

**35**

**STANDING COMMITTEE ON ENERGY**

(2012-13)  
FIFTEENTH LOK SABHA

**MINISTRY OF POWER**

**DEMANDS FOR GRANTS  
2013-14**

**THIRTY FIFTH REPORT**



**LOK SABHA SECRETARIAT  
NEW DELHI**

***April, 2013/Chaitra, 1935 (Saka)***

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STANDING COMMITTEE ON ENERGY  
(2012-13)**

**(FIFTEENTH LOK SABHA)**

**MINISTRY OF POWER**

**DEMANDS FOR GRANTS  
(2013-14)**

*Presented to Lok Sabha on 23.04.2013*

*Laid in Rajya Sabha on .....*



**LOK SABHA SECRETARIAT  
NEW DELHI**

*April, 2013/Chaitra, 1935 (Saka)*

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**COMPOSITION OF THE STANDING COMMITTEE ON ENERGY (2012-13)**

**LOK SABHA**

**Shri Mulayam Singh Yadav - Chairman**

2. Shri P.C. Chacko
3. #Shri Gadhvi Mukesh Bhairavdanji
4. Shri Syed Shahnawaz Hussain
5. Shri Gurudas Kamat
6. Shri Shripad Yesso Naik
7. Smt. Mausam Noor
8. Shri Jagdambika Pal
9. Shri Ravindra Kumar Pandey
10. Dr. Padamsinha Bajirao Patil
11. Shri Nityananda Pradhan
12. Shri A.Raja
13. Shri Gutha Sukhender Reddy
14. Shri Baju Ban Riyan
15. Shri Nripendra Nath Roy
16. Shri C.L. Ruala
17. Shri Sushil Kumar Singh
18. Shri Radha Mohan Singh
19. Shri Jagada Nand Singh
20. Shri Vijay Inder Singla
21. Shri Bishma Shankar *alias* Kushal Tiwari

## RAJYA SABHA

22. Shri V.P. Singh Badnore
23. Shri Shyamal Chakraborty
24. Shri Y.S.Chowdary
25. Shri Bhubaneswar Kalita
26. Shri Bhagat Singh Koshyari
27. Shri Kiranmay Nanda
28. Prof. Anil Kumar Sahani
29. Shri Birender Singh
30. @Shri K.C. Tyagi
31. Shri Motilal Vora

## SECRETARIAT

- |    |                            |                     |
|----|----------------------------|---------------------|
| 1  | Shri Brahm Dutt            | Joint Secretary     |
| 2. | Smt. Abha Singh Yaduvanshi | Director            |
| 3  | Shri N.K.Pandey            | Director            |
| 4. | Shri Manish Kumar          | Executive Assistant |

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# Passed away on 1<sup>st</sup> March, 2013

@ Nominated as member of the Committee w.e.f. 28.03.2013

## INTRODUCTION

I, the Chairman, Standing Committee on Energy having been authorized by the Committee to present the Report on their behalf, present this Thirty Fifth Report on Demands for Grants of the Ministry of Power for the year 2013-14.

2. The Committee took oral evidence of the representatives of the Ministry of Power on 4<sup>th</sup> April, 2013. 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 16<sup>th</sup> April, 2013.

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**

**16<sup>th</sup> April, 2013**

**Chaitra 26, 1935 (Saka)**

**MULAYAM SINGH YADAV**

**Chairman,**

**Standing Committee on Energy**

**REPORT**  
**PART-I**  
**NARRATION ANALYSIS**

**I      INTRODUCTION**

1.1      The electricity plays a crucial role in economic growth of a country and there is strong correlation between country's GDP and the energy availability and consumption therein. Though the power generation capacity in the Country has increased manifolds, yet the ever growing demands for energy has outpaced it leaving a gap of 8-9%. Today the power sector of the Country is facing various challenges in the form of coal supply constraints, environmental and forest clearances, high AT&C losses, debt ridden DISCOMs etc. These issues warrant urgent redressal so that desired growth of the sector can be ensured.

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 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 & 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 STATUS OF IMPLEMENTATION OF RECOMMENDATIONS CONTAINED IN THE TWENTY EIGHTH REPORT OF THE STANDING COMMITTEE ON ENERGY ON DEMANDS FOR GRANTS (2012-13) OF THE MINISTRY OF POWER.**

1.6 The Twenty Eighth Report of the Standing Committee on Energy on Demands for Grants (2012-13) pertaining to the Ministry of Power was presented to Parliament on 03<sup>rd</sup> May, 2012 and the related Action Taken Report i.e. Thirty Second Report was presented to Parliament on 18<sup>th</sup> December, 2012.

1.7 The current status of implementation of the recommendations contained in the Twenty Eighth Report of the Committee on Demands for Grants (2012-13) could not be assessed as the Minister of Power is yet to lay a statement in Parliament under Direction 73A of Directions by the Speaker.

1.8 The Twenty Eighth Report contained 16 recommendations out of which the Government accepted 10 recommendations and 8 recommendations were commented upon by the Committee.

1.9 The final Action Taken Statement on the recommendations contained in the Twenty Eighth Report of the Committee is yet to be furnished by the Ministry of Power.

### III 12<sup>TH</sup> FIVE YEAR PLAN

1.10 The 12<sup>th</sup> Five Year Plan (2012-17) component has been approved in 57<sup>th</sup> Meeting of National Development Council (NDC) held on 27<sup>th</sup> December, 2012. The 12<sup>th</sup> 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 12<sup>th</sup> Five Year Plan.

1.11 The Planning Commission has fixed generation capacity addition target of the order of 88,537 MW from the conventional sources comprising of 10,897 MW hydro power, 72,340 MW thermal power and 5,300 MW nuclear power. The sector-wise breakup of the planned capacity addition is 26,182 MW in Central Sector, 15,530 MW in State Sector and 46,825 MW in Private sector. Whereas, the proposed Renewable Capacity Addition during the 12<sup>th</sup> Plan is 30,000 MW.

