FIRST REPORT

STANDING COMMITTEE ON ENERGY
(2014-2015)

(SIXTEENTH LOK SABHA)

MINISTRY OF POWER

DEMANDS FOR GRANTS
(2014-2015)

Presented to Lok Sabha on 22.12.2014
Laid in Rajya Sabha on 22.12.2014

LOK SABHA SECRETARIAT
NEW DELHI

December, 2014/*Agrahayana*, 1936 (*Saka*)

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MEMBERS

Lok Sabha

2. Shri Om Birla
3. Shri M. Chandrakasi
4. Shri Ashwini Kumar Choubey
5. Shri Harish Chandra *alias* Harish Dwivedi
6. Shri Deepender Singh Hooda#
7. Shri Saumitra Khan
8. Shri Bhagat Singh Koshyari
9. Kunwar Sarvesh Kumar
10. Dr. Arun Kumar
11. Shri R.P. Marutharajaa
12. Shri Jagdambika Pal
13. Shri Ravindra Kumar Pandey
14. Shrimati Krishna Raj
15. Shri M.B. Rajesh
16. Shri Vinayak Bhaurao Raut
17. Shri Gutha Sukender Reddy
18. Shri Purno Agitok Sangma
19. Shri Devendra Singh *alias* Bhole Singh
20. Shri Malyadri Sriram
21. Shri Bhanu Pratap Singh Verma

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* Appointed as Chairman of the Committee *w.e.f.* 12th November, 2014 *vice* Shri Rajiv Pratap Rudy.

Nominated as Member of the Committee *w.e.f.* 14th November, 2014.

Rajya Sabha

22. Shri V.P. Singh Badnore
23. Shri Oscar Fernandes^
24. Shri Ram Jethmalani
25. Shri Pyarimohan Mohapatra
26. Shri S. Muthukaruppan
27. Dr. K.P. Ramalingam
28. Shri Ananda Bhaskar Rapolu
29. Dr. Anil Kumar Sahani
30. Shri Mohammad Shafi
31. Shrimati Viplove Thakur

SECRETARIAT

1. Shri Devender Singh	—	*Additional Secretary*
2. Shri N.K. Pandey	—	*Director*
3. Shri Arun K. Kaushik	—	*Additional Director*
4. Shri Manish Kumar	—	*Executive Assistant*

^Nominated as Member of the Committee *w.e.f.* 09.12.2014 *vice* Shri Rajiv Shukla.

INTRODUCTION

I, the Chairperson, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this First Report on Demands for Grants of the Ministry of Power for the year 2014-15.

2. The Committee took briefing/oral evidence of the representatives of the Ministry of Power on 22nd September, 2014. The Committee wish to express their thanks to the representatives of the Ministry for appearing before the Committee for evidence and furnishing the information, desired by the Committee in connection with the issues relating to the subject.

3. The Report was considered and adopted by the Committee at their sitting held on 17th December, 2014.

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

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

NEW DELHI;
19 *December,* 2014
28 *Agrahayana,* 1936 *(Saka)*

DR. KIRIT SOMAIYA,
Chairperson,
Standing Committee on Energy.

REPORT

PART I

NARRATION ANALYSIS

I. INTRODUCTORY

1.1 The electricity is a vital input for economic as well as social development of a nation. The power sector of the country has come a long way after independence. The country now has installed generation capacity to the tune of 2,54,000 MW. We are now the third largest electricity producing country in the world. The participation of Private Players has provided further impetus to this sector. However, on the other hand the ever growing demand of electricity has continuously outstripped the supply, resulting in acute deficiency of electricity in the country. It is a matter of deep concern that even after more than 65 years of Independence, our numerous villages still do not have access to electricity. Even cities are facing acute power shortages. Now, the vision is to provide 24x7 power supply across the country in the coming years. This is a herculean task. Today, the Power Sector of the Country is marred by various problems such as delay in completion of power projects due to difficulty in obtaining of various clearances, acute shortage of coal, uncertainty and low PLF of various power plants due to non-availability of coal linkages, huge losses incurred by Discoms, very high rate of AT&C losses, etc. Thus, there is an urgent need to redress these issues by taking appropriate remedial measures to salvage power sector.

1.2 The Ministry of Power is primarily responsible for the development of electrical energy in the country. The Ministry's responsibility *inter-alia* include 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, hydro power generation, transmission and distribution.

1.3 The main items of work dealt with by the Ministry of Power are as given below:

- General Policy in the electric power sector and issues relating to energy policy and coordination thereof. (Details of short,

medium and long-term policies in terms of formulation, acceptance, implementation and review of such policies, cutting across sectors, fuels, regions and intra-country and inter-country flows)'

- All matters relating to hydro-electric power (except small/ mini/micro hydel projects of and below 25 MW capacity), thermal power and transmission and distribution system network;
- Research, development and technical assistance relating to hydro-electric and thermal power, transmission system network and distribution systems in the States/UTs;
- Administration of the Electricity Act, 2003, (36 of 2003), the Energy Conservation Act, 2001 (52 of 2001), the Damodar Valley Corporation Act, 1948 (14 of 1948) and Bhakra Beas Management Board as provided in the Punjab Reorganisation Act, 1966 (31 of 1966)
- All matters relating to Central Electricity Authority, Appellate Tribunal Electricity and Central Electricity Regulatory Commission;
- Rural Electrification;
- Power schemes and issues relating to power supply/ development schemes/programmes/decentralized and distributed generation in the States and Union Territories;
- Matters relating to the following Undertakings/Organizations;

  (a) Damodar Valley Corporation (DVC)

  (b) Bhakra Beas Management Board (except matters relating to irrigation);

  (c) NTPC Limited;

  (d) NHPC Limited;

  (e) Rural Electrification Corporation Limited (REC);

  (f) North Eastern Electric Power Corporation Limited (NEEPCO);

  (g) Power Grid Corporation of India Limited (PGCIL);

  (h) Power Finance Corporation Limited (PFC);

  (i) THDC India Limited;

  (j) SJVN Limited;

(k) Central Power Research Institute (CPRI);

(l) National Power Training Institute (NPTI);

(m) Bureau of Energy Efficiency (BEE);

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

1.4 In all technical and economic matters, the Ministry of Power is assisted by the Central Electricity Authority (CEA). While the Authority (CEA) is a Statutory Body constituted under section 3 of the repealed Electricity (Supply) Act, 1948 and continued under section 70 of the later replaced by the Electricity Act, 2003, where similar provisions exist, the office of the CEA is an "Attached Office" of the Ministry of Power. The CEA is responsible for technical coordination and supervision of programmes and is also entrusted with a number of statutory functions. CEA is headed by a Chairperson, who is also *ex-officio* Secretary to the Government of India and comprises six full time Members of of the rank of *Ex-officio* Additional Secretaries to the Government of India. They are designated as Member (Thermal), Member (Hydro), Member (Economic & Commercial), Member (Power System), Member (Planning) and Member (Grid Operation and Distribution). 14 subordinate offices are functioning under the control of the Central Electricity Authority. The Ministry of Power has a monitoring system for the capacity addition programmes for timely execution of the cleared projects. The monitoring mechanism operates at 3 broad levels *viz*. by Central Electricity Authority, by the Ministry of Power and through the Power Project Monitoring Panel (PPMP).

1.5 The National Electricity Policy which has been evolved in consultation with and taking into account views of the State Governments, Central Electricity Authority (CEA), Central Electricity Regulatory Commission (CERC) and other stakeholders, aims at laying guidelines for accelerated development of the power sector, providing supply of electricity to all areas and protecting interests of consumers and other stakeholders keeping in view availability of energy resources, technology available to exploit these resources, economics of generation using different resources, and energy security issues. The National Electricity Policy (2005) aimed at achieving the following objectives:

- Access to Electricity — Available for all households in next five years
- Availability of Power — Demand to be fully met by 2012. Energy and peaking shortages to be overcome and adequate spinning reserve to be available.

- Supply of Reliable and Quality Power of specified standards in an efficient manner and at reasonable rates.
- Per capita availability of electricity to be increased to over 1000 units by 2012.
- Minimum lifeline consumption of 1 unit/household/day as a merit good by year 2012.
- Financial Turnaround and Commercial Viability of Electricity Sector.
- Protection of consumers' interests.

II. ANALYSIS OF DEMANDS FOR GRANTS (2014-15)

1.6 The Minister of State for Power laid on the table of the Lok Sabha, the detailed Demands for Grants (2014-15) for the Ministry of Power on 24th July, 2014. The Demands show a budgetary provision of GBS of Rs. 9,642.00 crore. The Central Plan Outlay including IEBR *i.e*. Rs. 50,742.02 crore, however stands at Rs. 60,384.02 crore. The Head-wise Demands for Grants of the Ministry are given as per Annexure-I. The Programmes and Schemes of the Ministry within the financial provisions made under the Demands are briefly as under:—

1. **Secretariat:** Provision is made for expenditure on establishment matters for the Secretariat of the Ministry of Power, under various schemes.
2. **Central Electricity Authority:** The Central Electricity Authority (CEA) as a statutory organization is responsible for overall power sector planning, coordination, according concurrence to hydro-electric schemes, promote and assist the timely completion of projects, specifying of technical standards, safety requirements, Grid Standards as well as conditions for installation of meters applicable to the Power Sector of the country. CEA advises the Central Governments on the National Electricity Policy and formulates short term Prospective Plans for development of the electricity system. It also has the mandate to collect, record and make public, data related to all segments of the electricity sector, carry out investigations and promote research.
3. **Research & Development:** Central Power Research Institute, Bengaluru 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.

4. **Training:** National Power Training Institute is engaged in imparting training in various aspects of power sector including operation and maintenance of power stations.

5. **Central Electricity Regulatory Commission:** Under the provision of the ERC Act, 1998, the Central Government had constituted the Central Electricity Regulatory Commission (CERC). The Central Commission continues as a statutory body under the Electricity Act, 2003, which has come into force with effect from 10th June, 2003.

6. **Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY):** This scheme of rural Electricity Infrastructure and Household Electrification has been introduced in April, 2005 for providing access to electricity to all rural households. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under the scheme, projects can be financed with 90% capital subsidy for provision of Rural Electricity Distribution Backbone (REDB), creation of Village Electrification Infrastructure (VEI) and Decentralized Distributed Generation and Supply. REDB, VEI and DDG would also cater to the requirement of agriculture and other activities. Under this scheme un-electrified Below Poverty Line (BPL) households will get electricity connection free of charge. To increase the coverage of small habitations, Government sanctioned electrification of habitations upto 100 population instead of 300. RGGVY is a flagship Scheme for creation of Rural Electricity Infrastructure and household electrification.

10. **Funds for Evaluation Studies and Consultancy:** This provision is for conducting evaluation studies of various projects/ programmes/schemes.

11. **Appellate Tribunal for Electricity:** Under the provisions of Electricity Act, 2003, the Central Government has set up the Appellate Tribunal for Electricity. It hears appeals against the orders of the adjudicating officer or the Appropriate Commissions under the Electricity Act, 2003. Under the provisions of the Petroleum and Natural Gas Regulatory Board Act, 2006, APTEL is the Appellate Tribunal for the purpose of that Act.

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

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

14. **Energy Conservation:** The funds would be utilized for carrying out the awareness creation on Energy Conservation through print, electronic and other media for general public. Continuation of EC awards and paintings competition on Energy Conservation. The fund would also be utilized to implement the National Mission for Enhanced Energy Efficiency (NMEEE) and to upscale the efforts to create and sustain market for energy efficiency to unlock investments.

15. **Bureau of Energy Efficiency (BEE):** Fund would be provided to BEE for implementation of its various energy efficiency initiatives in the areas of household lighting, commercial buildings, Standard & Labelling (S&L) appliances, Demand Side Management in Agriculture/Municipalities, SMEs and large industries including the initiation of the process for development of Energy Consumption norms for industrial sub sectors, capacity building of SDAs etc. These initiatives by Government will enhance efficiency of energy consumption and reduce the rate of growth of energy consumption.

16. **Re-structured Accelerated Power development Reforms Programme (R-APDRP):** The objective of the programme is to facilitate State Power Utilities to reduce the level of AT&C loss to 15%. The programme has two major components. Part-A includes projects for establishment of information technology based energy accounting and audit system leading to finalization of verifiable base-line AT&C loss levels in the project areas. Part-B envisages distribution network strengthening investments leading to reduction in loss level.

17. **Assistance to Forum of Regulator for Capacity Building:** There is a provision for providing funds to Forum of Regulators for capacity building and availing consultancy.

19. **Financial Support for Debt Restructuring of DISCOM:** The scheme has been formulated and approved by Govt. to enable the turnaround of the State DISCOMs and ensure their long term viability. The scheme contains measures to be taken by the State DISCOMs and State Govt. for achieving financial turnaround by restructuring their debt with support through a Transitional Finance Mechanism by Central Govt.

21. National Electricity Fund (Interest Subsidy Scheme): The National Electricity Fund (NEF) is being set up to provide interest subsidy on loans to be disbursed to the Distribution Companies (DISCOMS) both in the Public and Private Sector, to improve the distribution network for areas not covered by RGGVY and R APDRP Project areas. The pre condition for eligibility are linked to certain reform measures taken by States and the amount of interest subsidy is linked to the progress achieved in reforms linked parameters.

25. **Smart Grid:** The scheme of Smart Grid is one of the schemes included in the 12th Plan with an outlay of Rs. 1,000 crore. The scheme envisages setting up of an institutional mechanism by launching 'National Smart Grid Mission' which would serve the need of an electrical grid with automation, communication and IT systems that can monitor power flows from points of generation to point of consumption and ensure control of power flow or curtailment of loads matching generation on real time basis.

26. **Power Sector Support to NCT of Delhi:** Delhi's transmission system lacks adequate capacity/redundancy, resulting in frequent outages/power cuts in the National Capital. Accordingly Ministry of Power has decided to provide special support to the Government of NCT of Delhi for strengthening of the transmission system.

27. **Deen Dayal Upadhyaya Feeder Separation Scheme:** The scheme is included in the 12th Plan with an outlay of Rs. 2,500.00 crore. The scope of scheme will cover Feeder Separation in rural areas for agriculture and non agricultural supply.

28. **Integrated Power Development Scheme:** The scope of scheme includes the following components:-

    (a) Filling up of critical gaps in sub-transmission and distribution network in the country; and

    (b) 100% metering of all consumers throughout the country.

29. **Power System Operation Corporation Ltd. (POSOCO):** The scheme envisages acquiring the entire equity currently held by M/s PGCIL in M/S POSOCO and thereby convert it into a wholly owned Govt. of India company.

30. **220 KV transmission line from Srinagar to Leh *via* Kargil:** The Cabinet Committee on Economic Affairs has, in its

meeting held on 2.1.2014, approved the proposal for construction of 220kV Transmission System from Alusteng (Srinagar) to Leh (*via* Drass, Kargil & Khalsti 220/66 PGCIL sub-stations) and 66 PGCIL interconnection system for Drass, Kargil, Khalsti and Leh sub-stations in Jammu & Kashmir (J&K).

31. **Green Energy Corridor:** The scheme is proposed for maximization of renewable energy generation and integration with the main grid without compromising on the security and stability of power system.

32. **Power System Development Fund (PSDF):** PSDF Scheme has been approved by the Cabinet in the last Financial Year. The scheme envisages strengthening of existing distribution and transmission infrastructure by part funding through Grants. The Scheme would not require any net budgetary support from MOP as the expenditure on the projects would be funded from the receipts accruing from the regulatory charges levied by Central Electricity Regulatory Commission (CERC).

