilization of the same keep on decreasing. During the year 2004-05, BE was Rs. 15630.32 crore whereas during the year 2006-07, it was increased to Rs. 27623.70 crore. However, the utilization of the same has declined from 92.21% in the year 2004-05 to only 57.6% in the year 2006-07. The Committee feel it is a matter of serious concern. The Committee, therefore, desire that the Government should retrospect and analyze the reasons for this trend so that the same story is not repeated during the year 2007-08. The Committee also note that quarterly utilisation of the funds has also not been on the desired norms. The Ministry should make all out efforts to improve quarterly utilisation of funds so that annual allocations can be fully utilised.
2.	2.2.29	The Committee are concerned to note that peak shortages have increased from 11.8% in 2001-02 to 13.9% in 2006-07. The Committee feel that apart from capacity addition and generation of more power, there is a need to consider other solutions also like having different time zones for the country and by staggering the office timings and school timings by about 1-2 hours so that peak hour/rush hour are also staggered. The Committee desire that these suggestions should be considered at the appropriate level and the Committee may be informed of the action taken in the matter.
3.	2.2.30	The Committee note that a target of 41110 MW was fixed for 10^{th} Plan, which was reduced to 36956 MW during the Mid Term Appraisal. However, the Committee further note with great concern that at the end of 10^{th} Plan only 21180 MW has been achieved. The performance of the Ministry regarding capacity addition in the 10^{th} Plan is thus abysmally disheartening. The actual achievement has been only 51.5% of targeted capacity addition. It is a matter of great concern in a fast growing economy like India where generation of power has to grow almost in direct proportion to the growth of Gross Domestic Product (GDP). The Committee find many a reasons responsible for this scenario. Delay in the award of works/order placement, delay in supplies by BHEL, delay in supply of Aux. Boiler, delay in placement of order for material handling plant, etc., are the reasons which show slackness on the part of executing

		agencies and should have been tackled through proper monitoring. Starting from the planning stage, the Committee feel that the targets for the plan period are seemingly unrealistic. Since gestation period for development of Power Project varies from 4 years to almost 7-8 years, many projects spill over into two plans. The Committee fail to understand as to how the proposed capacity addition of 68,869 MW for the 11th Plan would be achieved – especially when the 10th Plan target of 41110 MW could not be achieved. The Committee recommend that to reduce the seemingly mismatch between targets and achievements, targets should be drawn more realistically. Only those projects for which all the clearances have been secured and are likely to be available quickly should be included – while setting the plan targets. The Committee, therefore, desire that the annual and plan targets for capacity addition should be fixed realistically.
4.	2.2.31	The Committee observe that out of the target of 7121 MW set for the private sector during the 10th Plan the likely achievement is only 1930 MW which cannot be termed as satisfactory at all. Despite allowing and facilitating the entry of private sector in the power sector as per promise of the Electricity Act, 2003, its participation remains very poor. The Committee desire that a detailed study should be made by the Government to know the reasons for poor participation, the difficulties faced by the private sector and the steps proposed to be taken to resolve those difficulties. The Committee would like to be apprised of the details in this regard.
5.	2.2.32	The Committee note that 53% of capacity addition target has slipped to 11th Plan. Out of this, major slippage has been due to delay in Supercritical technology and supply of equipment & materials by BHEL. Since BHEL is the sole supplier of equipment, it seemed to be overburdened with work. Extremely worried by the situation as obtaining presently in regard to the equipment supply for the Power Plants, the Committee strongly recommend that to ensure that the capacity addition does not suffer during the 11th Plan due to delay on the part of BHEL, the Government should go for international competitive bidding for procuring equipment from other suppliers as well. The Committee further desire that the proposal of the Government to enhance equipment manufacturing capacity in India, under the flagship of NTPC and other players, should be vigorously pursued to its logical conclusion in a fixed time frame and the Committee be apprised of the same. Similarly, the proposal of NTPC for looking at the possibility of entering into some on-going equipment manufacturing business should also be pursued simultaneously. The Committee also strongly endorse that in order to avoid delays in the setting up of higher capacity power projects which are caused mainly due to non-availability of advance environment clearances for the same, the Government should invariably try and