1.12 Central Public Sector Undertakings-wise projection for generation capacity addition during the 12<sup>th</sup> Five year Plan are as under:

<b>CPSU</b>	<b>Capacity (MW)</b>
NTPC	11,920.0
DVC	2,200.0
NEEPCO	871.0
NHPC	3,502.0
NLC	1,250.0
NPC	5,300.0
ONGC	726.6
SJVNL	412.0
<b>TOTAL</b>	<b>26,181.6</b>

1.13 Generation capacity addition achievements during the 11<sup>th</sup> Five Year Plan period vis-à-vis their targets are given below:

	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

1.14 A target for generation capacity addition to the tune of 17,956.3 MW comprising 802 MW hydro, 15154.3 MW thermal and 2,000 MW nuclear, was set for the first year of the 12<sup>th</sup> Plan i.e. 2012-13. The details of the target and achievement in the generation capacity addition for the period are given below:

Sector	12 <sup>th</sup> Plan		
	TARGET 12 <sup>th</sup> Plan	TARGET 2012-13	ACHIEVEMENT (as on 31.03.2013)
Central	26,181.6	4,668.3 (+2,000 MW Nuclear)	5,397.3 (Nuclear=0)
State	15,530.0	4,038.0	3,968.0
Private	46,825.0	7,250.0	11,257.5
Total	88,536.6	15,956.3 (+2,000 MW Nuclear)	20,622.8 (Nuclear=0)

1.15 Detailing it further, the Secretary, Power deposed before the Committee as under:

“Now, the target for the year that went by, 2012-13, without nuclear, was 15,956 MW for the power sector. I am very happy to inform you that against this 15,956 MW, the actual achievement was 20,622.8 MW. So, with this, against the target of 15,956 MW, we achieved 129 per cent. We would also like to tell you that the year before 2012-13, that is the year, 2011-12, the power sector could achieve a target of 20,500 MW. So, last year’s achievement was more than what was done in 2011-12, and with this we hope that we would establish a trend of doing 20,000 MW per year.”

1.16 He further added:

“This Hon’ble Committee had in the previous meeting expressed its concern over the less than satisfactory achievement by the Central and State sector. This Committee had expressed the view that the Central and State sectors should ensure that the targets given to them should be achieved. So, we have worked on this from the beginning. I am happy to tell you that the Central sector achieved its target for 2012-13. The target for Central sector for capacity addition was 4,668 MW. Against this, the achievement was 5,397 MW. It is about 115 per cent of the target. The State sector nearly achieved its target. They achieved 98 per cent of what was given to them. So, with that the Central and State sectors had done very well in 2012-13 and we hope to repeat this performance in 2013-14... One more notable feature of last year’s achievement of capacity addition was the completion of the first Ultra Mega Power Project in the country. Tata Mundra is of 4,000 MW. Sir, 800 MW was commissioned in 2011-12 and the rest 3,200 MW consisting of four units were commissioned in 2012-13. With this Tata Mundra, the first UMPP in the country stands fully commissioned.”

1.17 In regard to generation capacity addition in hydro sector, the Secretary, Power has stated as below:

“Hydro is also a matter over which concern has been expressed by the hon. Members from time to time. This year again, the year 2012-13 we had focussed on hydro. The target for hydro was 802 MW and we had done 501 MW. We were again close to achieving this target. Uri project with 240 MW of capacity was very close to commissioning when the project had to be stopped because of agitations not connected with the project. So, about 240 MW for commissioning, which could have come before 31<sup>st</sup> March, slipped to the next year.”

1.18 The target for the 12<sup>th</sup> Plan in respect of construction of transmission lines and transformation capacity of substation is 1,07,440 ckm and 2,70,000 MVA respectively. In addition the target for High Voltage Direct Current (HVDC) convertor station is 12,750 MW.

1.19 In regard to targets and achievement in 2012-13 it was stated that against a target of 17,426 ckm of transmission lines, the achievement is 15,465 ckm as on 27.03.2013. Further, against a target of 31,669 MVA of substations during 2012-13 the achievement is

52,670 MVA as on 27.03.2013. Against the nil target for HVDC convertor station 3,750 MW has been achieved as on 27.03.2013. It was further stated that the target for 2013-14 for construction of transmission lines and transformation capacity of substation is 18,674 ckm and 35,363 MVA.

1.20 The Committee were apprised about the initiatives for bringing reforms in distribution sector. Some of the key initiatives proposed during the 12<sup>th</sup> Plan for improvement of distribution sector are:

- Coverage of R-APDRP to be increased.
- Operationalization of National Electricity Fund (NEF)
- Preparation of action plan to eliminate the gap between the average cost of supply and average tariff realized.
- Time of Day (TOD) metering shall be taken up by all the utilities for effective demand side management (DSM).
- Load shifting arrangement, and improvement in energy efficiency in the agriculture sector shall contribute towards DSM and ease out the pressure on utilities.
- Open Access shall be provided to consumers with more than 1 MW load in accordance with the Electricity Act, 2003.
- To improve safety, counter theft and improve aesthetics, underground cabling work shall be taken up by the utilities for towns under R-APDRP in selected areas.
- The smart grid will be a key focus area in the distribution sector in the Twelfth plan. A number of pilot projects will be taken up.
- Phased installation of smart metres, extending SCADA system to 100 more towns, and integration of renewable into the grid.

1.21 When the Committee enquired about the estimation in regard to the fund requirement of the power sector during the 12<sup>th</sup> Five Year Plan period, it was stated by the Ministry that the estimated requirement for power sector during the 12<sup>th</sup> 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 12<sup>th</sup> Plan for the power sector including renewable energy is projected at Rs.18,20,239 crore.