33.02 **Power System Improvement Project in North Eastern Region except Sikkim and Arunachal Pradesh:** World Bank will fund for six NER states *viz*. Assam, Manipur, Meghalaya, Mizoram, Tripura and Nagaland, the aforesaid new project (on advice of DEA and Planning Commission, projects in sensitive Border Areas *viz.*, Arunachal Pradesh and Sikkim were excluded from the ambit of World Bank financing. Therefore, Intra-State Transmission & Distribution projects for Sikkim and Arunachal Pradesh have been segregated for implementation through budgetary support from Government of India.

33.04 **Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim:** A comprehensive scheme for strengthening of transmission, sub-transmission and distribution system in the entire NER including Sikkim has been conceptualized.

34.1 **NTPC Limited:** NTPC was setup in 1975 as a Central Sector generating company for the development of thermal power. The Corporation has grown rapidly to become the largest thermal generating company in India. Company has diversified into hydro power, power trading, coal mining etc. In order to embody its diverse operations the company has been rechristened as NTPC Limited. As on 31st December, 2013 the authorized share capital of NTPC is Rs. 10,000 crore and paid up capital is Rs. 8,245.46 crore. NTPC including its JVs

& subsidiaries has installed capacity of 42,454 MW as on 31 December, 2013.

34.2 **NHPC Limited:** NHPC Ltd. was incorporated in 1975 under Companies Act 1956. NHPC is a scheduled-A mini ratna enterprise of the Government of India with an authorized share capital of Rs. 15,000 crore and paid up capital as on 31 March, 2013 is Rs. 11,071.00 crore. The total installed capacity of NHPC as 31.12.2013 including that of NHDC (Joint Venture Company with Govt. of Madhya Pradesh) is 5,927 MW.

34.3 **Damodar Valley Corporation (DVC):** DVC was established in 1948 for the promotion and operation of irrigation, water supply, drainage, generation, transmission and Hydro- electric Power in Damodar Valley. The total installed capacity of DVC as on 31.12.2013 is 6,907.20 MW.

34.4 **North Eastern Electric Power Corporation (NEEPCO):** The North Eastern Electric Power Corporation Limited (NEEPCO), a Schedule A company under Ministry of Power, Government of India was set up on 2nd April, 1976 with the objectives of developing the power potential of the NE Region of the country through planned development and commissioning of power projects which in turn would promote the development of the region as a whole. Authorized share capital of the company is Rs. 5,000 crore. The existing installed capacity is 1,130 MW comprising of 755 MW of Hydro and 375 MW of Gas Based Power.

34.5 **SJVN Limited (Formerly Nathpa Jhakri Power Corporation Limited NJPC): (**Formerly Nathpa Jhakri Power Corporation Limited NJPC) SJVN Limited (formerly Nathpa Jhakri Power Corporation) was established on 24th May, 1988 as a joint venture of the Government of India (GoI) and the Government of Himachal Pradesh (GoHP) with an equity participation in the ratio of 75:25 respectively, to plan, investigate, organize, execute, operate and maintain Hydro-electric power project. Govt. of India through an Initial Public Offer (IPO) of SJVN in the month of May, 2010, offered 10.03 per cent of its share to the public and financial institutions. SJVN is a Schedule-A, Mini Ratna company. The existing installed capacity is 1500 MW as on 31.12.2013.

34.6 **THDC India Limited:** THDC INDIA LTD., a Mini Ratna category I and ISO 9001 2008 certified PSU Company, was incorporated as a joint venture of Government of India and

Government of Uttar Pradesh in July, 1988 to develop, operate and maintain the 2400 MW Tehri Hydro Power Complex and other projects. The Tehri Hydro Power Complex (2400 MW) comprising Tehri HEP (1000MW) is under operation since 2007 and Koteshwar HEP (400 MW) is under operation since April 2012.

34.7 **PGCIL:** Power Grid Corporation of India Limited (POWERGRID) was incorporated as a Government of India enterprise on 23 October, 1989 under the Companies Act, 1956 with an authorized share capital of Rs. 5,000 crore, which has been enhanced to Rs. 10,000 crore. With the commissioning of 765 kV S/c Raichur-Solapur transmission line, interconnection of Southern grid synchronously with rest of the National Power Grid is achieved on 31st December, 2013.

III. ANNUAL PLAN OUTLAY

1.7 During Regular Budget of 2014-15, Ministry of Power sought an outlay Rs. 9,642 crore which was accepted without any reduction by Planning Commission and the Ministry of Finance. The total outlay for the year 2014-15 is Rs. 60,384.02 crore comprising IEBR of Rs. 50,742.02 crore and GBS of Rs. 9,642.00 crore. Details are as given in the table below:—

Table: 1.7 — Annual Plan Outlay

(Rs. in crore)

Sl. No.	Organisations/ Schemes	GBS	IEBR	Total
1	2	3	4	5
A.	**IEBR of CPSUs**			
1.	NTPC	0.00	22400.00	22400.00
2.	NHPC	478.80	2745.46	3224.26
3.	PGCIL	0.00	20000.00	20000.00
4.	DVC	0.00	2764.99	2764.99
5.	THDCIL	62.92	793.76	856.68
6.	SJVNL	0.00	1091.93	1091.93
7.	NEEPCO	142.10	945.88	1087.98

1	2	3	4	5
B.	**GBS for other MoP Schemes**			
1.	Computerization & Office Equipment	0.75	0.00	0.75
2.	Central Electricity Authority	46.29	0.00	46.29
3.	Central Power Research Institute	295.53	0.00	295.53
4.	National Power Training Institute	60.52	0.00	60.52
5.	Subsidy for Rural Electrification-Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY)*	5144.09	0.00	5144.09
6.	Funds for evaluation studies and consultancy	1.50	0.00	1.50
7.	Comprehensive Award Scheme for Power Sector	1.00	0.00	1.00
8.	Energy Conservation	107.65	0.00	107.65
9.	BEE**	139.55	0.00	139.55
10.	APDRP (Grant)	144.50	0.00	144.50
11.	Assistance to FOR for Capacity Building	2.25	0.00	2.25
12.	Loan to PFC under APDRP***	1116.54	0.00	1116.54
13.	National Electricity Fund (NEF)/ Interest subsidy sch.	50.69	0.00	50.69
14.	Acquisition of coal bearing Areas	915.00	0.00	915.00
15.	Acquisition of coal bearing Areas	-915.00	0.00	-915.00
16.	220 kV Transmission line from Srinagar to Leh *via* Kargil	268.14	0.00	268.14
17.	Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim	175.18	0.00	175.18
18.	Financial Support for Debt Restructuring of DISCOMs	400.00	0.00	400.00

1	2	3	4	5
19.	Power System Improvement Project in NE region (except Sikkim & Arunachal Pradesh)	200.00	0.00	200.00
	NEW SCHEME		0.00	
20.	Green Energy Corridors	1.00	0.00	1.00
22.	Power System Operation Company (POSOCO)	1.00	0.00	1.00
22.	Smart Grid	1.00	0.00	1.00
24.	PSDF#			
(i)	Transfer to Power System Development Fund (PSDF)	1.00	0.00	1.00
(ii)	Scheme for Power System Development to be met from PSDF	1.00	0.00	1.00
(iii)	Amount met from Power System Development Fund	-1.00	0.00	-1.00
25.	Power Sector Support to NCT of Delhi	200.00	0.00	200.00
26.	Deendayal Upadhyaya Gram Jyoti Yojana	500.00	0.00	500.00
27.	Integrated Power Development Scheme	100.00	0.00	100.00
	Total	9642.00	50742.02	60384.02

* This includes Rs. 710.00 crore for Scheduled caste Sub Plan (SCSP) & Rs. 293.99 crore for North Easten Regions.

** This includes Rs. 2.00 crore grant as Externally Aided Projects for BEE.

*** This includes Rs. 90.00 crore for Scheduled caste Sub Plan (SCSP) & Rs. 152.95 crore for North Eastern Regions.

Ministry of Power had asked for Rs. 2500 crore under PSDF scheme. However only token provision was agreed to by Ministry of Finance (MoF) pending finalization of budgetary and accounting procedure.

1.8 The Committee was informed that the internal accruals out of operations (of CPSUs) and borrowings (both domestic and foreign) constitute IEBR. The capex plan of CPSUs (for generation/transmission projects) is funded substantially through I&EBR. In fact, the budgetary support (to capex plan) is provided only to Hydel PSUs (NHPC, THDC and NEEPCO), that too, on a limited scale. Power Sector CPSUs have capex target in excess of Rs. 50000 crore per year and they have

meeting this target. The expenditure under IEBR is not routed through government budget/demand for grant. It is managed by the Board of the respective PSUs.

1.9 It was further informed that the GBS on the other hand is the gross budgetary support/demand for grant provided from out of Consolidated Fund of India for implementation of various schemes of the Ministry, forming part of the Five Year Plan/Annual Plans. For the 12th Plan, GBS size is Rs. 54,279 crore. The expenditure under GBS is routed through Ministry's budget.

1.10 The utilization of Gross Budgetary Support during the 11th Five Year Plan and the 12th Plan so far as against the Budget Estimate is shown below:—

Table: 1.10 — Utilization of GBS during the 11th and 12th Plan

(Rs. in crore)

Sl.No.	Year	BE			RE			Actual		
		Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
1.	2007-08	5483.00	411.19	5894.19	4350.00	404.53	4754.53	4289.59	235.24	4524.83
2.	2008-09	6000.00	395.76	6395.76	6100.00	271.51	6371.50	6049.97	196.05	6246.02
3.	2009-10	9230.00	276.73	9506.73	6814.00	216.80	7030.80	6711.98	208.74	6920.72
4.	2010-11	10630.00	133.5810763.58		8725.22	114.69	8839.91	8601.80	107.36	8709.16
5.	2011-12	9642.00	137.68	9779.68	6051.00	131.34	6182.34	4699.98	127.37	4827.35
6.	2012-13	9642.00	133.77	9775.77	4708.00	410.86	7901.93	2536.71	3526.88	6063.59
7.	2013-14	9642.00	671.70	10313.7	5000.00	410.86	5410.86	4529.72	650.81	5180.53
8.	2014-15	9642.00	126.50	9768.5	NA	NA	NA	473.78	53.01	526.79

1.11 The actual utilization of plan outlay since the year 2007-08 as against the Budget Estimates is shown below:—

Table: 1.11 — Actual Utilization against the Budget Estimates

Year	BE (Rs. in crore)	RE (Rs. in crore)	Actual Utilization (Rs.in crore)	% of Budget Estimate
1	2	3	4	5
2007-08	33,153.26	30,690.38	25,887.63	78.08%
2008-09	40,460.10	36,306.47	37,656.00	93.07%

1	2	3	4	5
2009-10	53,126.27	45,269.60	39,884.23	75.07%
2010-11	60,751.42	45,668.03	43,144.16	71.02%
2011-12	66,382.73	62,791.73	46,083.87	69.42%
2012-13	62,424.50	54,696.01	52,976.99	84.86%
2013-14	59,329.41	53,962.89	56,749.24	95.65%
2014-15	60,384.02	-	-	-

1.12 The Plan & Non-Plan quarter-wise utilization of the budget allocations for the last three years is given below:—

Table: 1.12 — Quarter-wise Utilization

Plan *(Rs. in crore)*

FY (Allocation in BE)		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Total
2012-13 (9642.00)	Actuals	268.92	1431.92	250.01	585.86	2536.71
	Percentage	2.79	14.85	2.59	6.08	26.31
2013-14 (9642.00)	Actuals	1761.70	834.41	1285.62	647.99	4529.72
	Percentage	18.27	8.65	13.33	6.72	46.98
2014-15 (9642.00)	Actuals	101.16				
	Percentage	1.05				

Non-Plan (Rs. in crore)

FY (Allocation in BE)		Qtr. 1	Qtr. 2	Qtr. 3	Qtr. 4	Total
2012-13 (133.77)*	Actuals	30.33	26.34	24.44	3445.77	3526.88
	Percentage	22.71	19.72	18.30	2579.56	2640.28
2013-14 (671.70)**	Actuals	31.53	561.90	28.43	28.95	650.81
	Percentage	4.69	83.65	4.23	4.31	96.89
2014-15 (126.50)	Actuals	35.44				
	Percentage	28.02				

* The last column in Non-plan actual for 2012-13 is including Rs. 3326.39 crore for payment of DESU Dues for GNCT of Delhi and Rs. 90.21 crore for waiver of inrest of NEEPCO.

** The Non-plan expenditure includes a one time payment of Rs. 536.30 crore for Lahori Nagpala HEP in second quarter.

1.13 When the Committee enquired about the reasons for variation in Budget Estimates and Actual utilization of fund for the year 2013-14, the Ministry of Power in their written reply have furnished the following information:—

Table: 1.13 — Reasons for Variation in BE and Actual Utilization

(Rs. in crore)

Sl. No.	Name of the Schemes/ CPSU	BE 2013-14	RE 2013-14	Actual 2013-14	Reasons for improper utilization/shortfall
1	2	3	4	5	6
1.	RGGVY	4500.00	3137.65	2938.52	Non-award of 273 projects sanctioned during 2013-14 under 12th Plan involving a sanction cost of Rs. 23594 crore (subsidy Rs. 21235 crore) Non-drawl of final installment by Project Implementing agencies in 209 closed projects due to non-fulfillment of requisite conditionalities. Slow progress of works under 10th and 11th Plan including Phase-II in the States of Chhattisgarh, Uttar Pradesh, Madhya Pradesh, Bihar & Jharkhand.
2.	Financial support for DISCOMs	1500.00	125.40	0.00	None of the participating States has filed any claim, hence, the provision made in the grant for the year 2013-14 could not be utilized.
3.	NHPC	995.83	628.01	628.01	As the cut was imposed at RE Stage as per trend of expenditure, therefore, the amount was surrendered.
4.	R-APDRP	575.00	700.00	648.70	The excess expenditure was required as per progress made in the scheme.
5.	Energy Conservation	564.45	16.00	16.00	Saving is due to delay in approval of the scheme and due to non-finalization of proposed scheme NMEEE.
6.	NEEPCO	447.00	111.00	111.00	The amount surrendered due to non-receipt of approval of RCEs of Kameng HEP and Pare HEP.

1	2	3	4	5	6
7.	CPRI	298.73	20.00	17.76	Saving is due to pending approval of EFC/ SFC for the schemes of CPRI.
8.	220kV Transmission line from Srinagar to Leh *via* Kargil	226.00	65.40	65.40	The approval of CCEA received only on 02.01.2014, hence the savings.
9.	Bureau of Energy Efficiency	193.41	77.60	66.72	The saving is due to non-finalization of the proposed scheme and non-receipt of UCs from different SDAs.
10.	National Electricity Fund	151.92	10.00	0.00	None of the participating States has filed any claim, hence, the provision made in the grant for the year 2013-14 could not be utilized.
11.	THDCIL	133.72	30.00	30.00	The amount surrendered due to the work on the projects of Vishnugad Pipalkoti and Dhukwan could not be started due to non-issuance of G.O. by Government of Uttarakhand for diversion of forest land for these projects.

1.14 When the Committee desired to know as to why only Rs. 1 crore has been provided for Smart Grid, whereas it has gained greater importance as the whole nation has been integrated into one National Grid, the Ministry in their reply has stated as under:—

> "Smart Grid Vision and Roadmap for India was approved by Ministry of Power in August, 2013 which also envisages the launch of a National Smart Grid Mission (NSGM) which will have its own resources, independence & statutory authority and functional & financial autonomy to plan and monitor implementation of the policies and programs prescribed in the roadmap.
>
> NSGM shall act as the focal point for coordinating all the activities being undertaken for development of Smart Grid in India across the different ministries of GoI and shall enable the integration of all such initiatives that are underway in isolation in various ministries toward creation of Smart Grid infrastructure.
>
> Under the NSGM, it is proposed to build Smart Grid systems in 30 cities where R-APDRP (including SCADA/DMS) systems have been successfully implemented; and further extend the systems of smart grid to other city infrastructure and services to build smart cities.