		secure clearances in advance. The Government should also make all out efforts to get Super Critical alternate technologies available worldwide for the setting up of Power Plants as a number of NTPC projects have been held up due to non-availability of this technology.
6.	2.2.33	The Committee observe that out of the three sectors viz, Central, State & Private, the performance of the State Sector, in terms of capacity addition during the 10th Plan has been better as compared to Central and Private Sectors. Though Central & Private Sectors could manage to achieve only 60% and 27% respectively, of the targets – the achievement of State Sector has been 68%. However, out of 68,869 MW proposed capacity addition during the 11th Plan, State Sector has been given the target of only 22,989 MW. Considering the performance of the State Sector during 10th Plan, the Committee feel that more responsibility could have been assigned to State Sector. The Central Government, on its part could extend the required support, as necessitated by the States to achieve this objective. Moreover, exemptions which are given to Mega Power Projects should also be available to the State Sector power projects of 1000 MW and above.
7.	2.2.34	The Committee appreciate the initiative of the Ministry of Power regarding the development of Ultra Mega Power Projects, which the Committee feel will help in meeting the rising demand of power in the country to a great extent. During the course of evidence on Demands of Grants for the year 2007-08, Members raised a number of queries regarding the setting up of Ultra Mega Power Projects expressing concern as to whether these projects would come up as scheduled earlier. Also an apprehension was expressed that the targets fixed by the Government for achieving the generation of 1,00,000 MW by 2012 to meet the goal of electricity for all may be jeopardized, if some of these Mega Power Projects do not come up during 11th Plan. During evidence, the representative of Ministry of Power, however, explained that they have set upon themselves the target of 1,00,000 MW capacity addition along with transmission links and related activities by the year 2012. The Committee, however, are greatly concerned with the present status of development of Sasan Ultra Mega Power Project, which was awarded to Globleq Singapore Private Limited and Lanco Consortium. However, Globleq Singapore was later on sold by its parent company to Prince Stone Investments, a holding Company for Lanco Consortium Limited and Jindal Steel and Power Limited. The Committee had categorically desired to know from the Ministry as to how the matter concerning award of contract for Sasan Project consequent on change of ownership of the successful bidder was proposed to be resolved. The Ministry had informed that they were seeking legal opinion in the matter and considering all legal opinions they would take appropriate decision. The Committee,

		however, have now been informed on 23rd April, 2007 by the Ministry that the matter is now under consideration of the Central Vigilance Commission (CVC). The Committee feel that an urgent action is required to resolve the issue at the earliest and desire that all possible steps be taken to ensure that the setting up of the Project is as per schedule without any time and cost overruns. But considering the fact that there arose a need for Central Vigilance Commission's involvement in the beginning of the project itself, the Committee feel apprehensive about the project as due diligence was not shown by the Ministry of Power in award of the project. The Committee, therefore, desire that responsibilities be fixed in the matter and stern action be taken against the guilty. The Committee should be apprised of the position at the earliest regarding the development of this project – clearly analyzing the matter as to how far this controversy is likely to affect the time and cost overrun of the project. The Committee are surprised to note that while the former Power Secretary assured the Committee in meeting held on 2.8.2006 that some units of Mega Power Projects would come up by the end of 11th Plan, the new Secretary in his evidence before the Committee on 21.3.2007 stated that it was not possible to complete Ultra Mega Power Projects in the 11th Plan and these would spill over to 12th Plan. The Committee note that a programme for completion of 1,00,000 MW capacity to ensure electricity for all by 2012 was announced by the Government with much fanfare. The Committee are concerned with the turn of events in the case of Sasan Project and feel that apart from non-achievement of the targets, it may give bad publicity to the Government's move to set up other Ultra Mega Power Projects and ultimately affect the goal of electricity for all. The Committee note that having achieved only 21180 MW capacity addition during 10th Plan and with a target of 68,869 MW during 11th Plan, there is no likelihood of achieving 1,00,000 MW generating capacity by 2012 as had been envisaged by the Government. The Committee desire that no effort should be spared to achieve this target if the goal of electricity for all is to be accomplished. The Committee feel that the power situation in the country requires daily monitoring and accountability to ensure progress as envisaged by the Government.
8.	2.3.4	The Committee note with concern that no exemption in Excise and Customs Duty has been proposed in the current budget for equipment to be used in the power sector. The capacity addition during the 10th Plan has suffered due to delay in supply of equipment by BHEL. To meet the increasing demand of equipment it is necessary to procure equipment through international competitive bidding. In this light, there is a need for exemption in Excise & Customs Duty for equipment as exemption in taxes and duties will act as incentive for