1.22 The Committee were further apprised about the total Plan outlay earmarked for Power Sector for the 12<sup>th</sup> Plan which is Rs 4,40,796 crore comprising Rs.54,279 crore of GBS and Rs 3,86,517 crore of IEBR. The details are given below:

<b>12<sup>TH</sup> PLAN OUTLAY</b>			
<b>CPSUs</b>	<b>GBS</b>	<b>IEBR</b>	<b>TOTAL</b>
NTPC	0.00	2,19,612.50	2,19,612.50
NHPC	2,056.91	27,312.04	29,368.95
PGCIL	0.00	1,02,034.00	1,02,034.00
DVC	0.00	14,509.65	14,509.65
THDC	516.20	6,781.86	7,298.06
SJVNL	0.00	10,400.00	10,400.00
NEEPCO	406.18	5,866.79	6,272.97
<b>TOTAL CPSUs</b>	<b>2,979.29</b>	<b>3,86,516.84</b>	<b>3,89,496.13</b>
<b>MOP Ongoing Schemes</b>			
RGVY	23,397.44	0.00	23,397.44
National Electricity Fund (NEF)	3,601.00	0.00	3,601.00
R-APDRP	10,830.00	0.00	10,830.00
R&D(CPRI)	1,368.90	0.00	1,368.90
Energy Conservation including NMEEE	1,712.50	0.00	1,712.50
BEE	787.41	0.00	787.41
NPTI	152.65	0.00	152.65
CEA	172.81	0.00	172.81
Assistance to FOR capacity building	15.00	0.00	15.00
Funds for evaluation studies & consultancy	10.00	0.00	10.00
Comprehensive Award Scheme for power sector	5.50	0.00	5.50
Setting up of joint SERC	2.50	0.00	2.50
Computerisation & Office equipment	2.00	0.00	2.00
<b>TOTAL MOP SCHEMES</b>	<b>42,057.71</b>	<b>0.00</b>	<b>42,057.71</b>
<b>MOP New Schemes</b>			
Feeder Separation Scheme	2,500.00	0.00	2,500.00
Smart Grid	1,000.00	0.00	1,000.00
Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim	3,014.00	0.00	3,014.00
220 kV transmission line from Srinagar to Leh via Kargil	1,628.00	0.00	1,628.00
Financial support for debt restructuring of DISCOMS	1,000.00	0.00	1,000.00
R&M of power plants covered under PAT scheme	100.00	0.00	100.00
<b>TOTAL MOP NEW SCHEMES</b>	<b>9,242.00</b>	<b>0.00</b>	<b>9,242.00</b>
<b>GRAND TOTAL</b>	<b>54,279.00</b>	<b>3,86,516.84</b>	<b>4,40,795.84</b>

1.23 When the Committee desired to know the action plan of the Government to mop up the required funds for power sector, the Ministry of Power in their written reply stated as under:

“Finances are to be mobilized through budgetary support, internal resource generation and borrowings or extra budgetary resources, i.e. receipts from bonds, debentures, ECBs, suppliers’ credit, deposit receipts and term loans from financial institutions. The government has taken steps to create an enabling environment to promote investment in infrastructure, specifically private investment through:-

- 100% foreign direct investment permitted in power projects,
- tax-free bonds to finance infrastructure projects,
- enhanced ceiling on ECBs under the automatic route
- tax concessions and tax holidays.”

1.24 In reply to a question about incentives for the industry to attract huge funds required for the 12<sup>th</sup> Plan, the Committee were also informed that the following benefits have been granted to Power Sector in Union Budget, 2013-14:

- Tax Holiday u/s 80-IA (100% deduction of profits for 10 years) extended by one year for units commissioned upto 31.03.2014.
- Rationalisation of Customs Duty & CVD on both steam and bituminous coal to 2% customs duty and 2% CVD.
- Withholding tax on Rupee denominated Infrastructure Funds reduced to 5% from 20%.
- Zero customs duty for electrical plants and machinery.
- Investment allowance of 15% over and normal depreciation for manufacturing companies for investments above Rs.100 crores.

1.25 The Committee taking into account the poor performance of the Power Sector during the 11<sup>th</sup> Five Year Plan asked the Government about their action plan to ensure that projects are commissioned as per schedule during the 12<sup>th</sup> Plan and strictly in accordance with the Detailed Project Reports drawn to that effect the failure of 11<sup>th</sup> Plan in terms of

achievement of targets is not repeated. The Ministry of Power in their written reply have stated as under:

“Action taken by the government to ensure that projects are commissioned as per schedule during the 12<sup>th</sup> Plan and strictly in accordance with the Detailed Project Reports are given below:

1. Central Electricity Authority (CEA) is performing the duties of monitoring of the power projects in pursuance of 73 (f) of Electricity Act, 2003. The progress of each project is monitored continuously through frequent site visits, interaction with the developers, critical study of monthly progress reports. Chairperson, CEA holds review meeting with the developers and other stakeholders to sort out the critical issues.
2. A Power Project Monitoring Panel (PPMP) has been set up by the Ministry of Power to independently follow up and monitor the progress of the hydro/thermal projects
3. Regular review of progress of project is being done at the highest level i.e. Secretary (Power), Chairperson, CEA and at the level of MOSP(I/C) for timely completion of projects.”

#### **IV ANALYSIS OF DEMANDS FOR GRANTS (2013-14)**

1.26 The Minister for Power laid on the table of the Lok Sabha, the detailed Demands for Grants (2013-14) for the Ministry of Power on 21<sup>st</sup> March, 2013. The Demands show a budgetary provision of GBS of ₹ 9,642.00 crore. The Central Plan Outlay including IEBR i.e. ₹ 49,687.41 crore, however stands at ₹ 59,329.41 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. **(Provision of ₹ 28.49 crore)**

**3. Central Electricity Authority:**..The Central Electricity Authority coordinates the activities of the various agencies in relation to control and utilization of national power resources. It is also responsible for carrying out the survey and studies, collection and recording of data concerning generation, distribution, utilization and development of power resources. **(Provision of ₹ 115.46 crore)**

**4. 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 **(Provision of ₹ 298.73 crore)**

**5. Training:**..National Power Training Institute is engaged in imparting training in various aspects of power sector including operation and maintenance of power stations. **(Provision of ₹ 17.40 crore)**