Activities pertaining to development of Smart Electricity Grid are as follows:—

- Deployment of Smart Meters and AMI
- Development of medium sized microgrids
- Development of distributed generation in form of rooftop PVs etc. and integration of renewables
- Real time monitoring and control of distribution transformers
- Provision of harmonic filters and other power quality improvement measures
- Creation of EV charging infrastructure for supporting proliferation of EVs
- Sub-station renovation and modernization with deployment of GIS wherever economically feasible

The outlay during 12th Plan for the Smart Grid is envisaged at Rs. 1000 crore. The Provision for Annual Plan is normally done on the basis of anticipated level of expenditure in a particular Financial Year. As the process of appraisal of the project was in the initial stages at the time of finalisation of annual plan of 2014-15, only a token provision of Rs. 1 crore was provided for."

IV. 12th FIVE YEAR PLAN

1.15 The 12th Five Year Plan (2012-17) component has been approved in 57th Meeting of National Development Council (NDC) held on 27th December, 2012. The 12th Plan has identified 25 monitorable targets which *inter alia* contain a monitorable target for power sector to provide electricity to all villages and reduce AT&C losses to 20% by the end of the 12th Five Year Plan.

1.16 The Planning Commission has fixed generation capacity addition target of the order of 88537 MW from the conventional sources comprising of 10897 MW hydro power, 72340 MW thermal power and 5300 MW nuclear power. The sector-wise breakup of the planned capacity addition is 26182 MW in Central Sector, 15530 MW in State Sector and 46825 MW in Private Sector. Whereas, the proposed Renewable Capacity Addition during the 12th Plan is 30000 MW.

1.17 The Planning Commission assessed an Outlay of Rs. 4,40,795.84 crore during the 12th Plan period for the Central Sector comprising of Rs. 3,86,516.84 crore of Internal & Extra Budgetary Resources (IEBR)

to be raised by the CPSUs themselves and Rs. 54,279.00 crore of Gross Budgetary Support (GBS), including RGGVY Rs. 23,397.44 crore. The actual utilization upto 31.10.2014, during the 12th Plan period is Rs. 1,34,995.42 crore including Rs. 1,24,718 crore as IEBR and Rs. 10,277.42 crore as GBS.

1.18 The CPSU-wise and scheme-wise break-up of financial performance so far in the 12th Plan is as under:—

Table: 1.18 — Financial Performance during the 12th Plan

(Rs. in crore)

Sl.No.	Activity/Organization		IEBR	GBS	Total
1	2		3	4	5
A.	**Investment in PSUs**				
1.	NTPC Ltd.	Estimates	219612.50	0.00	219612.50
		Achievements	41456.18	0.00	41456.18
2.	NHPC	Estimates	27312.04	2056.91	29368.95
		Achievements	5627.91	898.38	6526.29
3.	POWERGRID	Estimates	102034.00	0.00	102034.00
		Achievements	42361.00	0.00	42361.00
4.	DVC	Estimates	14509.65	0.00	14509.65
		Achievements	5236.43	0.00	5236.43
5.	THDC India Ltd.	Estimates	6781.86	516.20	7298.06
		Achievements	616.12	119.45	735.57
6.	SJVNL	Estimates	10400.00	0.00	10400.00
		Achievements	1846.80	0.00	1846.80
7.	NEEPCO	Estimates	5866.79	406.18	6272.97
		Achievements	2308.03	220.68	2528.71
	Total (A)	Estimates	386516.84	2979.29	389496.13
		Achievements	99452.47	1238.51	100690.98
B.	**MoP Schemes (other than CPSUs)**				
1.	Rajeev Gandhi Grameen Vidyutikaran Yojana (RGGVY)	Estimates	0.00	23397.44	23397.44
		Achievements	0.00	3636.46	3636.46

1	2		3	4	5
2.	Restructured Accelerated Power Development Reforms Programme (R-APDRP)	Estimates	0.00	10830.00	10830.00
		Achievements	0.00	1883.19	1883.19
3.	National Electricity Fund (NEF)	Estimates	0.00	3601.00	3601.00
		Achievements	0.00	0.00	0.00
4.	Strengthening of Transmission System in the States of Arunachal Pradesh & Sikkim	Estimates	0.00	3014.00	3014.00
		Achievements	0.00	0.00	0.00
5.	Feeder Separation Scheme	Estimates	0.00	2500.00	2500.00
		Achievements	0.00	0.00	0.00
6.	Energy Conservation	Estimates	0.00	1696.00	1696.00
		Achievements	0.00	53.00	53.00
7.	220 KV Transmission Line from Srinagar to Leh *via* Kargil	Estimates	0.00	1628.00	1628.00
		Achievements	0.00	65.40	65.40
8.	Central Power Research Institute (CPRI)	Estimates	0.00	1368.90	1368.90
		Achievements	0.00	58.12	58.12
9.	Financial Debt Restructuring of DISCOMs	Estimates	0.00	1000.00	1000.00
		Achievements	0.00	0.00	0.00
10.	Other MoP Schemes	Estimates	0.00	2264.37	2264.37
		Achievements	0.00	130.63	130.63
	Total(B)	Estimates	0.00	51299.71	51299.71
		Achievements	0.00	5826.80	5826.80
	Total GBS (A) + (B)	Estimates	386516.84	54279.00	440795.84
		Achievements	99452.47	7065.31	106517.78

#Achievement is as on 31.03.2014.

1.19 A capacity addition target of 88537 MW excluding 30000 MW of Renewable Energy Sources has been fixed by the Planning Commission for 12th Plan period. The details are as under:—

Table: 1.19 — Capacity Addition Target for the 12th Plan

(Figures in MW)

	Hydro	Thermal Breakup			Total Thermal	Nuclear	Total
		Coal	Lignite	Gas/ LNG			
Central Sector	6004	13800	250	827.6	14878	5300	26182
State Sector	1608	12210	0	1712.0	13922	0	15530
Private Sector	3285	43270	270	0.0	43540	0	46825
All-India	10897	69280	520	2539.6	72340	5300	88537

1.20 When the Committee enquired about the estimation in regard to the fund requirement of the power sector during the 12th Five Year Plan period, it was stated by the Ministry that the estimated requirement for power sector during the 12th Plan will be Rs. 15,01,666 crore, whereas, Rs. 3,18,573 crore will be required for renewable energy sector. Thus, the total fund requirement during 12th Plan for the power sector including renewable energy is projected at Rs. 18,20,239 crore.

V. MINISTRY OF POWER SCHEMES

A. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

1.21 This Scheme of Rural Electricity Infrastructure and Household Electrification was introduced by the Government of India in April, 2005 for creating and strengthening the rural distribution network of the country to provide access to electricity to all Rural Households over a period of four years. Rural Electrification Corporation (REC) is the nodal agency for implementation of this programme.

1.22 Under the Programme 90% grant is provided by Government of India and 10% as loan by REC to the State Governments. The Scheme also provides for funding of electrification of all un-electrified Below Poverty Line (BPL) households with 100% capital subsidy.

1.23 Under this Scheme, 90% Capital Subsidy is being 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) Decentralised Distributed Generation (DDG) and Supply System from conventional sources for Villages/Habitations where grid supply is not cost effective and where Ministry of Non-Conventional Energy Sources would not be providing electricity through their programme(s).

1.24 Further, as per new definition, a village would be declared as electrified if:—

(a) 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);

(b) Electricity is provided to public places like schools, Panchayat Office, Health Centres, Dispensaries, Community Centres etc.; and

(c) The number of household electrified should be at least 10% of the total number of households in the village."

1.25 The Ministry of Power has informed that as on 31.08.2014, cumulatively, electrification works in 1,08,642 un-electrified villages (97%), 3,11,331 intensive electrification of villages (83%) has been completed and free electricity connections to 2.19 crore BPL households (80%) have been released under the scheme. The State-wise details of scope and achievement under RGGVY as on 31.08.2014 are furnished at **Annexure-II**.

1.26 Government of India has approved continuation of RGGVY in 12th Plan for electrification of villages and habitations having population of 100 and above. Under the scheme, 273 projects have been sanctioned during September, 2013 to March, 2014 covering electrification of 12,468 un-electrified villages, intensive electrification of 2,31,935 partially electrified villages and release of free electricity connections to 1.3 crore BPL households.

1.27 As per the Ministry of Power, the electrification works in projects of Phase-I (235 projects and 341 projects under 10th & 11th Plan respectively) are likely to be completed by December, 2014

and final closure by March, 2015. However, electrification works under Phase-II of 11th Plan (72 Projects) are in various stages of progress as they were sanctioned during November, 2011 to February, 2012. It is expected to complete the electrification works of Phase-II projects in FY 2015-16. The award process of 12th Plan projects has started and the project implementation is targeted for completion in 2 years around by 2018-19.

1.28 The Committee was informed that the Planning Commission has approved an outlay of Rs. 35,447 crore for continuing RGGVY in 12th & 13th Plan, out of which Rs. 23,397 crore will be met through GBS for 12th Plan and remaining Rs. 12,050 crore would spillover to 13th Plan. Against the total outlay, cumulatively, Ministry of Power has disbursed an amount of Rs. 29,800.29 crore up to 31.07.2014.

1.29 The details of budget allocations *vis-à-vis* utilization during each year since the inception of RGGVY scheme is given below:—

Table: 1.29 — Budget Allocation *vis-à-vis* Utilization of Funds under RGGVY

(Rs. in crore)

Year	Allocation	Capital Subsidy Released by Ministry of Power
2005-06	1,500.00	1,500.00
2006-07	3,000.00	3,000.00
2007-08	3,944.00	3,913.45
2008-09	5,500.00	5,500.00
2009-10	5,000.00	5,000.00
2010-11	5,000.00	5,000.00
2011-12	3,544.00	2,237.31
2012-13	4,900.00	697.94
2013-14	4,500.00	2,938.52
2014-15	5144.09	76.15[#]
Total	36,888.09	29,787.22

[#]till Aug., 2014.

1.30 The details of target and achievement of un-electrified villages and release of free electricity connection to BPL households during the 12th Five Year Plan are as under:—

Table: 1.30 — Targets and Achievement under RGGVY

Year	Un-electrified Villages		BPL Households	
	Target	Achievement	Target	Achievement
2012-13	6000	2587 (43%)	3680000	1296541 (35%)
2013-14	3300	1197 (36%)	2000000	961730 (48%)
2014-15#	15000*	6600 (44%)	1500000	270470 (18%)

#(as on 31.08.2014)
*Include un-electrified villages and intensive electrification of already electrified villages

1.31 The Ministry of Power has given the following reasons for the poor utilization of fund allocated for the year 2013-14:—

"Non-award of 273 projects sanctioned during 2013-14 under 12th Plan involving a sanction cost of Rs. 23594 crore (subsidy Rs. 21235 crore)

Non-drawl of final installment by Project Implementing agencies in 209 closed projects due to non-fulfillment of requisite conditionalities.

Slow progress of works under 10th and 11th plan including Phase-II in the States of Chattisgarh, Uttar Pradesh, Madhya Pradesh, Bihar & Jharkhand."

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

1.32 Re-structured APDRP was approved as Central Sector Scheme on 31.07.2008 with total outlay of Rs. 51,577 crores. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction upto 15%. The coverage of programme is urban areas-towns and cities with population more than 30,000 (10,000 for special category states). Private distribution utilities are not covered under the programme.

1.33 Projects under the scheme are taken up in two parts. Part-A is for establishing IT enabled system for energy accounting/ auditing and Supervisory Control and Data Acquisition (SCADA) for big cities (population: 4 lacs and Annual Energy Input: 350MU) whereas Part-B is for regular distribution up-gradation and strengthening projects. The outlay for Part-A (IT enabled system and SCADA) is Rs. 10,000 crores and that for Part-B is Rs. 40,000 crores. Initially funds for projects under both the parts would be provided through loan. The

entire amount of loan for Part-A projects would be converted into grant on the completion of the project and up-to 50% (90% for special category States) loan of Part-B projects would be converted into grant on achieving the 15% AT&C loss in the project area on a sustainable basis.

1.34 The completion period for both Part-A and Part-B projects are five years from the sanction date. Part-C of the programme is an enabling component for implementation of R-APDRP. Provision of Rs. 1,177 crores through GBS (Grant) has been provided in the scheme. Under Part-D of the scheme, there is provision for incentive for utility staff in towns where AT&C loss levels are brought below 15%. There is provision of Rs. 400 crores (Grant) for this purpose.

1.35 Part-A (IT) projects worth Rs. 5,480.36 crores covering all the eligible towns (1,412 Nos) in 30 States/UTs have already been sanctioned. No more projects are expected to be sanctioned. IT Implementing Agencies (ITIAs) have been appointed in 1,398 towns (except Odisha -12 towns) for execution of the projects. So far 645 towns have been integrated with Data Center and also been declared as Go-Live. Part-A (SCADA) projects worth Rs. 1,556.23 crores covering all 72 eligible towns have already been sanctioned. SCADA Implementing Agencies (SIAs) have been appointed in 66 towns of 17 States.

1.36 Around 1,278 towns are envisaged for Part-B projects. So far 1,259 Part-B projects worth Rs. 32,215.54 crores have been sanctioned. The towns for which Part-B projects are to be sanctioned are from Arunachal Pradesh and Nagaland States. So far Part-B works have been awarded/started in 1,062 towns and out of which 139 Towns have been completed.

1.37 So far Rs. 7,858.19 crores has been released under the programme, out of which Rs. 7,636.65 crores is the loan against Part-A and Part-B projects for disbursement to State utilities and Rs. 221.54 crores as grant against enabling component for implementation of R-APDRP under Part-C. Details of year-wise financial progress achieved are given below:—

Table: 1.37 — Financial Progress under R-APDRP

(Rs. in crore)

Year	Projects sanctioned			Budget Allocation			Actual Releases		
	Part-A	Part-B	Total	Loan	Grant	Total	Loan	Grant	Total
1	2	3	4	5	6	7	8	9	10
2008-09	1947.71	0.00	1947.71	325	25	350	325.00	25.00	350.00
2009-10	3183.00	3059.26	6242.26	1364	66	1430	1331.46	1.26	1332.72
2010-11	715.41	12915.31	13630.72	2471	100	2571	2246.42	100.00	2346.42

1	2	3	4	5	6	7	8	9	10
2011-12	792.69	8802.78	9595.47	1600	68	1668	1600.00	67.87	1667.87
2012-13	74.29	2341.75	2416.04	1383	117	1500	1217.45	17.04	1234.49
2013-14	236.55	4020.62	4257.17	640	60	700	640.00	8.70	648.70
2014-15	86.93	1075.83	1162.76	1117	144	1261	276.32	1.67	277.99
TOTAL	7036.58	32215.55	39252.13	8900	580	9480	7636.65	221.54	7858.19

1.38 Physical and Financial Targets and Achievements under R-APDRP, as on 31.8.2014 are given below:—

Table: 1.38 — Targets and Achievements under R-APDRP

2012-13				2013-14				2014-15			
Physical		Financial		Physical		Financial		Physical		Financial	
Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.	Tgt.	Ach.
Integration of Towns with Data Centre		Funds disbursement (Rs. Cr.)		Go-Live of Towns		Funds disbursement (Rs. Cr.)		Go-Live of Towns		Funds disbursement (Rs. Cr.)	
400	150	1383	1217	300	339	640	640	350	136	1117	276

1.39 Technical and Distribution (T&D) losses are included in Aggregate Technical Commercial (AT&C) losses which are being compiled by Power Finance Corporation (PFC) in the report published by them on 'Performance of State Power Utilities'. The Report is compiled on the basis of data given in the annual accounts (audited/provisional) of SEBs/unbundled utilities (including Discoms of Delhi & Odisha) and Annual Resource Plans submitted to the Planning Commission by State Power Departments and utilities not preparing annual accounts. Additional information for calculation of AT&C losses is obtained from the utilities.