		both foreign and domestic players to participate in the bidding process. Exemption in duties will encourage competition which will ultimately lead to reduction in cost of generation of power. Hence, the Committee strongly recommend that Ministry of Power should take up the matter of exemption of Excise & Customs Duty on equipment/materials useful for the development of power with the Ministry of Finance as they feel that exemption in Customs and Excise duties will not only ensure the supply of equipments, but would also reduce the cost of plant and power production and thereby leading to reduction in per unit tariff of power and thus making the projects viable. In view of the pace of development as envisaged by the Government, such exemptions need to be thought of urgently.
9.	2.4.8	The Committee feel that the hydro power generation has not been given the desired impetus. The percentage of hydro share in aggregate capacity during the 9^{th} & 10^{th} Plan has been only 25% & 26% respectively whereas the ideal ratio between thermal & hydro should be 60:40. Considering the shortage of coal and gas and also combined with the fact that India has an estimated unutilized hydro-power potential of 1,50,000 MW, the Committee strongly desire that more emphasis should be given to hydro power generation. The Committee, therefore, recommend that Government should work out a strategy for exploiting the hydro power and increasing the share of hydro power generation to an ideal 40% during the 11^{th} Plan. The Committee note that the tariff policy notified in January 2006 requires that all distribution utilities shall procure power only through competitive bidding. But there are uncertainties and risks associated with construction of hydro projects like geological surprises, resettlement and rehabilitation problems inaccessibility of sites, law and order problems etc. This renders tariff based bidding as a difficult proposition for hydroelectric projects. The Committee are happy to note that to address this complex issue, the Central Government has prepared a policy, which is yet to be firmed up after having a re-look at the same and taking into consideration the concerns expressed by the States in regard thereto. The Committee expect the Government to come up with this policy within a definite time frame so that the road blocks or irritants in the way of exploiting huge unexploited hydro-power potential in the country could be removed on due priority. Since delay in getting environment clearance is a major reason for delay in hydro power projects, the Committee feel that there is a need to reassess and remap the forest area in the country so as to ensure that the environment clearances are secured early. The Committee desire that the Ministry of Power should take up this matter with the Ministry of Environment and Forests. The Committee further desire that a Joint Coordination Committee – consisting of the representatives of the Ministry of Power and the Ministry of Environment and Forests be formed to