**7. 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.

9. **Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY):**..This scheme of rural Electricity Infrastructure and Household Electrification was 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 (DDG) 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. **(Provision of ₹ 4041.30 crore)**

10. **Funds for Evaluation Studies and Consultancy:**..This provision is for conducting evaluation studies of various projects/programmes/ schemes. **(Provision of ₹ 02.00 crore)**

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. **(Provision of ₹ 09.05 crore)**

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. **(Provision of ₹ 04.00 crore)**

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. **(Provision of ₹ 00.99 crore)**

**14. Energy Conservation:..**The funds would be utilized for carrying out the Energy Conservation related activities i.e. National level awareness campaign, National Energy Conservation Awards and National level Painting Competition for children. One of the Missions is National Mission for Enhanced Energy Efficiency. This is being pursued by MoP and Bureau of Energy Efficiency (BEE). **(Provision of ₹ 564.45 crore)**

**15. Bureau of Energy Efficiency (BEE):..**Fund would be provided to BEE for implementation of its various plan schemes. A number of Demand Side Management (DSM) have been initiated by Government to reduce the overall power consumption and improving efficiency of agriculture irrigation, water pumping, street lighting and sewage pumping to reduce the subsidy burden of the states and energy cost incurred by municipalities. Government has approved Bachat Lamp Yojana (BLY) scheme that seeks to promote energy efficient and high quality compact fluorescent lamps (CFLs) as replacement of incandescent bulbs in household. A Standard & Labeling (S&L) programme has been launched to reduce the end use consumption by applying labeling for equipments/appliances and mandatory labeling for energy consuming appliances category. Schemes such as Energy Conservation Building Code (ECBC), strengthening of State Designated Agencies (SDA) Energy Efficiency in Small and Medium Enterprises (SMEs), State Energy Conservation Fund and Super Energy Efficient Appliances Programme (SEEP) also launched to promote energy conservation, efficiency to achieve targeted generation capacity. **(Provision of ₹ 193.41crore)**

**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. **(Provision of ₹ 75.00 crore)**

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. **(Provision of ₹ 03.00 crore)**

18. **Lahorinag Pala HEP:**..As per the recommendation of CCEA and claim settlement committee a provision has been kept for compensating NTPC towards reimbursement of compensation for construction of the project due to closure. **(Provision of ₹ 536.30 crore)**

19. **Financial Support of 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. **(Provision of ₹ 1500.00 crore)**

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. The nodal agency for NEF would be Rural Electrification Corporation Ltd. The implementation of the Scheme would result in reduction in AT&C losses, reduction of gap between average cost of supply and average revenue on subsidy received basis, improving return on Equity and issue of notification of multiyear tariff along with investment in Distribution Sector. This Scheme will facilitate Central Govt. intervention, and catalyst for revamping and restructuring the State Sector Distribution Scheme. The CCEA has already approved the NEF Scheme. **(Provision of ₹ 151.92 crore)**

25. **220 KV transmission line from Srinagar to Leh via Kargil:**..The scheme has been approved by EFC on 18.12.2012 and approval of the CCEA is to be obtained.

**(Provision of ₹ 226.00 crore)**

26.03. **Strengthening of Transmission System in the States of Arunachal Pradesh & Sikkim:**..The new scheme is to be approved by EFC/CCEA. **(Provision of ₹ 01.00 crore)**

27.01. **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 31 December, 2012 the authorized share capital of NTPC is ₹ 10,000 crore and paid up capital is ₹ 8,245.50 crore. NTPC including its JVs & subsidiaries has installed capacity of 39,674 MW as on 31<sup>st</sup> December, 2012.

27.02. **NHPC Limited:**..NHPC Ltd. was incorporated in 1975 under Companies Act 1956. NHPC is a mini ratna category-I Enterprise of the Government of India with an authorized share capital of ₹ 15,000 crore and paid up capital as on 31<sup>st</sup> March, 2012 is ₹ 12,300.74 crore. The total installed capacity of NHPC as 31.12.2012 including that of NHDC (Joint Venture Company with Govt. of Madhya Pradesh) is 5,570 MW through 16 projects... **(Provision of ₹ 995.83 crore)**

27.03. **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 31.12.2012 is 6907.20 MW. **(Provision of ₹ 4080.82 crore)**

27.04. **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. **(Provision of ₹ 1,989.61 crore)**

**27.05. SJVN Limited (Formerly Nathpa Jhakri Power Corporation Limited NJPC):**..SJVN Limited (formerly Nathpa Jhakri Power Corporation) was established on 24 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 and 25 respectively, to plan, investigate, organize, execute, operate and maintain Hydro-electric power projects. 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 present authorized share capital of SJVN is ₹ 7000 crore. **(Provision of ₹ 964.08 crore)**

**27.06. THDC India Limited:**..THDC INDIA LTD., a Miniratna 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. **(Provision of ₹ 579.86 crore)**

**27.07. PGCIL:**..Power Grid Corporation of India Limited was incorporated as a Government of India enterprise on 23 October, 1989 under the Companies Act, 1956 with an authorized share capital of ₹5,000 crore, which has been enhanced to.. ₹.10,000 crore in 2007-08 and paid up capital as on 31<sup>st</sup> March, 2012 is ₹ 4,629.73 crore. The inter regional transmission capacity of POWERGRID as on 31.12.2012 is 28,000 MW. **(Provision of ₹ 20,000.00 crore)**

## V ANNUAL PLAN OUTLAY

1.27 The total outlay approved by the Planning Commission for the year 2013-14 is ₹ 59,329.41crore comprising IEBR of ₹ 49,687.41crore and GBS of ₹ 9,642.00 crore as against the proposal of ₹ 58,967.31crore. Details are as given in the table below:

(₹ in crore)					
Sl. No	Organisations/ projects/ schemes	Proposed Annual Plan 2013-14		Approved by Planning Commission /Min. of Finance	
		GBS	IEBR	GBS	IEBR
	<b>(A) PSUs under MoP</b>				
1.	NTPC Ltd.	0.00	20200.00	0.00	20200.00
2.	NHPC Ltd.	694.73	2453.76	995.83	2453.76
3.	PGCIL	0.00	20000.00	0.00	20000.00
4.	DVC	0.00	4080.82	0.00	4080.82
5.	THDCIL	133.72	446.14	133.72	446.14
6.	SJVNL	0.00	964.08	0.00	964.08
7.	NEEPCO	386.00	1542.61	447.00	1542.61
	<b>(A) Total</b>	<b>1214.45</b>	<b>49,687.41</b>	<b>1,576.55</b>	<b>49,687.41</b>
	<b>(B) Other MoP Schemes</b>				
1	Computerization & Office Equipment	0.75	0.00	0.75	0.00
2	Central Electricity Authority	37.20	0.00	37.20	0.00
3	Central Power Research Institute	298.73	0.00	298.73	0.00
4	National Power Training Institute (NPTI)	11.00	0.00	11.00	0.00
5	Setting up of JERC for Manipur and Mizoram	0.00	0.00	0.00	0.00
6	Subsidy for Rural Electrification – RGGVY	4,500.00	0.00	4,500.00	0.00
7	Funds for Evaluation Studies and Consultancy	2.00	0.00	2.00	0.00
8	Comprehensive Award Scheme for power sector	0.99	0.00	0.99	0.00
9	Energy Conservation	564.45	0.00	564.45	0.00
10	Bureau of Energy Efficiency	193.41	0.00	193.41	0.00
11	Assistance to FOR for Capacity Building	3.00	0.00	3.00	0.00
12	R-APDRP	575.00	0.00	575.00	0.00

13.	National Electricity Fund (NEF)	151.92	0.00	151.92	0.00
14.	220kV Transmission Line from Srinagar to Leh via Kargil.	226.00	0.00	226.00	0.00
15.	Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim	1.00	0.00	1.00	0.00
16.	Financial Support for Debt Re-structuring of DISCOMs	1,500.00	0.00	1,500.00	0.00
	<b>(B) Total</b>	<b>8,065.45</b>	<b>0.00</b>	<b>8,065.45</b>	<b>0.00</b>
	<b>Total(A+B)</b>	<b>9,279.90</b>	<b>49,687.41</b>	<b>9,642.00</b>	<b>49,687.41</b>

1.28 The utilization of Gross Budgetary Support during the 11<sup>th</sup> Five Year Plan as against the Budget Estimate is shown below:

(₹ in crore)

SL. No.	Year	BE			RE			Actuals		
		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	133.58	10763.58	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

1.29 The actual utilization of plan outlay during the last six years as against the Budget Estimates is shown below:

Year	BE (₹ in crore)	RE (₹ in crore)	Actual Utilization (₹ in crore)	% of Budget Estimate
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%
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	-	-	-

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

(₹ in crore)

		Plan				
			Qtr 1	Qtr 2	Qtr 3	Qtr 4
2010-11	BE	Actuals	890.84	3098.49	1374.73	3237.74
	10630.00	Percentage	8.38%	29.15%	12.93%	30.46%
2011-12	BE	Actuals	181.66	1251.54	2126.11	1140.67
	9642.00	Percentage	1.88%	12.98%	22.05%	11.83%
2012-13	BE	Actuals	268.92	1431.92	250.01	
	9642.00	Percentage	2.79%	14.85%	2.59%	
		Non-Plan				
			Qtr 1	Qtr 2	Qtr 3	Qtr 4
2010-11	BE	Actuals	28.37	22.89	24.83	31.27
	133.58	Percentage	21.24%	17.14%	18.59%	23.41%
2011-12	BE	Actuals	27.87	22.87	25.81	50.82
	137.68	Percentage	20.24%	16.61%	18.75%	36.91%
2012-13	BE	Actuals	30.33	26.33	24.44	
	133.77	Percentage	22.67%	19.68%	18.27%	

1.31 When the Committee enquired about the reasons for variation in revised estimates and the Budget Estimates for the year 2012-13, the Ministry of Power in their written reply have furnished the following information:

Sl. No.	Name of the Schemes/ Projects	BE 2012-13	RE 2012-13	Variations between BE & RE	Reasons for improper utilization/shortfall
1.	RGGVY	4,900.00	2,492.02	2,407.98	<ul style="list-style-type: none"> <li>• An amount of Rs. 2,500.00 crore (approx.) subsidy is lying as unspent with the Implementing agencies as of 31.12.2012.</li> <li>• Delay in award of Phase II projects involving an amount of Rs. 1800 crore as 1st installment planned for release in 2012-13.</li> <li>• Non submission of closure proposals by</li> </ul>

					<p>Implementing agencies for X plan projects.</p> <ul style="list-style-type: none"> <li>• Non-release of final 10% due to non-fulfillment of conditionalities including franchisee deployment conditionality.</li> <li>• Slow progress of works particularly in the states of Arunachal Pradesh, Bihar, Chhattisgarh, MP and J&amp;K.</li> <li>• Downward revision in project cost (approx. amount Rs. 500.00 crore) for 11th plan projects due to inclusion of state taxes while awarding but not payable under RGGVY. Implementing agencies have already been requested to segregate the same.</li> </ul>
2.	R-APDRP	3,114.00	1,500.00	1,614.00	<p>Award of contract for Part A (IT) has taken between 3 months to more than 3 years in States.</p> <p>Slow implementation of Part A (IT) across States. None of the States could complete the projects within the stipulated time of 3 years from date of sanction, even the best Utilities have taken almost 48 months</p> <p>Appointment of ITIA's by Utilities has taken between 12-18 months against envisaged schedule of 3 months from sanction.</p>

					<p>Exceptional cases include Haryana (42 months), Kerala (36 months) NE States (28 months) &amp; Goa (23 months).</p> <p>Delay in DC Building &amp; Infra. completion, delay in GIS work completion in view of non-availability of skilled man-power, delay in software customization and delay in meter/modem procurement &amp; their installation resulting in delay in Part A project completion.</p> <p>Dispute and Court cases (Kerala, Bihar, Karnataka, NE States) have delayed the implementation.</p>
3.	CPRI	265.00	80.00	185.00	The reduction is mainly due to non-finalization of certain projects which have been deferred for the next Financial Year and delay in completion of civil works.
4.	Energy Conservation	200.00	55.00	145.00	The reduction is mainly due to delay in finalization of NMEEE and Energy Conservation Awareness Awards and Painting Competition Scheme for the XII Plan.
5.	BEE	200.00	58.80	141.20	Due to non-finalization of the schemes for XII Plan.
6.	220kV Transmission line from Srinagar to Leh via Kargil	200.00	10.00	190.00	The scheme is yet to be approved by the Competent Authority.