1.40 The methodology of calculation of AT&C losses as finalized by PFC in consultation with CEA is as follows:—

Table: 1.40 — Methodology of Calculation of AT&C losses

Parameter		Definition
1		2
AT&C Losses (%) for State Electricity Boards/Power Departments/Discoms)		
• Net input energy (Mkwh)	=	Total input energy (adjusted for transmission losses and energy traded)

1		2
• Net sale of energy (Mkwh)	=	Total energy sold (adjusted for energy traded)
• Net revenue from sale of energy (Rs. Crs.)	=	Revenue from sale of energy (adjusted for energy traded)
• Collection Efficiency (%)	=	Net Revenue from Sale of Energy-Change in Debtors for Sale of Power X100 / Net Revenue from Sale of Energy
• Energy realized (Mkwh)	=	New sale of Energy (Mkwh) x collection Efficiency
• AT&C Losses (%) (For State Electricity Boards/ Power Departments/Discoms)	=	Net input energy (Mkwh) - Energy Realized (Mkwh) x 100 / Net input energy (Mkwh)

1.41 Year-wise and State-wise Aggregate Technical & Commercial (AT&C) Losses since inception of R-APDRP in the year 2008-09 are tabulated below:—

Table: 1.41 — Year-wise & State-wise AT&C losses

Sl.No.	State	State-wise AT&C Loss (%)				
		2008-09	2009-10	2010-11	2011-12	2012-13
1	2	3	4	5	6	7
1.	Andhra Pradesh	12.99	16.43	17.50	15.27	13.63
2.	Arunachal Pradesh	60.15	58.82	61.45	65.55	60.26
3.	Assam	32.68	56.19	28.71	29.47	31.85
4.	Bihar	34.37	43.92	47.44	59.24	54.63
5.	Chhattisgarh	32.73	40.04	28.84	29.05	25.12
6.	Delhi	17.92	20.78	15.76	18.56	15.22
7.	Goa	21.69	6.12	14.08	15.12	14.14
8.	Gujarat	22.04	22.81	16.89	19.26	19.87
9.	Himachal Pradesh	12.85	18.46	14.70	18.04	9.53
10.	Haryana	33.29	29.32	28.02	28.27	32.55

1	2	3	4	5	6	7
11.	Jammu and Kashmir	69.05	70.44	72.86	71.16	60.87
12	Jharkhand	62.80	10.43	46.79	42.77	47.49
13.	Karnataka	24.94	25.34	23.71	23.29	20.78
14.	Kerala	21.61	14.90	14.09	12.17	10.53
15.	Madhya Pradesh	46.61	41.03	37.28	38.26	31.15
16.	Maharashtra	31.19	25.02	23.30	21.63	21.95
17.	Manipur	81.32	47.55	40.17	44.80	85.49
18.	Meghalaya	43.37	48.77	51.63	44.85	26.60
19.	Mizoram	41.08	38.95	43.09	36.59	27.55
20.	Nagaland	44.12	65.36	49.73	22.85	75.30
21.	Odisha	42.20	39.70	45.60	44.66	42.94
22.	Puducherry	18.47	19.35	14.43	18.91	9.13
23.	Punjab	18.51	17.73	19.64	18.96	17.66
24.	Rajasthan	29.83	30.07	24.66	24.81	20.00
25.	Sikkim	46.81	59.31	65.46	58.32	53.51
26.	Tamil Nadu	14.39	18.87	19.49	21.70	20.72
27.	Tripura	31.91	29.16	34.48	33.76	33.85
28.	Uttar Pradesh	34.90	34.45	42.94	41.95	42.85
29.	Uttarakhand	39.89	28.35	28.48	25.84	23.18
30.	West Bengal	25.81	33.24	27.40	32.90	34.43
	National Level	27.47	26.78	26.35	26.63	25.38

1.42 When the Committee asked the reasons for the high AT&C losses, the Ministry in their written reply stated as under:—

> "Energy losses occur in the process of supplying electricity to consumers on account of technical and commercial reasons. The technical losses are due to energy dissipated in the conductors and equipment used for transmission, transformation and distribution of power while commercial losses are due to pilferage of energy by hooking of lines and bypassing the meters, defective meters, errors in meter reading etc. These technical losses are inherent in

a system and cannot be eliminated entirely but can be reduced to a certain level. These losses depend on the pattern of energy use, load density and configuration of the transmission and distribution system.

Main Reasons for High Technical Losses

(a) Overloading of existing lines and sub-station equipment.

(b) Absence of up-gradation of old lines and equipment.

(c) Low HT: LT lines ratio.

(d) Poor repair and maintenance of equipment.

(e) Non-installation of sufficient capacitors/reactive power equipment.

Reasons for Commercial Losses

(a) Low metering/billing/collection efficiency.

(b) Theft, pilferage of electricity and tampering of meters.

(c) Low accountability of employees.

(d) Absence of Energy Accounting and Auditing.

1.43 In regard to success in containing AT&C losses through R-APDRP, the Ministry stated as given below:—

"So far, 645 towns have been integrated with Data Centre and declared by utilities as Go-live. The Distribution Transformer (DT) level energy data from these towns is flowing to state Data Centres enabling state DISCOMs to analyse this data. Utilities have started using this data for energy accounting/auditing and to take administrative measures for controlling AT&C losses. It is reported that 422 towns could achieve loss reduction within short span of time by taking administrative measures only on the basis of data collected. The some of the main reasons for improvement in reduction in AT&C losses are indicated below:—

- Better visibility of DTR wise sent out in Energy Accounting.
- More transparent consumer information through GIS.
- Smart Administration and Vigilance activities strengthened.
- Use of LT Areal Bunched cable in place of bare conductor.
- Replacement of faulty and old analog Meters."

1.44 On being asked by the Committee about the difficulties being experienced in implementation of the programme, the Ministry in their written reply has enumerated the followings:—

"Long time taken by State utilities for appointment of IT Implementing Agencies (ITIAs) (tendering, evaluation and award process). Against envisaged time of three months for award of ITIA after sanction of projects, utilities of Haryana took over 42 months, utilities of 10 States took more than 19 months, utilities of 15 States took average of 12 months & those of 3 States took 3-5 months.

The utilities are taking more than the scheduled duration of 36 months for completion of Part-A (IT) projects from the date of award. Even the advanced States of Gujarat, the project is envisaged to be completed in more than 45 months from award. This is, in spite of the fact that best of the IT companies namely TCS, Infosys, HCL Tech/HCL Info etc. are engaged for implementation of the projects. Even, West Bengal has taken about 45 months from award for completion. Considering same, MoP, GoI has extended duration for completion to five years from sanction.

- Long time taken in Development & Testing of Software Modules/Business Process automation, and its integration with legacy system. Karnataka, Rajasthan, Tamil Nadu, Bihar, Goa, Jharkhand & J&K delayed on this count.
- Establishment of Meter Data Acquisition System (MDAS) involves procurement and installation of meters by utilities and modems by ITIA. It also involve integration with legacy metering system. This is taking longer time than envisaged due to procurement procedure and practices of State power distribution utilities (Arunachal Pradesh, Nagaland, Manipur, J&K and Jharkhand delayed).
- Establishment of GIS (Consumer indexing and assets mapping), including Digitization and Verification by utilities is taking much longer time than envisaged. State utilities to form joint team to speed up validation process.
- Network connectivity between towns and Data Center (DC) and Customer Care Center (CCC) is also a challenge. Sikkim, Andhra Pradesh, Uttar Pradesh, Uttarakhand and NE States are facing issues of last mile connectivity.
- Common Data Center (DC) and Disaster Recovery (DR) Center in NE States, Sikkim with West Bengal, Puducherry with Tamil Nadu, and Chandigarh with Punjab took longer time than envisaged.

- Lack of Readiness of Infrastructure such as DC/CCC building, which utilities have to create from its own source. (It delayed implementation in TN, J&K, and Jharkhand & Goa).
- Human Resource (HR) issues: Lack of domain knowledge *i.e.* utilities personnel lack IT knowledge whereas ITIA personnel lack power sector knowledge. Deployment of adequate trained manpower by utility as well as ITIAs is lacking in most of the States addition to frequent changes in core teams.
- Procurement procedure and practices of State power distribution utilities is slow. Co-ordination issues amongst stakeholders (Utility and ITIA, ITIA and its sub contractor and also amongst DISCOMS in States) is not up to the mark. Project Management, Monitoring and review by utilities as well as ITIAs is also lacking in majority of the States.

1.45 When the Committee desired to know the remedial measures being taken to address the hindrances, it was stated as under:—

"Besides providing technical and financial assistance, Ministry of Power (MoP)/Power Finance Corporation (PFC) is facilitating and taking following measures for implementation of R-APDRP:

- PFC is regularly assisting utilities in formulation of Detailed Project Reports (DPRs) by issuing Model DPRs, Handholding Utilities for Part A-IT, SCADA and Part B projects, specifically in special category and Eastern States.
- Regular Monitoring and review with all State utilities/ITIA by PFC and MoP. During such meetings the critical issues in implementation are discussed and provide a forum for sharing of experiences/best practices between various utilities for resolving implementation related issues.
- The review meetings are also conducted regularly at state HQ with utilities to discuss the critical issues and find solutions for the same.
- The R-APDRP Steering Committee also reviews the implementation of R-APDRP and issues guidelines/direction for taking corrective measures in this regard.
- PFC/MoP also organizes workshops on technical areas, guidelines, best practices etc. for dissemination of information. PFC/MoP also issues guidelines for simplification of implementation procedures.

- All the model documents, guidelines, links for bidding documents of utilities, events etc. are regularly posted on dedicated R-APDRP web portal.
- PFC/MoP facilitated in preparation of technical specifications for development of open protocol meters based on interaction with all stakeholders to have vendor neutral technology for R-APDRP.
- PFC/MoP have also facilitated establishing meter testing lab at CPRI, Bangalore for testing of open protocol meters.
- PFC/MoP have interacted with various meter manufacturers through their association for making available and sharing information with ITIAs for integration of existing/legacy meters under R-APDRP.
- PFC/MoP facilitated in obtaining GIS imageries (maps) for RAPDRP towns. For this, PFC/MoP interacted with National Remote Sensing Centre (NRSC), Hyderabad and streamlined the process to speed up supply of imageries.
- Capacity building/training of utility personnel is also carried out in a big way under R-APDRP to enhance their skill.

  Sharing of Best Practices in R-APDRP Implementation with all State utilities at various forums."

1.46 On being inquired by the Committee as to how long will it take to achieve the main objective of R-APDRP of reducing AT&C losses to 15%, the Ministry replied as under:—

"Part-A (IT) projects have been sanctioned progressively in various towns since year 2009 and their completion shall enable installation of IT enabled system in utilities for establishment of baseline data of revenue & energy without human intervention to identify AT&C losses.

- Third Party Independent Evaluation Agencies are in process of evaluating baseline AT&C losses in these towns [Baseline AT&C losses established so far in 1252 towns].
- The reduction in AT&C losses shall be measured for five years through IT system established under Part-A (IT) of the scheme with first year starting a year after establishment of said IT system.
- IT Systems under Part-A (IT) of R-APDRP are likely to be established progressively in FY 2013-14 [Already established in West Bengal] & hence reduction in AT&C losses shall be measured over baseline values established by TPIEA-EA for five years starting FY 2014-15 progressively."

C. Energy Conservation & Efficiency

1.47 The Energy Conservation Act, 2001 is the most important multi-sectoral legislation in India and is intended to promote efficient use of energy in India. The Act specifies energy consumption standards for equipment and appliances, establishes and prescribes energy consumption norms and standards for consumers, prescribes energy conservation building codes for efficient use of energy in commercial buildings, and establishes a compliance mechanism for energy consumption norms and standards. Large scale energy savings can be realized through strengthening of the existing policies, schemes as well as expanding and reaching out to new areas *i.e.* Utility Demand Side Management, Human Resource Development Programme and Super-Efficient equipment Programme in the 12th Plan.

1.48 Bureau of Energy Efficiency (BEE), a statutory body under Ministry of Power is responsible for spearheading the improvement of energy efficiency in the economy through various regulatory and promotional instruments.

1.49 There is a budgetary provision of Rs. 1,696 crore for Energy Conservation for the 12th Plan.

1.50 Information regarding Budget allocation *vis-à-vis* utilization of fund for the Bureau of Energy Efficiency (BEE) for the last three years is tabulated below:—

Table: 1.50 — Budget Allocation *vis-à-vis* Utilization of fund under BEE

(Rs. in crore)

	2011-12	2012-13	2013-14	2014-15
BE	130.80	200.00	193.41	139.55
RE	50.00	58.80	77.60	-
Actuals	49.99	44.10	66.72	-

1.51 During the 11th Five Year Plan, 10,836 MW of avoided generation capacity resulting from various schemes of the BEE was achieved. The 11th Plan was the first plan in which energy efficiency programmes were launched. These included the Standards & Labeling programme for appliances and equipment, the Energy Conservation Building Code, the Industrial Energy Efficiency and SME programme

and the Municipal and Agricultural Demand Side Management (DSM) programmes. For the 12th Plan a target of 12,350 MW of avoided capacity is proposed.

1.52 National Mission for Enhanced Energy Efficiency (NMEEE) was launched to strengthen the market for energy efficiency by creating conducive regulatory and policy regime. The NMEEE is one of the eight national missions under the National Action Plan on Climate Change. The NMEEE spelt out four new initiatives *i.e.* Perform Achieve and Trade (PAT), Market Transformation for Energy Efficiency (MTEE), Energy Efficiency Financing Platform (EEFP) and Framework for Energy Efficient Economic Development (FEED) to enhance energy efficiency in the country, in addition to the energy efficiency schemes being pursued through BEE.Targets for reduction in specific energy consumption (SEC) of 478 Designated Consumers (DCs) in 8 industrial sectors *i.e.* Cement, Pulp & Paper, Fertilizer, Textile, Chlor Alkali, Aluminium, Iron & Steel, Thermal Power Plants have been notified on 30th March, 2012 for the first PAT cycle (2012-13 to 2014-15). It is expected to save around 6.686 million ton of oil equivalent of energy from the first cycle of the PAT scheme. Rules for operationalization Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE) and Venture Capital Fund for Energy Efficiency (VCFEE) have been prepared.

1.53 Continuation of NMEEE for 12th Plan was approved by Cabinet on 6th May, 2014 with an Outlay of Rs. 775 crore, of which Rs. 190 crore is for PAT, Rs. 462.50 crore for FEED and EEFP, Rs. 122.50 crore for MTEE components of NMEEE. Super Efficient Equipment Programme (SEEP) for ceiling fan under MTEE will be launched and institutional structure under Bachat Lamp Yojana (BLY) will be used for providing technical assistance to REC for Bulk procurement of LEDs under RGGVY scheme.

1.54 Enumerating the achievements of the BEE scheme, the Ministry of Power in their outcome budget (2014-15) states as follows:—

Standards & Labelling (S&L)

- ➢ Moving from Voluntary to Mandatory program: 4 products were notified under mandatory programme since January, 2010.
- ➢ Upgradation of standards for Split ACs and Frost Free Refrigerators with effect from 1st January, 2014.
- ➢ Rs. 9.35 crores has been disbursed to 2 Government laboratories for 7 products.