		address and resolve the issues involved in power generation. The Committee desire that this matter should also be brought to the notice of PMO for necessary action.
10.	2.5.9	The Committee are concerned with the poor performance of NHPC during the 10th Plan. NHPC failed to achieve both physical as well as financial targets set for the Plan period. Out of financial outlay of Rs. 32226 Crore, the anticipated expenditure is only Rs.10983 crore. Similarly, against the target capacity addition of 4357 MW, the anticipated capacity addition is only 1970 MW. The Committee note that in a number of cases, CCEA sanction was delayed like Parbati-III; HP Uri-II and Chamera Stage III resulting in delay of subsequent activities. In case of Nimoo Bazgo and Chutak projects, sanction from the State Government was delayed. In case of Siang Upper and Siang Lower projects, there was delay in Survey and Investigation. There are some other projects also where delays were due to small problems, which could be visualized and resolved in advance. Inspite of an elaborate monitoring mechanism of review meetings being held at the highest level in the Ministry, the non-achievement of targets is a matter of serious concern. Now, the target for the 11th Plan has been set at 5233 MW. In addition four projects with installed capacity of 604 MW have been targeted for completion under best efforts category. The Committee desire that before embarking on the ambitious plan for the 11th Plan period, the reasons for shortfall in achieving the targets should be analyzed deeply so that repetition of same could be checked while executing projects during the 11th Plan. The Committee further note that the Ministry had informed during the examination of Demands for Grants(2006-07) that the procedure for sanction of hydro-electric schemes has been streamlined. Moreover, a Committee had been set up under the Chairmanship of Cabinet Secretary to examine the existing procedures relating to environment, forest and wild life clearances and give its recommendations to streamline the procedures. Since, delays at various levels lead to avoidable delays in implementation of projects, the Committee desire that the time schedule fixed for implementation of power projects be strictly adhered to. Further, the Committee desire to be apprised of the outcome of the report submitted by the Committee set up for the purpose.
11.	2.6.5	The Committee note that 10th Plan outlay for NEEPCO was Rs.4224 crore out of which only Rs.832.62 crore are likely to be utilised. The Committee are, however, unhappy to note that even at BE stage annually, funds were not allocated as per 10th Plan outlay. At RE stage these were further reduced drastically every year and actual utilisation turned out to be much less. The Committee are concerned to note that NEEPCO have totally failed to achieve the prescribed financial and physical targets of 10th Plan. The Committee feel that

		this is a clear case of poor planning. Where the Ministry of Power, Government of India does not appear to have taken any corrective steps. Considering the immense importance of NEEPCO and the objective behind its establishment – exploiting the power potential of North Eastern Region which would lead to development of North Eastern Region, the under utilization of funds is a serious matter. The Committee desire that the reasons for gross under-utilization of funds by NEEPCO during the 10th Plan be analyzed in details and the corrective steps taken accordingly. The Committee desire that 11th Plan targets, both physical and financial, should be based on more realistic assessment keeping in mind the various factors which have led to gross under-utilisation of 10th Plan outlay. The Committee also find that most of the reasons cited by the Ministry of Power, for under-utilisation of funds are such which could have been easily known if any serious examination of those projects would have been done. But this is perhaps lacking even when review meetings are held for the projects in hand. The Committee desire that every review meeting should identify various reasons for delays and also take immediate steps to remove those reasons. This should be a standard practice for all the review meetings.
12.	2.7.5	The Committee are concerned to note that in Satluj Jal Vidyut Nigam out of the sanctioned strength of 2069, only 1718 positions have been filled, that is, almost 315 posts at various levels, i.e., the executive, supervisor and workmen are lying vacant. The existence of so many vacancies is a matter of concern as in the absence of proper manpower the work stands to suffer. Moreover existence of so many vacancies in the background of rising unemployment in the country does not present a good scenario. The Committee desire that all the vacancies on SJVN be filled up within six months and the Committee be apprised of the same. The Committee are unhappy to note the gross under-utilisation of budgetary allocation by SJVNL year after year. The reasons cited are not such which could not be visualized in advance. The Committee desire that the Ministry should take immediate steps to make review meetings meaningful to ensure that the funds are utilised fully.
13.	2.8.7	The Committee note that out of 10th Plan Outlay of Rs.21,370 crore, PGCIL could spend only Rs.18,181 crore. However, with this lesser outlay, the physical achievements have been more than the 10th Plan targets. The Committee while appreciating the work done by PGCIL in the field of transmission of power, would suggest that financial targets should be properly assessed. There is a need to encourage the participation of private sector in the power sector as a whole and in transmission sector as well. With this purpose the Government has notified guidelines for encouraging competition in the development of transmission projects. A Committee has been set up and 14