7.	Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim	145.00	1.00	144.00	The reduction is mainly due to non-finalization of the scheme.
8.	National Electricity Fund	72.00	0.00	72.00	For independent evaluator it was assumed that evaluation of pre-eligibility conditions of utility and computation of interest subsidy will be done in first year only. However, after finalization of guidelines the role of independent evaluator was only required for evaluation of pre-eligibility conditions only in FY 2012-13. Accordingly budget estimates has been revised.
9.	Central Electricity Authority	19.08	6.53	12.55	<ul style="list-style-type: none"> <li>•Due to NIL provision under new (un-approved) schemes upgradation of IT facilities in CEA (Phase-II).</li> <li>•The scheme Renovation &amp; Modernization of Thermal Power Stations to be discontinued after 31.12.2012</li> <li>•Due to less provision under the scheme strengthening of REBs.</li> </ul>

## **VII MINISTRY OF POWER SCHEME (FUNDED THROUGH GBS)**

### **A. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)**

1.32 This Scheme of Rural Electricity Infrastructure and Household Electrification was introduced in April, 2005 for achieving the National Common Minimum Programme objective of providing access to electricity to all Rural Households over a period of four years. Rural Electrification Corporation (REC) is the nodal agency for the programme. The Scheme inter-alia provides for funding of electrification of all un-electrified Below Poverty Line (BPL) households with 100% capital subsidy.

1.33 Under this Scheme 90% Capital Subsidy will be provided for rural electrification infrastructure through:-

- i) Creation of Rural Electricity Distribution Backbone (REDB) with one 33/11 kV (or 66/11kV) 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).  
Balance 10% will be loan assistance on soft terms by REC.

1.34 During 10<sup>th</sup> and 11<sup>th</sup> Plan, 648 projects in 579 districts covering 1,12,795 un-electrified census villages; 3, 96,336 partially electrified census villages and 274.98 Lakh BPL households with total project cost of Rs. 42,413.46 Crore (Revised Cost) have been sanctioned. It was stated by the Ministry that the remaining ongoing work are expected to be completed by the end of 2014-15. In regard achievement made under the scheme so far, it was stated that as on 31/01/2013 electrification in 1,06,474 un-electrified villages, intensive electrification in 2,87,827 partially-electrified villages completed and free



electricity connection to 205.15 Lakhs BPL households released. Physical targets and achievements made so far, year wise and State wise is given in **Annexure-II&III**.

1.35 When the Committee asked about the financial and physical targets set under the scheme for 12<sup>th</sup> Plan, it was informed by the Ministry as under:

“Ministry of Power has proposed for continuation of the scheme during XII plan. The Cabinet Note for XII Plan has been circulated for inter-ministerial consultation. Proposal consists of following:

- to complete spillover works of projects sanctioned in 10th and 11th Plan .
- to continue the scheme for covering all remaining villages and habitations irrespective of population and
- providing free electricity connections to remaining Below Poverty Line (BPL) households.
- the estimated requirement of budget support for 12th Plan is Rs.49,730 crore.”

1.36 In reply to a specific query of the Committee regarding provision for minimum hour of power supply under the scheme, it was stated by the Ministry that the states have committed for a minimum daily supply of 6-8 hours of electricity in the RGGVY network. An independent evaluation of RGGVY was conducted by four agencies namely TERI, IRADe, Sambodhi and Tetrattech. They conducted the evaluation in around 1000 villages in 20 States. Through the evaluation, it was found that all states except Bihar, Jharkhand, in parts of UP are supplying 6-8 hours of electricity.

1.37 When the Committee enquired about the projection in regard to the requirement of the electricity at the time of full achievement of the targets envisaged under the scheme, it was stated as under:

“The estimated power requirement for 2.76 Cr. BPL Households and 2.29 Cr APL Households covered under 10<sup>th</sup> and 11<sup>th</sup> plan projects of RGGVY would be of the order of 4,919 MW, considering connected load of 60 watt per BPL Household, 250 watt per APL Household and diversity factor of 1.5.

Considering 8 hour of supply per day, the annual energy requirement works out to 14,364 MU.”

1.38 The details of Budget allocations vis-à-vis utilization during each year since the inception of RGGVY scheme is detailed below:

Year	Allocation (Rs. In Cr.)	Capital Subsidy Released by MOP (Rs. In Cr.)
2005-06	1,500	1,500
2006-07	3,000	3,000
2007-08	3,944	3,913.45
2008-09	5,500	5,500
2009-10	5,000	5,000
2010-11	5,000	5,000
2011-12	3,544	2,237.31
2012-13 (As on 31.01.2013)	4,900	523.03
2013-14	4,500	--
<b>Total</b>	<b>36,888</b>	<b>26,673.79</b>

1.39 Against the target of electrification of 6,000 un-electrified villages during the 2012-13, only 2,292 villages could be electrified during the period. Whereas, against the target of providing free connection to BPL households to 35 lakh families, connection only to 12.29 lakh families could be provided.