Energy Conservation Building Code (ECBC)

- Rajasthan, Odisha, Uttarakhand and UT of Puducherry have notified while states such as Kerala, Punjab, Gujarat, Karnataka, Uttar Pradesh, Chhattisgarh, Andhra Pradesh, Tamil Nadu, Haryana, Maharashtra and West Bengal have already amended ECBC in their states.
- Upto March, 2013, 152 commercial buildings have been awarded Star label.
- 137 ESCOs have been empanelled by BEE through an open invitation and evaluation process.

Bachat Lamp Yojana (BLY)

- 29 million CFLs have been distributed in the included projects under BLY scheme and an Avoided Generation Capacity of 415 MW has been achieved by the CFL distribution during 11th Plan period.

Small and Medium Enterprises (SMEs)

- Preparation of 375 Nos. Detailed Project Reports (DPRs) on energy efficient technologies resulted in implementation of more than 650 EE projects in various clusters. The reported saving from these clusters was 14300 toe during 11th plan.

Agricultural DSM (AgDSM)

- The implementation of the first pilot at Solapur district in Maharashtra has commenced and more than 2200 pumps have been replaced in Solapur region with public private partnership.
- Preparation of 11 DPRs in 8 States which shown the potential of 96 million units (MU) through replacement of 20,000 pump sets with EEPS in these States.

Municipal DSM (MsDSM)

- A one-day interaction-cum-meeting with the Urban Development Department (UDD) and Urban Local Bodies (ULBs) officials through the SDAs are being organized in five states.

State Energy Conservation Funds (SECF)

- Evaluation/Impact Assessment study of the scheme during the 11th plan is completed.

BEE-GEF-World Bank MSME Project

- ➢ A Pilot activity to demonstrate the techno-economic feasibility of proposed Veneering technology for the MSME forging units was undertaken in association with GIZ and KAEFER. The pilot has been successfully competed in SB Engineers at Pune and Shri Aurbindo Auto Components Pvt. Ltd. at Faridabad.
- ➢ Marketing and Outreach through Awareness workshops, Questionnaire Survey & Focus Group Discussions.
- ➢ Knowledge Management & Sharing through E-News letter, demonstration activities, short videos and case studies.

D. FINANCIAL ASSISTANCE TO DISCOMS

1.55 Distribution provides the crucial last mile connectivity in the electricity sector. Unlike other two sectors — generation and transmission, distribution consumers are varied, numerous and disparate. As per the Ministry of Power, the sector continues to be almost entirely served by the Government utilities in spite of unbundling of erstwhile vertically integrated board.

1.56 The accumulated losses of the state power distribution companies are estimated to be about Rs. 1.9 lakh crore. As per Power Finance Corporation report on Performance of State Power Utilities for the years 2010-11 to 2012-13 based on the account details provided by the Utilities, the Profit/(Losses) on subsidy received basis on an aggregate basis for all utilities are given below:—

Table: 1.56 — Performance of State Power Utilities

(Rs. in crore)

	2010-11	2011-12	2012-13
Profit/(Loss) on subsidy received basis	(51,848)	(76,867)	(69,972)

1.57 As per the above study the Average Cost of Supply (ACS), Average Revenue Realised (ARR) (on subsidy received basis) and Gap (on subsidy received basis) for utilities selling directly to consumers are given below:—

Table: 1.57 — ACS & ARR and the Gap

	2010-11	2011-12	2012-13
ACS (Rs./kwh)	3.98	4.55	5.01
Avg. Revenue on subsidy received basis (Rs./kwh)	3.30	3.62	4.19
Gap on subsidy received basis (Rs./kwh)	0.68	0.94	0.83

1.58 On being asked by the Committee, the reasons for having gap between revenue realized and cost of supply per unit, the Ministry in their reply has enumerated the following reasons:—

"Infrequent/delayed revision of tariff:—

- Inadequate tariff increase.
- High AT&C Losses.
- SERCs try to avoid giving tariff shock to consumers.
- Revenue gap is bridged through creation of Regulatory Assets/ Subsidies/Tariff hike.
- Delay in tariff filing or Non filing of tariff petition by Distribution licensee. A Few SERCs have issued suo-motu Tariff orders.
- Delay in issuance of Tariff orders due to delay in filing or delay in furnishing data by the licensee.
- True-up petitions are not being filed by utilities on account of non finalization of audited accounts for the year.
- Fuel Surcharge Adjustment: Select states have provided for FSA in regulations or in tariff orders. In most of the states the process of approval of such charges takes a long time and adjusted during the true up exercise.
- Shortfall and delay in subsidy disbursements by the State Government.
- Regulatory Asset has been created by the SERC in an effort to bridge the gap in tariffs.
- Increase in short term loans.
- The actual loss levels of the DISCOMs are higher than the approved loss levels.
- Absence of True-up mechanism in the state.
- Disallowance of interest cost on short-term borrowings for meeting the revenue deficit of previous year and carrying cost for time lag involved in recovery of FSA and regulatory assets."

1.59 A scheme for financial restructuring of the DISCOMs has been prepared keeping in view the fragile financial health of utilities, coupled with serious systemic deficiencies in the working of State DISCOMs. The scheme contains immediate/continuing and short term measures

required to be taken in a time bound manner by the Discoms and State Governments. These measures include Financial Restructuring, Tariff Setting & Revenue Realization, Subsidy, Metering, Audit & Account and Monitoring.

1.60 The Scheme for Financial Restructurings of State Owned Discoms was notified by Ministry of Power after CCEA's approval with effect from 05.10.2012. The Scheme was available to all participating State Owned Discoms having accumulated losses and facing difficulty in financing operational losses. The scheme has a total outlay of Rs. 1,000 crore for the entire 12th Plan. Under the scheme there was a budgetary provision of Rs. 1,500 crore for the year 2013-14, however due to non-filing of claim by the participating states no fund could be utilized during the period. Now, there is an outlay of Rs. 400 crore for the Financial Year 2014-15.

1.61 The salient features of this scheme are as under:—

A. (i) 50% of the outstanding short term liabilities (STL) as of March 31, 2012 to be taken over by State Governments. This shall be first converted into bonds to be issued by Discoms to participating lenders, duly backed by the State Government guarantee. The State Government will take over the liability during next 2-5 years by issuance of special securities in favour of participating lenders in a phased manner keeping in view the fiscal space available till the entire loan (50% of STL) is taken over by the State Government. The door to door maturity will not be more than 15 years with a moratorium of 3-5 years on the principal repayment.

(ii) The State Government would provide full support to the Discoms for repayment of interest and principal for this portion.

(iii) State Government would ensure that issuance of Special securities is within the targets prescribed in FRBM Acts of respective States and even if fiscal space including Debt-GSDP ratio under the FRBM targets is available, States need to remain with their respective Net Borrowing Ceilings (of each of the relevant fiscal) fixed annually as per the formula prescribed by the Thirteenth Finance Commission.

B. Balance 50% of the STL will be rescheduled by lenders and serviced by the DISCOMS with moratorium of 3 years on principal. Repayment of Principal and Interest be fully secured by the State Government Guarantee. The best possible terms are to be extended for the rescheduled loans to improve viability of DISCOMs operations.

C. The restructuring/reschedulement of loan is to be accompanied by concrete and measurable action by the Discoms/States to improve the operational performance of the distribution utilities. State Government/Discoms have to commit themselves and carry out certain mandatory and recommendatory conditions as contained in part (c) of the scheme.

D. A Transitional Finance Mechanism (TFM) by the Central Government in support of the restructuring effort is available subject to fulfillment of mandatory conditions given in part C of the scheme. The TFM has the following features:—

For Providing liquidity support by way of a grant equal to the value of the additional energy saved by way of accelerated AT&C loss reduction beyond the loss trajectory specified under R-APDRP (Restructured Accelerated Power Development and Reforms Programme).

- The eligibility of grant would arise only if the gap between ARR and ACS for the year has been reduced by at least 25% during the year judged against the benchmark for the year 2010-11.
- This scheme would be available only for three years beginning 2012-13.

Incentive by way of capital reimbursement support of 25% of principal repayment by the State Government on the liability taken over by the State Government under the scheme. The amount to be reimbursed only in case the State Government takeover the entire 50% of the short term liabilities (corresponding to the accumulated losses) outstanding as on 31.3.2012.

1.62 In regard to expected outcomes from the implementation of the scheme, the Committee was informed the following:—

"Providing comfort to the lenders by securing State takeover of and guarantee for debt:

- Bringing about financial discipline in the distribution sector in the State.
- Providing a commercial orientation to the functioning of the distribution companies.
- Casting responsibility on the State Government to ensure a steady flow of revenue to the distribution companies by improving the efficiency of their operations.

- Accelerate the AT&C loss reduction effort of DISCOMS, through additional incentive from Central Government.
- Ensure regular rationalization of tariff to cover cost of service.
- Gradual elimination of the gap between ACS and ARR.
- Ensure timely finalization and audit of DISCOM accounts."

1.63 When the Committee desired to know as to how the gap between cost of generation and cost of supply can be reduced, the Ministry enumerated the following steps:—

"(i) Promoting use of more efficient super-critical technology in thermal power generation with a view to reduce the cost of fuel required per unit of generation.

(ii) Encouraging captive coal mining for thermal power projects with the object of *inter alia* lowering cost of fuel for coal-fired stations.

(iii) Renovation and Modernization of ageing/not well performing thermal and hydro power stations for improving operational efficiency.

(iv) Use of technical developments including greaseless turbine components, improved generator components, variable speed technologies, double-stage adjustable pump turbines, governor technology, state-of-art diagnostic and analytical methods, welding materials, high strength steel, improved F-class insulation, vacuum circuit breakers, micro-processor based numerical relays as well as site-specific developments to suit Indian conditions in hydro power stations.

(v) Tariff Policy notified on 06.01.2006 mandates procurement of power by distribution licensees competitively except in cases of expansion of existing projects of where there is a State controlled/owned company as an identified developer. For Public Sector projects also, the tariff of all new generation projects is to be decided on the basis of competitive bidding after 5th January, 2011.

(vi) Improved operational norms in the tariff regulations issued by the Central Electricity Regulatory Commission (CERC).

(vii) Promotion of higher unit size/plant capacity to reduce capital cost on account of economy of scale.

(viii) Initiative to set up Ultra Mega Power Projects (UMPPs) of 4000 MW capacity each through tariff-based International Competitive Bidding to reap benefits of economy of scale.

(ix) Competitive tariffs have been discovered through tariff based competitive bidding for procurement of power. Improvements in operational norms specified by CERC have resulted in reduction of tariff. Introduction of super-critical technology in new thermal projects would result in saving of fuel, reduction in CO2, NOx, SOs and particulate emissions, etc."

VI. GENERATION CAPACITY ADDITION PROGRAMME

1.64 The details of the total installed power generation capacity in the country as on 31.08.2014 is given as under:—

Table: 1.64 — Installed Generation Capacity in the Country

(in MW)

Sector	Modewise breakup							Total
	Thermal				Nuclear	Hydro	RES	
	Coal	Gas	Diesel	Total		(Renewable)	(MNRE)	
State	55290.50	6974.42	602.61	62867.53	0.00	27482.00	3803.67	94153.20
Private	50495.38	8568.00	597.14	59660.52	0.00	2694.00	27888.47	90242.99
Central	46525.01	7065.53	0.00	53590.54	4780.00	10622.76	0.00	68993.30
Total	152310.89	22607.95	1199.75	176118.59	4780.00	40798.76	31692.14	253389.48

1.65 The position regarding Energy and peak requirement/demand, availability, deficit during the last five years is tabulated below:—

Table: 1.65 — Demand and Availability of Electricity

Year	Energy				Peak			
	Requirement	Availability	Deficit (-)		Peak Demand	Peak Met	Deficit (-)	
	(MU)	(MU)	(MU)	(%)	(MW)	(MW)	(MW)	(%)
2014-15#	463,933	445,547	18,386	4.0	148,166	141,160	7,006	4.7
2013-14	10,02,045	9,59,614	42,431	4.2	1,35,918	1,29,815	6,103	4.5
2012-13	995,557	908,652	86,905	8.7	135,453	123,294	12,159	9.0
2011-12	937,199	857,886	79,313	8.5	130,006	116,191	13,815	10.6
2010-11	861,591	788,355	73,236	8.5	122,287	110,256	12,031	9.8
2009-10	830,594	746,644	83,950	10.1	119,166	104,009	15,157	12.7

#:figures of 2014-15 are upto Aug., 2014.

1.66 The forecast of electricity demand of the country is carried out by CEA under the direction of Electric Power Survey (EPS). The 18th EPSC has carried out forecast of year-wise demand of the country for 12th & 13th Plan period. As per of report of 18th EPS of India, the total Electric Energy Requirement (EER) of the country by end of 12th Plan is assessed to be 1354.87 BU and by end of 13th Plan the EER is assessed to be 1904.86 BU.

1.67 In regard to energy and peak demand it was stated by the Ministry that during the current year *i.e.* April, 2014, the energy and peak demand which could not be met in the country was 4% and 4.7%, respectively. This demand-supply gap keeps changing from time to time based on demand and supply of power. Power supply position report is prepared and issued by CEA every month. This report is prepared on the basis of the information furnished by the Regional Power Committee (RPCs). RPCs in turn collect the related data from the State Load Dispatch Centres (SLDCs) in the region.

1.68 When the Committee desire to know that will there be no power deficit in the country if the generation is increased by 4.7%, the Secretary, the Ministry of Power during the sitting of the Committee on the subject deposed as under:—

''यह बहुत महत्वपूर्ण विषय है और सर, ये सेंट्रल इलैक्ट्रिसिटी अथॉरिटी का आंकड़ा है डिमांड कितनी है, डैफिसिट कितना है, एनर्जी अवेलेबिलिटी की हालत क्या रही लेकिन जो डिमांड latent है उसे कैपचर नहीं किया जाता। तो एक तरह से यह आंकड़ा सही नहीं है। इसी तरह से यह आंकड़े इकट्ठा करता रहा है और जो हम स्टेट के लिए प्लान बना रहे हैं उसमें हम इसी तरह से कर रहे हैं कि हरेक को कमिट कर दीजिए और 24 घंटे हरेक घर को कनैक्ट करके कितना देना होगा तो कितनी जैनरेशन की आवश्यकता होगी।''

1.69 The overall Sector-wise PLF of Thermal Power Stations (Coal/ Lignite) during 2013-14 and 2014-15 (upto Sept.) is as under:—

Table: 1.69 — PLF of Thermal Power Stations

Sector	Monitored Capacity as on 30.09.2014 (MW)	%PLF	
		2014-15 (upto Sep.)	2013-14
Central	53590.53	73.6	76.11
State	61863.49	59.64	59.06
Private IPP	56890.5	63.12	61.42
Total	173671.52	65.36	65.55

1.70 On being desirous of knowing the steps taken to improve PLF of power plants, the Committee was apprised by the Ministry as under:—

"The plant load factor of Coal/Lignite based Thermal generating units depends on number of factors such as forced and planned outages, design and age of the units, vintage of the units, availability of required quality and quantity of fuel and receipt of schedule from beneficiary states due to merit order dispatch, system load/ demand etc.