		projects have been identified for development through the competitive bidding route. The Committee desire that these projects be taken up for development by the private sector at the earliest and the participation of private sector be allowed only in conformity with the provision of the Electricity Act, 2003. Presently, the Committee note, most of the private investment has come through Joint Venture route only. Considering the fact that 11th Plan target is to attract Rs.20,000 crore investment for creating inter-regional transfer capacity of 11500 MW, the Ministry should identify sufficient projects in advance, which can be offered to the private sector. The Committee should be informed of the action taken in the matter.
14.	2.9.12	The Committee note that the Government of India had launched a number of schemes/programmes for electrification of rural areas in the country. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) has now been introduced by the Government in April 2005 with an objective of providing access to electricity to all rural households over a period of 4 years. Rural Electrification Corporation is the nodal agency for the programme. RGGVY proposed to electrify 40,000 villages during 2006-07 with a budgetary allocation of Rs. 3,000 crore. The Committee note that till 09.02.2007, only 18,422 villages have been electrified and 4.87 lakh connections have been released to BPL households. One of the reasons given by the Government is that "lead time of 4-6 months is required for pre-award activities." The Committee feel that this should have been preconceived of while setting the ambitious targets. Another reason is "delay in issue of tenders by State power utilities and State Government departments." The reasons cited by the Government for their poor performance only reflect poor planning and lack of coordination. The Committee note that PSUs like Powergrid, NTPC, NHPC, DVC & NEEPCO are providing their services in the implementation of this scheme. Hence, any difficulties being faced by State Governments in implementation of RGGVY should have been removed / addressed in consultation with these organizations, which does not seems to be the case. The Committee, therefore, recommend that firstly targets should be realistic and secondly, various PSUs and REC – which is the nodal agency – in implementation of RGGVY should be asked to provide all necessary technical and training support to State Governments in their respective areas. The Committee further recommend that first a thorough assessment be made about the targets to be achieved during 11th Plan and the funds required for the same. Then the sufficient funds should be made available under the RGGVY in each of the five years of XIth Plan to achieve the set target.

15.	2.9.13	The Committee strongly feel that rural electrification means not only electrification of households and villages but also catering to the needs of farmers and small scale industries which are the backbone of the rural economy. However, this aspect seem to have been ignored by the Government as no mention has been made about achievements in this regard under RGGVY. The Committee, therefore, recommend that in addition of electrification of households, electricity for agriculture and industrial activities should also be given due importance under RGGVY.
16.	2.10.16	APDRP was launched by the Government in 2002-2003 with the objective of reducing Aggregate Technical & Commercial (AT&C) losses to around 15% in five years from the then existing which were around 60%. The Committee, however, observe that even after completion of five years, AT & C losses could only be reduced to 33.5% by 2005-06. The Committee would like to know the reasons for such slow progress in reduction in AT & C losses. The Committee note that in a number of States, both Non-Special Category and Special Category States, utilisation of APDRP investment is less than 50% as on 31.12.2006. These are Chattisgarh, Kerala, Madhya Pradesh, Orissa, Arunachal Pradesh, Manipur and Meghalaya etc. Similarly, in a number of cases, loss reduction cash incentive has also not been released to a number of eligible States like Gujarat, Kerala, Madhya Pradesh etc. The Committee would like to know the reasons for less utilisation of funds by certain States as well as reasons for the non release of loss reduction cash incentives to some States.
17.	2.10.17	The Committee further note that APDRP is proposed to be continued during 11th Plan also with revised terms and conditions to make it more result oriented. The Committee desire that the scheme should be finalized at the earliest in consultation with the State Governments. The Committee, however, recommend that the new scheme should not adversely affect the State Governments in regard to the liabilities which they might have committed under the pre-revised APDRP.
18.	2.11.8	Scheme of research and development in the field of electric power is implemented through CPRI. However, the R&D activities of CPRI suffered during the 10th Plan as outlay Rs. 90.00 crore could not be fully utilized. One of the reasons given by the Government for this is 'delay in approval of the project proposals in absence of a regular Director General for first three years of the Plan period.' The Committee find it to their utter dismay that such an important organization remained without any Head for three long years. The Committee feel that this amply illustrates the casual approach of the Government towards such a vital area which is so instrumental in the growth and development of the power sector. The Committee note that some research schemes on Power were discontinued midway after a review of these schemes. The Committee feel that a lot of precious Government money could have