1.40 On being asked about the reasons for *poor performance under RGGVY during the year 2012-13, the Secretary, power* deposited before the Committee as under:

“RGGVY is a flagship scheme and we have been working on this for some time. The project, which has been sanctioned so far, covered 1,10,000 un-electrified villages against which we have completed nearly 1,07,000 villages. In the year 2012-13, the target kept was 6000 un-electrified villages to be done. We could not do more than 2300 villages. There had been several reasons for this. Most of these projects are in the States like Bihar, Jharkhand, Odisha, Chhattisgarh, Arunachal, Meghalaya and J&K. We are actually looking at some of the most difficult inaccessible villages in these States. We also had difficulties of forest clearance, in some cases contracts were terminated and this got into litigation, in Jharkhand there is a CBI

inquiry going on which has stopped the progress in a number of villages, etc. All these put together, about 2658 villages have been affected for different reasons. We have been pursuing with the States continuously and these 2658 villages are those where we have actually hit roadblock and we are finding it difficult to move forward. Had this been resolved, we would have done about more than 5000 villages.

1.41 In regard the poor utilization of allocated fund under the RGGVY scheme, he stated as under:

“the lack of satisfactory physical performance also reflects in the release of funds. That is why the funds that we have kept for RGGVY in BE could not be achieved. We had to revise the BE and even that could not be achieved. One reason was the poor progress of the projects that I have mentioned just now. The second reason was that we had sanctioned 19 projects for Uttar Pradesh, four projects for Bihar, two for Tamil Nadu and one for West Bengal. The sanctions were done more than one and a half years ago. These could not be awarded by the concerned States. Had these awards been taken place, we would have released money for these projects and physically the financial progress would have been very different. One more condition, which has been kept in the RGGVY projects, is that there should be a franchise at the village level, which would look after billing, collection, metering, etc. In fact, the franchise will buy it in bulk and sell it to the consumers and in a sense work like a mini-DISCOM. We have pursued with the States for last five years and we found that it is very difficult to achieve it. It is very difficult to make two-three franchise viable at that level. So, we have taken it up with the Ministry of Finance. They did not agree that this franchise condition could be relaxed. As a result of this, 10 per cent of the project cost could not be released for quite some time. Even today, it could not be released. An amount of Rs.1500 crore was held up because of this. We had a recent meeting with the Ministry of Finance. They have in a sense agreed to relax this condition. We expect that going forward we will be able to release this money. Putting together these reasons, namely 34 projects could not be awarded in time, the franchise condition, which could not be relaxed, were in the way of ensuring that the funds kept in the BE could be released.”

1.42 When the Committee asked about the difficulties that are being faced in implementation of the scheme, it was informed as given below:

“Difficulties faced during implementation of the scheme are indicated below:

- Delay in obtaining statutory clearances like forest, railway, National Highway.

- Delays in land acquisition for 33/11 KV sub-stations by States.
- Delay in energisation and taking over of completed infrastructure by the state utilities.
- Poor project management capabilities and shortage of manpower in some of the states, leading to abnormal delays in execution.
- Limited number of good agencies available for execution of turnkey contracts.
- Delays in issuance of road permit and way bills in some States.
- Inadequate upstream rural electricity infrastructure in some States.
- Delay in finalization of BPL lists by some States.
- Delay in taking decision to waive state and local taxes on certain materials by some States and issue of necessary documents like C form etc.”

1.43 The Committee were also apprised that about 86% of the remaining villages are in 6 states viz. Arunachal Pradesh, Manipur, Meghalaya and difficult and inaccessible areas of Bihar, Jharkhand and Odisha.

1.44 In regard to remedial measures proposed to overcome the difficulties being faced in the implementation of the scheme, the Ministry stated as under:

“The following changes are being proposed in the 12<sup>th</sup> Plan to overcome the difficulties being faced in its implementation:

1. In the 12<sup>th</sup> Plan guidelines availability of land, identification of bottlenecks like forest clearances, ROW problem, etc. will be made a pre-condition before sanction of the scheme.
2. Setting up of a dedicated implementation structure at district and PIA level will be made mandatory which will take care of day to day monitoring as well as for sorting out bottleneck in implementation of the scheme.
3. Enhance the BPL and APL load from 40W and 250 W to 250W and 500W respectively for designing the network which will take care of the burning of transformer issue arising out of overloads.
4. A State Level Standing Committee headed by Chief Secretary is also being proposed to finalize the scheme as well as for monitoring the progress and coordinating for sorting out bottlenecks.

## **B. Re-structured – Accelerated Power Development Reforms Programme (R-APDRP)**

1.45 Re-structured APDRP for 11<sup>th</sup> Plan was approved on 31.07.2008 as a Central Sector Scheme. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction. Projects under the scheme are to be taken up in two parts. Part-A is the projects for establishment of baseline data and IT applications for energy accounting / auditing & IT based consumer service centers and Part-B is regular distribution strengthening projects.

1.46 The programme size is ₹ 51,577 crore. Expected investment in Part-A (Baseline System) is ₹10,000 Crore and that in Part-B is ₹ 40,000Crore. PFC is the nodal agency for operationalising the programme. Initially funds for projects under both the parts would be provided through loan. The entire amount of loan for Part-A projects would be converted into grant on the completion the project and up-to 50% (90% for special category States) loan of Part-B projects would be converted into grant on achieving the 15% AT&C loss in the project area on a sustainable basis. Part C of the programme is an enabling component for the implementation of APDRP. Provision of Rs 1,177 Crore through GBS (Grant) has been provided in the scheme. Under Part D of the scheme, there is provision for incentive for utility staff in towns where AT&C loss levels are brought below 15%. There is provision of Rs 400 crore (grant) for this purpose.

1.47 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 & Orissa) 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.