The steps taken to improve the performance of Thermal (coal/ lignite based) generating stations are as under:—

- Coordinated operation and maintenance of hydro, thermal, nuclear and gas based power stations to optimally utilize the existing generation capacity.
- To meet the shortfall in coal supplies to thermal power stations from indigenous sources, the power utilities have been advised to import coal.
- Renovation modernization and life extension of old and inefficient generation units.
- Strengthening of inter-state and inter-regional transmission capacity for optimum utilization of generating resources.
- Strengthening of sub-transmission and distribution network as a major step towards loss reduction.
- Sharing of best O&M practices. For this continuous interaction of CEA with better performing power utilities and the other utilities for sharing O&M practices."

1.71 The per capita power consumption in the country for the year 2012-13 is 914.41 kWh [Per Capita Consumption = (Gross Generation+ Net Import)/ Mid Year Population]. The corresponding per capita power consumption in certain developed countries of the world *vis-a-vis* India for the year 2011 is given below:—

Table: 1.71 — Per Capita Power Consumption in Various Countries

Country	Per capita power consumption (kWh)
1	2
Australia	10514
China	3298

1	2
France	7318
Germany	7038
Japan	7847
Russia	6533
United Kingdom	5518
United States	13227
India*	884

*The figures in respect of India for the Year 2011-12.

Source: IEA website

1.72 A capacity addition target of 88,537 MW has been finalized by the Planning Commission for the 12th Plan. Out of which 46,766 MW capacity has been added till 31.08.2014 during 12th Five Year Plan. The Sector-wise and fuel-wise break up of 12th Plan capacity addition target of 88,537 MW and achievement is given as under:—

Table: 1.72 — Capacity Addition Target and Achievement during the 12th Plan

(In MW)

Sector	Thermal		Hydro		Nuclear		Total		%
	Target	Ach.	Target	Ach.	Target	Ach.	Target	Ach.	
Central	14878	7283.3	6004	1555.44	5300		26182	8838.7	33.8
State	13922	9309.1	1608	102	0		15530	9411.1	60.6
Private	43540	28347.5	3285	169	0		46825	28516.5	60.9
All India	72340	44939.9	10897	1826.44	5300		88537	46766.3	52.8
%		62.1		16.8		0		52.8	

1.73 The Capacity Addition target of 78,000 MW was set for the 11th Five Year Plan. During Mid Term Appraisal of 11th Five Year Plan, the said target was revised to 62,374 MW. However, at the end of the Plan, the actual achievement was 54,964 MW.

1.74 The details of capacity addition, target and achievement in the 11th Plan is tabulated below:—

Table: 1.74 — Capacity Addition and Target and Achievement in the 11th Plan

	Original Target				Actual Capacity Addition				Slippage into XII Plan			
	Thermal	Hydro	Nuclear	Total	Thermal	Hydro	Nuclear	Total	Thermal	Hydro	Nuclear	Total
Central	24840	8654	3380	36874	12790	1550	880	15220	12050	7104	2500	21654
State	23301	3482		26783	14030	2702		16732	9292	780		10072
Private	11552	3491		15043	21720	1292		23012	-510	2199		1689
Total	59693	15627	3380	78700	48540	5544	880	54964	20832	10083	2500	33415

1.75 Replying to the query of the Committee as to how many projects planned for commissioning during the 11th Five Year Plan have been slipped into the 12th Plan, the Ministry in their written reply have furnished the following information:—

> "Thermal Projects totaling 20832 MW (Central Sector: 11000 MW + State Sector: 9292 MW + Private Sector: 540 MW) had been slipped from 11th Plan Original Target. Out of which 11925.3 MW capacity (Central Sector: 4783.3 MW + State Sector: 6602 MW + Private Sector: 540 MW) has been commissioned during 12th Plan till date. Further, out of this 7586.7 MW is expected to be commissioned during the 12th plan and 1320 MW is likely to slip to the 13th plan.
>
> Hydro Projects totaling 10083 MW (Central Sector: 7104 MW + State Sector: 780 MW + Private Sector: 2199 MW) had been slipped from 11th Plan Original Target. Out of which 1784.34 MW capacity (Central Sector: 1555.34 MW + State Sector: 60 MW + Private Sector: 169 MW) has been commissioned during 12th Plan till date. Further, out of this 6698.66 MW is expected to be commissioned during the 12th plan. 1000 MW is likely to slip to the 13th plan and 600 MW has been discontinued."

1.76 Further, when the Committee asked the Ministry to specify the quantum of power projects capacity which slipped from the 11th Plan and has been counted in the overall generation capacity addition target set for the 12th Plan, it was informed as under:—

> "Thermal projects totaling 19,812 MW out of 20,832 MW & hydro projects totaling 8,483 MW out of 10,083 MW have been counted in the overall generation capacity addition target set for the 12th Plan."

1.77 Capacity addition targets *vis-à-vis* achievements during the 12th Plan in respect of Central Power Sector Undertakings are as under:—

Table: 1.77 — Capacity Addition Targets and Achievements of CPSU in the 12th Plan

Sl. No.	CPSU	12th Plan Target	2012-13		2013-14		2014-15 (till date)	
			Target	Ach.	Target	Ach.	Target	Ach.
1.	DVC	2200	500	500	600	0	600	600
2.	NEEPCO (T)	101	0	0	0	0	0	0
3.	NEEPCO (H)	770	-	-	-	-	-	-
4.	THDC	-	-	-	-	-	-	-
5.	NHPC	3502	645	374	708	708	130	130
6.	NLC	1250	0	0	500	0	1000	0
7.	NPC	5300	2000	0	2000	0	2000	0
8.	NTPC (T)	10600	3160	4160	1660	1660	855	
9.	NTPC (H)	1320	-	-	-	-	-	-
10.	ONGC	726.6	363.3	363.3	363.3	0	363.3	0
11.	SJVNL	412	-	-	206	206	206	137.34
	Total	26181.6	6668.3	5397.3	6037.3	2574	5154.3	867.34

1.78 Generation capacity addition target during 12th Plan is 88,537 MW from conventional sources on an all-India basis. This comprises of 26,182 MW in Central Sector, 15,530 MW in State Sector and 46,825 MW in Private Sector. The Targets & achievements of Central and Private Sector capacity during 12th Plan upto August, 2014 are as under:—

Table: 1.78 — Capacity Addition Targets and Achievements during the 12th Plan

(in MW)

Fuel	Sector	Target (MW) (12th Plan period)	Achievement (Upto August, 2014)	% Achievement
Thermal	Central	14878	7283.3	48.95%
	Private	43540	28347.5	65.11%
Hydro	Central	6004	1555.33	25.9%
	Private	3285	169	5.1%

1.79 When the Committee asked as to why the Central Sector has started performing poorly as far as generation capacity addition is concerned, the Ministry in their written reply stated as under:—

"During the years 2012-13, 2013-14 and 2014-15 (up to August, 2014), a thermal capacity of 7283.3 in Central Sector (48.95% of their overall target) and 28347.5 MW (65.11% of their overall target) in Private Sector has been achieved against a target of 14,878 MW and 43,540 MW in Central & Private Sectors respectively.

The progress of Central Sector is about 50% of their 12th Plan target in nearly two and half years' time and balance capacity is expected to be added in remaining period of 12th Plan and hence performance is not dismal.

In regard to hydro capacity addition upto August 2014, the Central Sector has added 1555.33 MW (25.9% of their overall target for 12th plan), whereas, in the same period, the Private Sector has added 169 MW (5.1% of their overall target for 12th plan). Year-wise details are given in the table below. It is evident that performance upto August 2014 during the 12th plan has been better in the Central sector as compared to that in Private sector.

(in MW)

Year	Central Sector		Private Sector	
	Target	Achievement	Target	Achievement
2012-13	645	374	70	70
2013-14	914	914	199	99
2014-15*	336*	267.33	0*	0
Total	1895	1555.33	269	169

*Upto August, 2014

Therefore, the performance of Central Sector is not dismal relative to Private Sector performance. However, the absolute achievement of the Hydro Electric projects is not very encouraging as often a number of uncertainties/constraints are encountered during the construction of hydro electric projects like, geological surprises, Natural calamities, Resettlement & Rehabilitation issues, Environmental & Forest issues, land acquisition problems, contractual disputes, etc."

1.80 In reply to the query of the Committee as to what curative steps are being taken to ensure better performance by the Central Sector, the Ministry stated as under:—

"The following steps are being taken by Ministry of Power, Govt. of India for expeditious completion of power projects including Central Sector projects:

1. Central Electricity Authority (CEA) is monitoring the progress of construction of the power projects through frequent site visits and interaction with the developers and equipment suppliers. In addition, CEA holds review meetings periodically with the developers and other stakeholders and identify issues critical to commissioning of projects and help resolving them.
2. A Power Project Monitoring Panel (PPMP) has been set up by the Ministry of Power for independently monitoring of Thermal and Hydro Generation projects targeted for commissioning during the 12th Plan and beyond along with the associated transmission system.
3. Regular reviews are undertaken by the Ministry of Power, Government of India at various levels including, Ministry of Heavy Industries, Planning Commission and Cabinet Secretariat to identify the constraint areas and facilitate faster resolution of inter-ministerial and other outstanding issues."

1.81 When the Committee desired to know about the vision of the Government to provide 24x7 power supply in the country, the Secretary, the Ministry of Power during the meeting deposed before the Committee as under:—

''जहां तक चौबीस घंटे बिजली देने की बात है.... मैं इतना ही बताना चाहूंगा कि हम एक स्टेट स्पेसिफिक प्रयास कर रहे हैं। सब जगह अलग-अलग प्राब्लम्स हैं। हमारे देश में कई ऐसे राज्य हैं, जो मुश्किल में हैं। कुछ राज्यों में काफी अच्छा काम पावर सेक्टर में हुआ है, वेस्टर्न रीजन में महाराष्ट्र, गुजरात और मध्य प्रदेश के कुछ हिस्से ले लीजिए। उत्तरी रीजन में पंजाब और हरियाणा हैं, उनकी हालत काफी ठीक है। कुछ राज्यों में 24 घंटे बिजली है, जैसे छत्तीसगढ़ है। प्राब्लम कुछ राज्यों में रह गई है, वे ईस्टर्न और नार्थ ईस्टर्न के राज्य हैं, जिनमें उत्तर प्रदेश भी आता है और ईस्टर्न रीजन में बिहार भी आता है। Bengal is one of the better States in terms of power supply and the entire North East. बिहार, झारखंड, ओडिशा, these are the States on which we need to focus on. असम और छोटे-छोटे राज्य हैं। ये हमारी स्ट्रेटजी में हैं। साउथ के राज्यों में अलग तरह की समस्या है। वहां कृष्णापट्टनम का और न्यूक्लियर

का कुडनकुलम प्रोजेक्ट है, उसमें डिले हुआ है। वहां रूरल इलेक्ट्रिफिकेशन की समस्या इतनी नहीं है। वहां तारें घरों तक पहुंच गई हैं। हर राज्य में अलग-अलग प्राब्लम है। इसलिए समाधान भी अलग-अलग है। जो स्टेट स्पेसिफिक प्लान की बात हम कर रहे हैं, हम सिर्फ एक सेग्मेंट को नहीं लेकर सबको ले रहे हैं। हम जेनरेशन को भी देख रहे हैं कि इसमें क्या कमी है। अगर अगले तीन से पांच साल में चौबीस घंटे अगर बिजली देनी है तो कितनी पावर की, कितने मेगावाट की जरूरत पड़ेगी। आज की स्थिति में क्या प्लान है और क्या गैप हैं वह हमारे सामने आ गया है। या तो राज्यों को अपनी जेनरेशन से मीट करना पड़ेगा या हम दूसरे प्रोजेक्ट्स से देने पर हमें विचार करना पड़ेगा। इसी तरह ट्रांसमिशन में क्या गैप्स हैं, इंटर स्टेट और इंटर रीजन में क्या गैप हैं, उनकी पहचान करके उनकी व्यवस्था करेंगे और तीसरा बिंदु वितरण का है। यह मुख्य रूप से राज्यों को ही करना है। हम उनसे यही कह सकते हैं कि आप इसके लिए बाध्य हों, कीजिए और सुधार करें। इस बारे में राजस्थान और आंध्र प्रदेश में अच्छा काम हुआ है, उन्हें करीब तीन साल में टार्गेट पूरा करने की बात की है कि इसे एचीव कर लेंगे। उन्होंने अच्छा प्रोग्राम बनाया है।''

1.82 When the Committee asked to clarify the term 24x7 and its scope, the Secretary, the Ministry of Power further stated as under:—

"By 24x7, that is exactly what we mean. The total number of connected consumers whether they are in rural areas or in the urban areas that we will have to address separately. We will have to connect them through the lines. We have to do that. When we say 24X7, it is 24X7 to all categories of consumers and to all the consumers whether they are connected or unconnected except agriculture because agriculture does not require 24 hours. That is why, separation of feeder is important."

PART II

OBSERVATIONS/RECOMMENDATIONS OF THE COMMITTEE

1. The Committee note that the detailed Demands for Grants (2014-15) of the Ministry of Power were laid in Lok Sabha on 24th July, 2014. The Demands show a budgetary provision of GBS of Rs. 9,642.00 crore with a provision of Rs. 7,570.50 crore in revenue and Rs. 2,071.50 crore in capital section. The Central Plan Outlay including IEBR *i.e*. Rs. 50,742.02 crore, however stands at Rs. 60,384.02 crore. Having examined the Demands for Grants of the Ministry of Power for the year 2014-15 in detail, the Committee proceed to make some recommendations/ observations in succeeding paragraphs which shall be taken into account by the Ministry while preparing the Demands for the year 2015-16.

Annual Plan Outlay

2. The Committee while scrutinizing the Gross Budgetary Support (GBS) for the year 2013-14 note that against the Budgetary Estimation (BE) of Rs. 9,642.00 crore, which was revised to Rs. 5,000.00 crore, the actual utilization was Rs. 4,529.72 crore only. Notably, the Committee find the financial performance of the Ministry far from satisfactory. In regard to RGGVY, against the BE of Rs. 4,500 crore the actual utilization was only Rs. 2,938.52 crore. Important programmes of the Ministry *viz*. Energy Conservation, Bureau of Energy Efficiency, CPRI, etc. have also shown poor utilization of funds during the period. There is nil utilization of fund under the heads of Financial support for DISCOMs and National Electricity Fund. The Committee note that poor utilization of allocated fund by the Ministry has become a regular recurring feature. The scrutiny of the Committee reveals that the Ministry, after 2008-09 has not fully utilized the allocated funds. Every year, the Ministry while assigning various reasons for the poor performance, has been apprising the Committee of the remedial measures being taken by them to ensure a better performance next year, an assurance which remains still unfulfilled. The Committee, therefore, recommend the Ministry to take necessary measures to improve monitoring mechanism to fully utilize the allocated fund.

(Recommendation Sl. No. 1, Para No. 2)

3. The Committee also note that the Ministry have included five ambitious schemes in the 12th Plan during the current fiscal *viz*. Deen Dayal Upadhyaya Feeder Separation Scheme, Green Energy Corridor, Smart Grid, Power System Development Fund and Integrated Power Development Scheme. While the Deen Dayal Upadhyaya Feeder Separation Scheme and Integrated Power Development Scheme have outlay of Rs. 500 crore and Rs. 100 crore respectively, other three schemes — Green Energy Corridor, Smart Grid and Power System Development Funds have been allocated a token amount of Rs. 1 crore each for the current financial year. The Green Energy Corridor will integrate the proliferating non-conventional energy to the main grid, whereas Smart Grid aims at modernization of grid system through use of IT to make it more efficient, reliable, economic and sustainable. The Feeder Separation Scheme envisages to provide separate feeders for agriculture and non-agricultural supply in rural areas to cater to their different needs. The Committee appreciate and wish these schemes implemented effectively and timely. The Committee, therefore, recommend that the roadmap for these programmes be finalized and their expeditious implementation ensured.