		been saved if these schemes were judiciously selected. The Committee feel that the Ministry should ask various power utilities and CEA to prepare the list of such areas based on their day to day work experience which need further research to seek their solutions. This should be a continuous process.
19.	2.11.9	The Committee appreciate the work done by CPRI in the field of energy conservation. The Committee recommend that CPRI should undertake some research activity with the objective of reducing the cost of generation of power. The Committee feel if the cost of generation could be reduced it will ultimately benefit the consumers. The Committee further desire that some devices should also be developed by CPRI to reduce transmission and distribution losses – as these losses constitute a major chunk of the losses in the power sector and have a direct bearing on the financial health of the state utilities and, as such, viability of generation of power.
20.	2.11.10	The Committee observe that CPRI was financially constrained during the 10^{th} Plan and hence could neither undertake new research activities nor invest in improvement of the infrastructure. The allocation under the 10^{th} Plan was only Rs. 63.14 crore which according to CPRI was insufficient to meet its demands. The Committee are of the considered view that research & development activities in the power sector should not suffer due to resource constraints. Hence the Committee recommend that 11^{th} Plan outlay of CPRI be substantially increased so as to enable CPRI to not only carry out its research activities but also to establish itself as an internationally competitive research institute of excellence.

Annexure - I

MINUTES OF THE 6TH SITTING OF THE STANDING COMMITTEE ON ENERGY (2007-08) HELD ON 14th MARCH, 2007 IN COMMITTEE ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hours to 1745 hours

PRESENT

Shri Gurudas Kamat - Chairman

MEMBERS

Lok Sabha

2. Shri Rashid J.M. Aaron
3. Shri Gauri Shankar Chaturbhuj Bisen
4. Prof. Chander Kumar
5. Sardar Sukhdev Singh Libra
6. Shri Sanat Kumar Mandal
7. Shri Dharmendra Pradhan
8. Dr. Ravindra Kumar Rana
9. Shri Vijayendra Pal Singh
10. Shri E.G. Sugavanam
11. Shri Tarit Baran Topdar

Rajya Sabha

12. Dr. K. Kasturirangan
13. Shri Sayed Azeez Pasha
14. Shri Veer Pal Singh Yadav

SECRETARIAT

1. Shri P.K. Bhandari, Joint Secretary
2. Shri J.S. Chauhan, Deputy Secretary
3. Shri Shiv Kumar, Deputy Secretary

Witnesses

MINISTRY OF POWER

1.	Shri Anil Razdan	Secretary (Power)
2.	Shri G.B. Pradhan	Joint Secretary
3.	Shri Jayant S.Kawale	Joint Secretary
4.	Shri Harish Chandra	Joint Secretary
5.	Shri A.K. Kutty	Joint Secretary
6.	Shri Mrutunjay Sahoo	Joint Secretary

PUBLIC SECTOR UNDERTAKINGS/AUTONOMOUS BODIES/STATUTORY BODIES

7.	Shri Rakesh Nath	Chairperson, CEA
8.	Shri P.K. Kumar	CE, CEA
9.	Shri B.K. Misra	Secretary, CEA
10.	Shri T. Sankaralingam	CMD, NTPC
11.	Shri R.P.Singh	CMD, PGCIL
12.	Dr. V.K. Garg	CMD, PFC
13.	Shri S.K. Garg	CMD, NHPC
14.	Shri R.S.T. Sai,	CMD, THDC
15.	Shri H.K. Sharma	CMD, SJVNL
16.	Shri Subrata Biswas	Secretary, DVC
17.	Shri M.R. Ghosh	CMD, NEEPCO
18.	Shri A.K. Lakhina	CMD, REC
19.	Shri U.C. Mishra	Chairman, BBMB
20.	Shri A.K.Tripathy	Director General, CPRI
21.	Shri Jagmohan Gupta	Registrar, APTEL

2. At the outset, the Chairman welcomed the Secretary of the Ministry of Power and other officials accompanying him to the sitting of the Committee and apprised them of the provisions of Direction 58 of the Directions by the Speaker.

3. The Officials of the Ministry of Power made a powerpoint presentation on the Demands for Grants of the Ministry which *inter alia* covered the following points:-

i) Growth of installed generating capacity and high voltage transmissions links.
ii) Capacity addition achieved during the 10^{th} Plan & reasons for slippage.
iii) Renovation and Modernisation of Thermal and Hydro Plants during the 10^{th} Plan.
iv) Proposed capacity addition during the 11^{th} Plan.
v) Distribution reforms undertaken in the 10^{th} Plan.
vi) Achievements in the area of rural electrification.

4. Intermittently the Members raised some queries, such as, reasons for failure on the part of the Government in capacity addition during plan periods, need for increasing share of States in capacity addition, shortage in supply of equipment meant for electricity generation, ratio of investment in generation as compared to transmission and distribution sectors and, in particular, the issues involved in development of Ultra Mega Power Projects, etc. Some of these were replied to by the representatives of the Ministry of Power.

5. However, since the meeting remained inconclusive, due to paucity of time, it was decided to reconvene the meeting to discuss the aforesaid issues and other issues concerning performance of the Ministry, the undertakings thereunder and the bodies associated therewith - in greater details.

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

The Committee then adjourned.

Annexure - II

MINUTES OF THE 8TH SITTING OF THE STANDING COMMITTEE ON ENERGY (2007-08) HELD ON 21st MARCH, 2007 IN COMMITTEE ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hours to 1720 hours

PRESENT

Shri Gurudas Kamat - Chairman

MEMBERS

Lok Sabha

2. Shri Rashid J.M. Aaron
3. Shri Kailash Baitha
4. Shri Gauri Shankar Chaturbhuj Bisen
5. Prof. Chander Kumar
6. Sardar Sukhdev Singh Libra
7. Shri Sanat Kumar Mandal
8. Shri Dharmendra Pradhan
9. Dr. Ravindra Kumar Rana
10. Shri Kiren Rijiju
11. Shri Nand Kumar Sai
12. Shri Vijayendra Pal Singh
13. Shri E.G. Sugavanam
14. Shri Tarit Baran Topdar

Rajya Sabha

15. Dr. K. Kasturirangan
16. Shri Sayed Azeez Pasha
17. Shri Veer Pal Singh Yadav

SECRETARIAT

1. Shri P.K. Bhandari, Joint Secretary
2. Shri J.S. Chauhan, Deputy Secretary
3. Shri Shiv Kumar, Deputy Secretary

Witnesses

MINISTRY OF POWER

1.	Shri Anil Razdan,	Secretary (Power)
2.	Shri Harish Chandra,	Sr. Adviser
3.	Shri Anil Kumar,	Addl. Secretary
4.	Shri A.K. Kutty,	Joint Secretary
5.	Shri Gireesh B. Pradhan	Joint Secretary
6.	Shri Jayant Kawale,	Joint Secretary
7.	Shri M. Sahoo,	Joint Secretary