(Recommendation Sl. No. 2, Para No. 3)

4. The Committee note that during the first quarter of the current fiscal, the Ministry could spend Rs. 101.16 crore, *i.e.* a 1.05% of the annual outlay. The Committee, therefore, expect the Ministry to make monitoring mechanism for quarterly expenditure more effective to ensure adherence to the norms laid down by the Ministry of Finance in this regard.

(Recommendation Sl. No. 3, Para No. 4)

RGGVY

5. The Committee note that the Planning Commission has approved an outlay of Rs. 35,447 crore for continuing RGGVY in 12th & 13th Plan, out of which Rs. 23,397 crore will be met through GBS for the 12th Plan and remaining Rs. 12,050 crore would spill over to the 13th Plan. The annual outlay for the current year is 5,144.09 crore whereas, the expenditure till August, 2014 is 76.15 crore. The Committee further note that from the year 2011-12 onward, the utilization of funds under the scheme has not been satisfactory. Against the budgetary allocation of Rs. 3,544 crore, Rs. 4,900 crore and Rs. 4,500 for the year 2011-12, 2012-13 and 2013-14, the actual utilization has been Rs. 2,237.31 crore,

Rs. 697.94 crore and Rs. 2,938.52 crore respectively. The Committee, therefore, suggest the Ministry to expedite the pace of the scheme and ensure optimum utilization of funds allocated. The Committee, apart from the slow pace of RGGVY, have been raising issues relating to installation of transformers of inadequate capacity, poor quality of materials used in erecting infrastructure, delay in replacement/ repair of not working items, inadequate supply of power to villages electrified under the scheme, etc. since long. The Committee were apprised by the Ministry that steps have been taken to address these problems in regard to 12th Plan projects. The Committee suggest the Government to give further push to the efforts aimed at resolving these issues. They also desire that the endeavour of the Ministry to address these issues need not be limited to 12th Plan Projects only but to all the villages covered under the scheme.

(Recommendation Sl. No. 4, Para No. 5)

R-APDRP

6. The Committee note that the objective of the Re-structured - Accelerated Power Development Reform Programme (R-APDRP) is to bring down AT&C losses to the level of 15%. The programme with a provision of Rs. 51,577 crore, has four Parts namely, A, B, C and D. It is informed that 645 towns out of 1412 towns have been integrated with Data Centre and already been declared 'Go Live' by the utilities. Out of 1278 towns envisaged for Part-B of the scheme, work in 139 towns has been completed. The Committee further note that at the time of inception of Re-structured - APDRP *i.e.* year 2008-09 the AT&T losses in the Country were at 27.37% which has marginally come down to 25.38% in the year 2012-13. The Ministry have claimed that once the programme is fully implemented then only the effectiveness of this programme can be judged. In regard to slow execution of the works under the scheme, the Ministry *inter alia* submitted reasons such as longer time taken by the IT companies in completion of Part-A, Lack of readiness of infrastructures, slow procurement procedure and practices of State Power Distribution Utilities and Human Resource issues. The whole power sector is dependent on the distribution sector for their economic viability, whereas, the viability of the distribution sector itself hinges on the success of the AT&C losses reduction programme *i.e.* R-APDRP. The Committee, therefore, expect the Ministry to strengthen the mechanism of coordination between the agencies involved in the implementation of this programme to ensure timely

execution of the work. They further desire for further expansion and acceleration the training programmes for utility personnel to resolve the human resource issue.

(Recommendation Sl. No. 5, Para No. 6)

Energy Conservation & Efficiency

7. The Committee note that there is a budgetary provision of Rs. 1,696 crore for Energy Conservation for the 12th Plan period. However, during the first two years of the 12th Plan only Rs. 53 crore has been utilized. Similarly, under Bureau of Energy Efficiency (BEE) head against the budgetary estimates of Rs. 200 crore and Rs. 193.41 crore for the year 2012-13 and 2013-14, the actual utilization has been Rs. 58.80 crore and Rs. 66.72 crore respectively. The Ministry have assigned delay in approval/finalization of schemes as reasons for poor performance. Since, more than two years of the 12th Plan have elapsed, the Committee expect that the schemes relating to BEE and Energy Efficiency shall soon be finalized by the Ministry. Considering the gap between power supply and demand in the country and the potential of Energy Conservation & Efficiency programmes to save power, the Committee desire that the Ministry, besides ensuring optimum utilization of allocated funds, shall expeditiously finalize/approve schemes relating to Energy Conservation & Efficiency.

(Recommendation Sl. No. 6, Para No. 7)

Financial Assistance to DISCOMs

8. The Committee note that a scheme for financial restructuring of the State DISCOMS was notified in the year 2012 which was available to all participating State Owned DISCOMs having accumulated losses and facing difficulty in financing operational losses. The scheme had a total outlay of Rs. 1,000 crore for the entire 12th Plan. However, later on, the outlay was increased and a provision of Rs. 1,500 crore was made for the year 2013-14 only. Now, the Government have provided an outlay of only Rs. 400 crore for the current year as no funds could be utilized during the year 2013-14 due to non-filing of claims by the participating States. The Committee believe that the programme, besides restructuring the loan of the DISCOMs, has the potential to provide further impetus to R-APDRP as reduction of AT&C losses is one of the condition. The condition of reduction of AT&C losses and reducing the gap between average cost of supply and average revenue realized to a certain

extent has been laid in the scheme to ensure the sustainability of improved financial condition of the DISCOMs and to avoid getting their accounts in red again. Since, not many States have shown their willingness to avail the scheme, the Committee desire that the Government may review and widen the scope of the scheme in order to cover more and more DISCOMs.

(Recommendation Sl. No. 7, Para No. 8)

9. The Committee note that there was energy deficit of 4.2% and peak deficit of 4.5% during the year 2013-14. When the Committee desired to know will there be no shortage of energy in the country if the supply is somehow increased by 4.5%, the Ministry stated that these figures are supplied by the Central Electricity Authority (CEA) and they do not have figures of latent demand for energy. Complete statistics helps in policy planning and energy demand/production for the country. The Committee, therefore, desire that the Government must compile and consolidate comprehensive statistics taking into account the latent demands of energy, assuming every person has to be provided at least a fair minimum amount of electricity.

(Recommendation Sl. No. 13, Para No. 9)

10. The Committee note that Plant Load Factor (PLF) of thermal power stations (coal/lignite based) during the year 2013-14 and 2014-15 (up to Sep., 2014) has been 65%. The Ministry have *inter-alia* assigned reasons for having such a low PLF *viz*. shortfall in supply of coal, age of power generating unit, etc. Low PLF indicates to sub-optimal utilization of power stations. The Committee, therefore, desire that necessary steps for addressing the issues responsible for low PLF be taken. They also desire that the issues of supply of coal and renovation and modernization of power stations shall be dealt with on priority.

(Recommendation Sl. No. 9, Para No. 10)

NEW DELHI;
19 *December,* 2014
28 *Agrahayana,* 1936 *(Saka)*

DR. KIRIT SOMAIYA,
Chairperson,
Standing Committee on Energy.

MINISTRY OF POWER

DEMAND No. 77

Ministry of Power

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

(In crores of Rupees)

		Major Head	Actual 2012-2013			Budget 2013-2014			Revised 2013-2014			Budget 2014-2015		
			Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
		1	2	3	4	5	6	7	8	9	10	11	12	13
		Revenue	639.27	-152.16	487.11	7337.95	431.07	7769.02	3539.42	410.86	3950.28	7570.50	-98.10	7472.40
		Capital	1687.95	3326.39	5014.34	2304.05	...	2304.05	1460.58	...	1460.58	2071.50	...	2071.50
		Total	2327.22	3174.23	5501.45	9642.00	431.07	10073.07	5000.00	410.86	5410.86	9642.00	-98.10	9543.90
1.	Secretariat-Economic Services	3451	0.38	24.44	24.82	0.75	27.74	28.49	0.75	25.30	26.05	0.75	28.75	29.50
2.	Waiver of Interest													
	2.1 North-Eastern Electric Power Corporation (NEEPCO)	2801	...	90.21	90.21	...	...	...	...	...	...	...	...	...
	2.2 Less Receipts Netted	0049	...	-90.21	-90.21	...	...	...	...	...	...	...	...	...
	2.3 Write off losses of NEEPCO	2801	...	...	...	...	...	...	...	...	...	...	...	...
	Total- Waiver of Interest	...	...	...	...	...	...	...	...	...	...	...	...	

		1	2	3	4	5	6	7	8	9	10	11	12	13
Power														
	General													
3.	Central Electricity Authority	2801	4.35	68.39	72.74	35.70	78.26	113.96	4.18	68.28	72.46	45.29	74.56	119.85
		4801	1.00	...	1.00	1.50	...	1.50	1.17	...	1.17	1.00	...	1.00
		Total	5.35	68.39	73.74	37.20	78.26	115.46	5.35	68.28	73.63	46.29	74.56	120.85
4.	Research and Development													
	4.1 Central Power Research Institute, Bengaluru	2801	40.36	...	40.36	298.73	...	298.73	20.00	...	20.00	295.53	...	295.53
5.	Training													
	5.1 National Power Training Institute (NPTI)	2801	5.00	5.76	10.76	11.00	6.40	17.40	6.00	6.40	12.40	60.52	6.40	66.92
6.	Setting up of JERC for Manipur & Mizoram	2801	1.09	...	1.09	...	...	...	...	...	...	...	...	...
7.	Central Electricity Regulatory Commission													
	7.1 CERC Fund	2801	...	25.06	25.06	...	36.20	36.20	...	36.20	36.20	...	40.30	40.30
	7.2 Amount met from CERC Fund	2801	...	-25.06	-25.06	...	-36.20	-36.20	...	-36.20	-36.20	...	-40.30	-40.30
		Net	...	...	...	...	...	...	...	...	...	...	...	...

		1	2	3	4	5	6	7	8	9	10	11	12	13
8.	National Investment Fund (NIF)													
	8.01 Transfer to National Investment Fund	2801	674.85	...	674.85	...	...	...	...	...	...	...	...	...
	8.02 Amount met from NIF for Subsidy for Rural	2801	-674.85	...	-674.85	...	...	...	...	...	...	...	...	...
	Electrification RGGVY	Net	...	...	...	...	...	...	...	...	...	...	...	...
9.	Subsidy for Rural Electrification RGGVY	2801	697.94	...	697.94	4041.30	...	4041.30	2868.50	...	2868.50	4850.10	...	4850.10
10.	Funds for Evaluation Studies and Consultancy	2801	...	...	...	2.00	...	2.00	0.50	...	0.50	1.50	...	1.50
11.	Appellate Tribunal for Electricity	2801	...	7.69	7.69	...	9.05	9.05	...	8.34	8.34	...	9.79	9.79
12.	Setting up of Joint JERC for UTs and Goa	2801	...	4.00	4.00	...	4.00	4.00	...	5.50	5.50	...	6.00	6.00
13.	Comprehensive Award Scheme for Power Sector	2801	...	...	...	0.99	...	0.99	0.99	...	0.99	1.00	...	1.00
14.	Energy Conservation	2801	37.00	...	37.00	564.45	...	564.45	16.00	...	16.00	107.65	...	107.65
15.	Bureau of Energy Efficiency													
	15.01 Non EAP Component	2801	41.50	...	41.50	189.41	...	189.41	75.00	...	75.00	137.55	...	137.55
	15.02 EAP Component	2801	2.60	...	2.60	4.00	...	4.00	2.60	...	2.60	2.00	...	2.00
	Total–Bureau of Energy Efficiency		44.10	...	44.10	193.41	...	193.41	77.60	...	77.60	139.55	...	139.55

		1	2	3	4	5	6	7	8	9	10	11	12	13
16.	APDRP	2801	17.04	...	17.04	75.00	...	75.00	75.00	...	75.00	144.50	...	144.50
17.	Assistance to Forum of Regulator Capicity Building	2801	1.50	...	1.50	3.00	...	3.00	2.00	...	2.00	2.25	...	2.25
18.	Lahori Nagpala HEP	2801	...	...	...	...	536.30	536.30	...	536.30	536.30	...	...	...
19.	Financial Support for Debt Restructuring of DISCOMs	2801	...	...	...	1500.00	...	1500.00	125.40	...	125.40	400.00	...	400.00
20.	Loan to PFC for APDRP	6801	1217.45	...	1217.45	442.50	...	442.50	567.50	...	567.50	963.59	...	963.59
21.	Interest Subsidy to National Electricity Fund	2801	...	...	...	151.92	...	151.92	10.00	...	10.00	50.69	...	50.69
22.	Tehri Hydro Development Corporation India Ltd.	4801	89.45	...	89.45	133.72	...	133.72	30.00	...	30.00	62.92	...	62.92
23.	Acquisition of Coal bearing Areas for NTPC	4801	214.24	...	214.24	474.00	...	474.00	474.00	...	474.00	915.00	...	915.00
	23.01 Deduct Recoveries	4801	-214.24	...	-214.24	-474.00	...	-474.00	-474.00	...	-474.00	-915.00	...	-915.00
		Net	...	...	...	...	...	...	...	...	...	...	...	...
	Total-General		2156.28	85.84	2242.12	7455.22	634.01	8089.23	3804.84	624.82	4429.66	7126.09	96.75	7222.84
Thermal Power Generation														
24.	Badarpur Thermal Power Station													
	24.01 Revenue Expenditure	2801	...	...	...	...	9.95	9.95	...	1.37	1.37	...	1.00	1.00
	24.02 Less Revenue Receipts	0801	...	-262.44	-262.44	...	-240.63	-240.63	...	-240.63	-240.63	...	-224.60	-224.60
		Net	...	-262.44	-262.44	...	-230.68	-230.68	...	-239.26	-239.26	...	-223.60	-223.60

		1	2	3	4	5	6	7	8	9	10	11	12	13
Transmission and Distribution														
25.	Smart Grid	2801	...	...	...	...	...	...	...	...	...	1.00	...	1.00
26.	Power Sector Support to NCT of Delhi	3602	...	...	...	...	...	...	...	...	...	200.00	...	200.00
27.	Deendayal Upadyaya Feeder Separation Scheme	2801	...	...	...	...	...	...	...	...	...	500.00	...	500.00
28.	Integrated Power Development Scheme	2801	...	...	...	...	...	...	...	...	...	100.00	...	100.00
29.	Power System Operation Company (POSOCO)	4801	...	...	...	...	...	...	...	...	...	1.00	...	1.00
30.	220 KV Transmission Line from Srinagar to Leh *via* Kargil	4801	...	...	...	226.00	...	226.00	65.40	...	65.40	268.14	...	268.14
31.	Green Energy Corridor	4801	...	...	...	...	...	...	...	...	...	1.00	...	1.00
32.	Power System Development Fund (PSDF)													
	32.01 Transfer to Power System Development Fund (PSDF)	2801	...	...	...	...	...	...	...	...	...	1.00	...	1.00
	32.02 Scheme for Power System Development to be met from PSDF	2801	...	...	...	...	...	...	...	...	...	1.00	...	1.00
	32.03 Amount met from Power System Development Fund	2801	...	...	...	...	...	...	...	...	...	-1.00	...	-1.00
		Net	...	...	...	...	...	...	...	...	...	1.00	...	1.00