PUBLIC SECTOR UNDERTAKINGS/AUTONOMOUS BODIES/STATUTORY BODIES

8.	Shri Rakesh Nath,	Chairperson, CEA
9.	Shri B.K. Misra,	Secretary, CEA
10.	Shri T. Sankaralingam,	CMD, NTPC
11.	Shri R.P.Singh,	CMD, PGCIL
12.	Dr. V.K. Garg,	CMD, PFC
13.	Shri S.K. Garg,	CMD, NHPC
14.	Shri R.S.T. Sai,	CMD, THDC
15.	Shri H.K. Sharma,	CMD, SJVNL
16.	Shri A.K. Barman,	Secretary, DVC
17.	Shri M.R. Ghosh,	CMD, NEEPCO
18.	Shri A.K. Lakhina,	CMD, REC
19.	Shri U.C. Mishra,	Chairman, BBMB
20.	Dr. N.S. Saxena,	DG, NPTI
21.	Shri A.K. Tripathy,	DG, CPRI
22.	Dr. Ajay Mathur,	DG, BEE
23.	Shri Jagmohan Gupta,	Registrar, APTEL

2. At the outset, the Chairman welcomed the Secretary of the Ministry of Power and other officials accompanying him to the sitting of the Committee, which was convened to discuss certain issues concerning the Ministry of Power which couldn't be taken up during the previous meeting – that remained inconclusive. The Chairman then apprised the witnesses of the provisions of Direction 58 of the Directions by the Speaker.

3. The Members inter alia raised the following queries during the sitting:

i) Need to have two time-zones in the country.

ii) Reasons for non-achievement of both physical and financial targets by the Ministry and the undertakings thereunder like NHPC, DVC and NEEPCO in particular – in the 10^{th} Plan and preparedness of Ministry for the Xith Plan.

iii) Need to fix responsibility for failure in meeting the targets.

iv) Development of Ultra Mega Power Projects (UMPP) and particularly the ownership issue of Sasan UMPP in Madhya Pradesh.

v) Ratio of thermal & hydro generation.

vi) Fiscal concessions asked for and provided to the power sector in the Annual Budget for the year 2007-08.

vii) Compensation & rehabilitation of people displaced due to development of power projects.

viii) Need to check the power theft.

4. Most of these queries were replied to by the representatives of the Ministry of Power. The Ministry was, however, asked to send the replies to the rest of the queries, in writing, to the Secretariat.

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

The Committee then adjourned.

Annexure - III

MINUTES OF THE 10TH SITTING OF THE STANDING COMMITTEE ON ENERGY (2007-08) HELD ON 16st APRIL, 2007 IN COMMITTEE ROOM 'B', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hours to 1610 hours

PRESENT

Shri Gurudas Kamat - Chairman

MEMBERS

Lok Sabha

2. Shri Kailash Baitha
3. Shri Gauri Shankar Chaturbhuj Bisen
4. Shri Mohan Jena
5. Sardar Sukhdev Singh Libra
6. Shri Sanat Kumar Mandal
7. Dr. Ravindra Kumar Rana
8. Shri Kiren Rijiju
9. Shri Vijayendra Pal Singh
10. Shri E.G. Sugavanam
11. Shri Tarit Baran Topdar
12. Shri Chandra Pal Singh Yadav

Rajya Sabha

13. Dr. (Smt.) Najma A. Heptulla
14. Shri Jesudasu Seelam
15. Shri Moti Lal Vora

SECRETARIAT

1. Shri P.K. Bhandari, Joint Secretary
2. Shri J.S. Chauhan, Deputy Secretary
3. Shri Shiv Kumar, Deputy Secretary

At the outset, the Chairman Standing Committee on Energy welcomed the Members to the sitting of the Committee.

2. The Committee then took up for consideration the draft 20th Report on Demands for Grants of the Ministry of Power for the year 2007-08.

3. The Members felt concerned over the fact that the Ministry of Power did not respond to pointed queries of the Committee concerning the ownership and other issues relating to the development of Sasan Ultra Mega Power Project. It was felt that the capacity generation targets require strict monitoring and there was need to fix responsibility wherever the cases of slippages therein taken place.

4. The Committee adopted the draft Report with certain additions / amendments as suggested by the Members of the Committee.

5. The Committee also authorised the Chairman to finalise the Report after incorporating the changes suggested by the Members of the Committee and also making consequential changes arising out of factual verification, if any, by the Ministry of Power and also to present the same to both the Houses of Parliament.

The Committee then adjourned