		1	2	3	4	5	6	7	8	9	10	11	12	13
33.	Lumpsum provision for Project/Schemes for the benefit of NE Region & Sikkim													
	33.01 Subsidy for Rural Electrification-RGGVY	2552	...	...	...	458.70	...	458.70	269.15	...	269.15	293.99	...	293.99
	33.02 Improvement of power system project in six North Eastern States exlcuding Arunachal Pradesh and Sikkim	2552	...	...	...	...	...	...	62.35	...	62.35	200.00	...	200.00
	33.03 Loan to PFC under APDRP	6552	...	...	...	57.50	...	57.50	57.50	...	57.50	152.95	...	152.95
	33.04 Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim	2552	...	...	...	1.00	...	1.00	1.00	...	1.00	175.18	...	175.18
	33.05 Investment in Public Enterprises in N.E. Region	4552	...	...	...	398.34	...	398.34	62.34	...	62.34	142.10	...	142.10
	33.06 Investment in Public Enterprises in N.E. Region	6552	...	...	...	48.66	...	48.66	48.66	...	48.66	...	...	...
	Total–Lumpsum provision for Project/Schemes for the benefit of NE Region & Sikkim		...	...	...	964.20	...	964.20	501.00	...	501.00	964.22	...	964.22
	Total–Transmission and Distribution		...	...	...	1190.20	...	1190.20	566.40	...	566.40	2036.36	...	2036.36
	Total–Power		2156.28	-176.60	1979.68	8645.42	403.33	9048.75	4371.24	385.56	4756.80	9162.45	-126.85	9035.60

		1	2	3	4	5	6	7	8	9	10	11	12	13
34.	Investment in Public Enterprises other than NE Region													
34.01	Investment in North Eastern Electric Power Corporation Ltd.	4801	30.51	...	30.51	...	...	...	...	...	...	...	...	...
34.02	Loans for Power Projects	6801	270.37	...	270.37	995.83	...	995.83	628.01	...	628.01	478.80	...	478.80
34.03	Loans to NEEPCO	6801	79.17	...	79.17	...	...	...	...	...	...	...	...	...
	Total-Investment in Public Enterprises other than NE Region		380.05	...	380.05	995.83	...	995.83	628.01	...	628.01	478.80	...	478.80
35.	Assistance to GNCT of Delhi to settle past DESU dues	7602	...	3326.39	3326.39	...	...	...	...	...	...	...	...	...
36.	Actual Recoveries	2801	-209.49	...	-209.49	...	...	...	...	...	...	...	...	...
	Grand Total		2327.22	3174.23	5501.45	9642.00	431.07	10073.07	5000.00	410.86	5410.86	9642.00	-98.10	9543.90

		Head of Dev.	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total
B.	**Investment in Public Enterprises**													
34.01	National Thermal Power Corporation Ltd.	12801	...	19925.53	19925.53	...	20200.00	20200.00	...	20200.00	20200.00	...	22400.00	22400.00

			1	2	3	4	5	6	7	8	9	10	11	12	13
	34.02	National Hydro Electric Power Corporation Ltd.	12801	270.37	3036.89	3307.26	995.83	2453.76	3449.59	628.01	2430.11	3058.12	478.80	2745.46	3224.26
	34.03	Damodar Valley Corporation Ltd.	12801	...	3366.65	3366.65	...	4080.82	4080.82	...	3515.97	3515.97	...	2764.99	2764.99
	34.04	North Eastern Electric Power Corporation Ltd. (North Eastern Region Component)	12801	109.68	952.94	1062.62	447.00	1542.61	1989.61	111.00	1550.77	1661.77	142.10	945.88	1087.98
	34.05	Satluj Jal Vidyut Nigam Ltd.	12801	...	842.15	842.15	...	964.08	964.08	...	964.08	964.08	...	1091.93	1091.93
	34.06	Tehri Hydro Development Corporation Ltd.	12801	89.45	201.72	291.17	133.72	446.14	579.86	30.00	301.96	331.96	62.92	793.76	856.68
	34.07	Power Grid Corporation of India Ltd.	12801	...	20360.00	20360.00	...	20000.00	20000.00	...	20000.00	20000.00	...	20000.00	20000.00
		Total		469.50	48685.88	49155.38	1576.55	49687.41	51263.96	769.01	48962.89	49731.90	683.82	50742.02	51425.84
C.	**Plan Outlay**														
	1.	Power	12801	2327.22	48685.88	51013.10	8677.80	49687.41	58365.21	4499.00	48962.89	53461.89	8677.78	50742.02	59419.80
	2.	North Eastern Areas	22552	...	...	...	964.20	...	964.20	501.00	...	501.00	964.22	...	964.22
	Total			2327.22	48685.88	51013.10	9642.00	49687.41	59329.41	5000.00	48962.89	53962.89	9642.00	50742.02	60384.02

ANNEXURE II

RGGVY: STATE-WISE COVERAGE, ACHIEVEMENT AND BALANCE (AS ON 31.08.2014)

Sl.No.	State	No. of Projects	Un-electrified Villages (Nos.)			Intensive Electrification of Partially-electrified Villages (Nos.)			Free Electricity Connection to BPL Households (Nos.)		
			Cover-age	Achieve-ment	Bal-ance	Cover-age	Achieve-ment	Bal-ance	Cover-age	Achieve-ment	Bal-ance
1	2	3	4	5	6	7	8	9	10	11	12
X & XI Plan Phase-I											
1.	Andhra Pradesh	16	0	0		16155	16155		1997962	1997962	
2.	Arunachal pradesh	16	2096	2010	86	1408	1328	80	53312	49102	4210
3.	Assam	23	8427	8288	139	12900	12749	151	1270814	1162091	108723
4.	Bihar	43	22956	22937	19	5832	5747	85	2549972	2459561	90411
5.	Chhattisgarh	16	1605	1179	426	15037	14002	1035	1183831	1045194	138637
6.	Gujarat	25	0	0		16176	16127	49	841219	841219	0
7.	Haryana	18	0	0		5285	5137	148	199173	199173	0
8.	Himachal Pradesh	12	95	91	4	12093	10234	1859	17494	16655	839
9.	Jammu and Kashmir	14	237	203	34	3247	3172	75	80021	69079	10942
10.	Jharkhand	22	18615	18136	479	6085	5786	299	1470260	1314933	155327
11.	Karnataka	25	58	58		23494	23471	23	890874	875477	15397
12.	Kerala	7	0	0		629	523	106	106759	102384	4375
13.	Madhya Pradesh	32	696	658	38	33000	27461	5539	1342135	1093114	249021
14.	Maharashtra	34	0	0		35325	35325	0	1206906	1206906	
15.	Manipur	9	882	616	266	1378	585	793	107369	29682	77687
16.	Meghalaya	7	1867	1818	49	3145	2911	234	109387	104150	5237
17.	Mizoram	8	145	111	34	570	378	192	30917	19500	11417
18.	Nagaland	11	105	92	13	1170	1113	57	74064	46566	27498
19.	Odisha	32	14525	14430	95	29083	26695	2388	3085925	2870496	215429
20.	Punjab	17	0	0		6580	6030	550	102176	100404	1772
21.	Rajasthan	40	4226	4173	53	33961	33313	648	1263735	1163053	100682
22.	Sikkim	4	25	25	0	413	405	8	12108	10706	1402
23.	Tamil Nadu	26	0	0	0	9673	9673	0	501202	501202	0

1	2	3	4	5	6	7	8	9	10	11	12
24.	Telangana	10	0	0	0	9746	9746	0	752297	752297	0
25.	Tripura	4	148	144	4	658	652	6	117163	117157	6
26.	Uttar Pradesh	64	27761	27750	11	2982	2982	0	1062226	1062226	
27.	Uttarakhand	13	1512	1511	1	10790	10748	42	261100	261100	
28.	West Bengal	28	4185	4185	0	23919	23560	359	2283144	2215512	67632
	Sub-Total	576	110166	108415	1751	320734	306008	14726	22973545	21686901	1286644
Phase-II under XI Plan											
1.	Bihar	11	1338		1338	12790	422	12368	2898328	42719	2855609
2.	Chhattisgarh	2	126	93	33	1077	613	464	84334	34010	50324
3.	Haryana	3				625		625	21432		21432
4.	Karnataka	2				587	466	121	27782	13146	14636
5.	Kerala	7				643	328	315	18839	15231	3608
6.	Madhya Pradesh	20	183	95	88	15635	2704	12931	496714	145275	351439
7.	Maharashtra	1				1139	747	392	19279	12559	6720
8.	Tami Nadu	3				729		729	24369		24369
9.	Uttar Pradesh	22	245	39	206	19991	43	19948	943641	4183	939458
10.	West Bengal	1	17		17	289		289	24423		24423
	Sub-Total	72	1909	227	1682	53505	5323	48182	4559141	267123	4292018
	Grand Total	648	112075	108642	3433	374239	311331	62908	27532686	21954024	5578662

ANNEXURE III

MINUTES OF THE SECOND SITTING OF THE STANDING COMMITTEE ON ENERGY (2014-15) HELD ON 22nd SEPTEMBER, 2014 IN COMMITTEE ROOM '62' PARLIAMENT HOUSE, NEW DELHI

The Committee met from 1500 hrs. to 1730 hrs.

PRESENT

Shri Rajeev Pratap Rudy — *Chairperson*

MEMBERS

Lok Sabha

2. Shri M. Chandrakasi
3. Shri Ashwini Kumar Choubey
4. Shri Harish Dwivedi
5. Shri Bhagat Singh Koshyari
6. Kunwar Sarvesh Kumar
7. Shri Jagdambika Pal
8. Shri Ravindra Kumar Pandey
9. Shrimati Krishna Raj
10. Shri M.B. Rajesh
11. Shri Purno Agitok Sangma
12. Shri Devendra Singh *alias* Bhole Singh
13. Shri Malyadri Sriram
14. Shri Bhanu Pratap Singh Verma

Rajya Sabha

15. Shri V.P. Singh Badnore
16. Shri Ram Jethmalani
17. Shri Pyarimohan Mohapatra
18. Shri S. Muthukaruppan
19. Dr. K.P. Ramalingam
20. Shri Ananda Bhaskar Rapolu
21. Dr. Anil Kumar Sahani
22. Shri Mohammad Shafi
23. Shrimati Viplove Thakur

SECRETARIAT

1. Shri N.K. Pandey	—	*Director*
2. Shri Dhiraj Kumar	—	*Additional Director*
3. Smt. L.N. Haokip	—	*Under Secretary*

WITNESSES

Ministry of Power

1. Shri P. K. Sinha	—	Secretary
2. Shri R.N.C. Choubey	—	Addl. Secretary
3. Shri B.N. Sharma	—	Joint Secretary
4. Smt. Jyoti Arora	—	Joint Secretary
5. Shri Mukesh Jain	—	Joint Secretary
6. Shri Satish Kumar	—	Joint Secretary
7. Shri Raj Pal	—	Economic Adviser

Central Electricity Authority

1. Mrs. Neerja Mathur	—	Chairperson
2. Dr. Jaipal Singh	—	Member

PSU, Autonomous Bodies, Statutory Bodies, etc.

1. Shri Arup Roy Choudhury	—	CMD, NTPC
2. Shri R.N. Nayak	—	CMD, Powergrid
3. Shri R.S.T. Sai	—	CMD, NHPC
4. Shri R.P. Singh	—	CMD, SJVNL
5. Shri P.C. Pankaj	—	CMD, NEEPCO
6. Shri A.W.K. Langstieh	—	Chairman, DVC
7. Shri A.B. Agrawal	—	Chairman, BBMB
8. Shri Rajeev Sharma	—	CMD, REC
9. Shri Harvir Singh	—	Registrar, APTEL
10. Shri M.K. Goel	—	CMD, PFC
11. Shri Subodh Garg	—	DG, NPTI
12. Shri Ajay Mathur	—	DG, BEE

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

3. Thereafter, the representatives of the Ministry made a power-point presentation on the Demands for Grants (2014-15) covering financial performance of the Ministry in the 12th Five Year Plan so far, new schemes introduced in the 12th Plan, the challenges before the sector and the strategy of the Ministry to overcome them.

4. Thereafter, the Committee raised *inter-alia* the following concerns/points with the representatives of the Ministry of Power:

(i) Poor utilization of allocated funds by the Ministry during the 12th Five Year Plan in general and 2013-14 in particular— Reasons for poor/nil utilization of funds under the head of important and flagship programs and the steps being taken by the Ministry for optimal utilization of allocated funds;

(ii) Implementation of RGGVY — reasons for delay in implementation of the programme, timeline to cover all the villages of the country, the sub-standard quality of the material being used under the scheme and its higher cost compared to the market rate, etc.;

(iii) Plan to provide 24x7 power supply in the country — the scope of the programmes, estimation of electricity required to implement it, present power demand and supply scenario of the country, actual shortage of electricity, etc.;

(iv) Reasons for slow pace of Hydro Sector development despite having huge potential in the Country especially in the North-Eastern Region;

(v) Power Discoms — the reasons for their poor financial health, gap between the cost of generation & supply of power and realization of the bills, unbundling of State Electricity Boards and financial assistance to them by the Central Government;

(vi) Aggregate Transmission and Commercial losses — reasons for having high AT&C losses, need to refurbish old and inefficient distribution infrastructure, timeline to reduce AT&C losses in the country; and

(vii) Low Plant Load Factor (PLF) of power station — reasons and its possible solutions and coal supply to power sector.

The Members sought clarifications on various issues relating to the subject and the representatives of the Ministry replied to some of the questions. The Committee directed the representatives of the Ministry to furnish written replies to the queries which could not be responded to by them. The Committee also decided to discuss the matter further during their next sitting.

5. The verbatim proceedings of the sitting of the Committee were kept on record.

The Committee then adjourned.

ANNEXURE IV

MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2014-15) HELD ON 17TH DECEMBER, 2014 IN COMMITTEE ROOM 'C', PARLIAMENT HOUSE ANNEXE, NEW DELHI

The Committee met from 1500 hrs. to 1700 hrs.

PRESENT

Dr. Kirit Somaiya — *Chairperson*

MEMBERS

Lok Sabha

2. Shri Om Birla
3. Shri M. Chandrakasi
4. Shri Harish Dwivedi
5. Shri Saumitra Khan
6. Shri Bhagat Singh Koshyari
7. Kunwar Sarvesh Kumar
8. Shri R.P. Marutharajaa
9. Shri Jagdambika Pal
10. Shri Ravindra Kumar Pandey
11. Shrimati Krishna Raj
12. Shri M.B. Rajesh
13. Shri Vinayak Bhaurao Raut
14. Shri Devendra Singh *alias* Bhole Singh
15. Shri Bhanu Pratap Singh Verma

Rajya Sabha

16. Shri V.P. Singh Badnore
17. Shri Oscar Fernandes
18. Shri S. Muthukaruppan
19. Shri Ananda Bhaskar Rapolu
20. Dr. Anil Kumar Sahani
21. Shri Mohammad Shafi

SECRETARIAT

1. Shri N.K. Pandey — *Director*
2. Shri Arun K. Kaushik — *Additional Director*
3. Smt. L.N. Haokip — *Under Secretary*

2. At the outset, the Chairman welcomed the Members and briefly apprised them of the agenda for the sitting. The Committee then took up for consideration the following draft Reports:—

(i) 1st Report on Demands for Grants of the Ministry of Power for the year 2014-15.

(ii) 2nd Report on Demands for Grants of the Ministry of New and Renewable Energy for the year 2014-15.

(iii) 3rd Report on Action Taken by the Government on the recommendations contained in the 41st Report (15th Lok Sabha) on Implementation of Rajiv Gandhi Grameen Vidyutikaran Yojana.

3. After discussing the contents of the Reports in detail, the Committee adopted the aforementioned draft Reports without any change. The Committee also authorized the Chairman to finalise the above-mentioned Reports and present the same to both the Houses of Parliament in the current Session.

4. * * * * * *

5. * * * * * *

6. * * * * * *

The Committee then adjourned.