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

A	Input Energy (Mkwh)*	Energy Generated – Auxiliary Consumption + Energy Purchased (Gross) – Energy Traded/Inter State sales
B	Transmission Losses (Mkwh)	
C	Net Input Energy (Mkwh)	(A-B)
D	Energy sold (Mkwh)	Energy sold to all categories of consumers including trading in Energy/Inter State Sales Energy traded / Interstate sale
E	Adjusted Energy sold (Mkwh)	Energy sold to all categories of consumers excluding Energy traded/ Inter State sales D ( i – ii)
F	Revenue From Sale of Energy (Rs./Cr.)	Revenue from sale of Energy to all categories of consumers (excluding subsidy) including trading / Inter State sales. Revenue from Trading of Energy /Inter State sale
G	Adjusted Revenue From Sale of Energy (Rs./Cr.)	Revenue from sale of Energy excluding revenue from trading of energy / inter-state sale F ( i - ii)
H	Opening Debtors For Sale of Energy (Rs./Cr.)	Opening debtors for sale of Energy (Without deducting provision for doubtful debtors).
I	Closing Debtors For Sale Of Energy (Rs./Cr.)	i) Closing debtors for sale of Energy (without deducting provision for doubtful debts). ii) Any amount written off directly from (i)
J	Adjusted Closing Debtors For Sale of Energy (Rs./Cr.)	I ( i + ii)
K	Collection Efficiency (%)	(H+G-J)/G*100
L	Units Realized (Mkwh)	E*K/100
M	Units Unrealized(Mkwh)	C-L
N	AT&C Losses (%)	M/C*100

Note (a) \*DISCOMs are required to give input energy at the point of purchase including transmission losses.

- (b) Provision for unbilled energy and debtors for trading of power have not been adjusted for calculation of collection efficiency since provision for unbilled revenue is cyclical in nature and figures of debtors are verifiable from annual accounts.

1.49 Year wise & State wise Aggregate Technical & Commercial Losses since inception of R-APDRP in FY 08-09 are tabulated below:

Region	State	Year	Year	Year
		2008-09	2009-10	2010-11
Eastern	Bihar	34.37	43.92	47.44
	Jharkhand	54.16	10.21	46.79
	Orissa	42.20	39.70	44.35
	Sikkim	46.81	55.36	51.96
	West Bengal	25.81	33.24	27.40
<b>Eastern Total</b>		<b>36.64</b>	<b>33.94</b>	<b>38.24</b>
North Eastern	Arunachal Pradesh	60.15	58.82	61.45
	Assam	32.68	29.31	29.19
	Manipur	81.32	47.55	40.17
	Meghalaya	43.37	48.77	51.63
	Mizoram	41.08	38.95	41.00
	Nagaland	44.12	46.16	50.07
	Tripura	31.91	29.16	34.48
<b>North Eastern Total</b>		<b>40.70</b>	<b>36.23</b>	<b>37.33</b>
Northern	Delhi	17.92	20.78	15.76
	Haryana	33.29	29.32	28.02
	Himachal Pradesh	12.85	18.46	15.72
	Jammu & Kashmir	69.05	70.44	72.86
	Punjab	18.51	17.73	17.47
	Rajasthan	29.83	30.07	24.19
	Uttar Pradesh	35.04	35.73	40.29
	Uttarakhand	39.89	28.35	28.48
	<b>Northern Total</b>		<b>29.96</b>	<b>29.66</b>
Southern	Andhra Pradesh	12.99	16.43	17.50
	Karnataka	24.94	25.34	23.71
	Kerala	21.61	14.90	14.09
	Puducherry	18.47	19.35	14.43
	Tamil Nadu	14.39	18.87	19.90
<b>Southern Total</b>		<b>16.92</b>	<b>19.05</b>	<b>19.26</b>

Western	Chattisgarh	32.73	36.28	28.64
	Goa	21.69	6.12	14.08
	Gujarat	22.04	22.81	16.89
	Madhya Pradesh	46.61	41.03	37.28
	Maharashtra	31.19	25.02	23.30
<b>Western Total</b>		<b>31.64</b>	<b>28.02</b>	<b>24.44</b>
<b>Grand Total</b>		<b>27.37</b>	<b>26.58</b>	<b>26.15</b>

1.50 The status of physical targets vis-à-vis achievements under the R-APDRP are as follows:

S. No.	FY	Targets	Success Indicator	Achievement
1	2008-09	No RfD Targets	-	Part-A(IT) schemes sanctioned for 597 Towns
2	2009-10	Sanction of Part-A(IT) Projects	30	Part-A(IT) schemes sanctioned for 781 Towns
		Sanction of Part-B Projects	50	Part-B schemes sanctioned for 237 Towns
		Sanction of SCADA Projects	2	SCADA schemes sanctioned for 3 Towns
3	2010-11	Sanction of Part-A(IT) Projects	10	Part-A(IT) schemes sanctioned for 23 Towns
		Sanction of Part-B Projects	330	Part-B schemes sanctioned for 584 Towns
		Sanction of SCADA Projects	25	SCADA schemes sanctioned for 25 Towns
4	2011-12	Sanction of Part-B Projects	150	Part-B schemes sanctioned for 263 Towns
		Sanction of SCADA Projects	15	SCADA schemes sanctioned for 35 Towns
5	2012-13	Part A-IT – Integration of towns with Data Centre (Nos.)	400	126 No. in FY 13 till 13-02-13. [Cum.282 No.]
		Part A – SCADA Towns(No.) – Appointment of SIA	25	21 No. in FY 13 till 13-02-13. [Cum. 41 No.]
		Part B – Sanction Towns(No.)	51	48 No. in FY 13 till 13-02-13.
		Part B – Award / Start of works in towns (No.)	400	324 No. in FY 13 till 13-02-13. Cum. 746 No.



1.51 The status of financial targets vis-à-vis achievements under the R-APDRP are as follows:

S. No.	Financial Year	Parameter/Budget Head	Targets as per RE [ `crore]	Achievement [ `crore]
1	2008-09	Loan to PFC under R-APDRP	325	325
		APDRP [Part-C]	25	25
2	2009-10	Loan to PFC under R-APDRP	1321.08	1321.08
		APDRP [Part-C]	1.26	1.26
3	2010-11	Loan to PFC under R-APDRP	2256.78	2256.78
		APDRP [Part-C]	100	100
4	2011-12	Loan to PFC under R-APDRP	1600	1600
		APDRP [Part-C]	68	68
5	2012-13	Loan to PFC under R-APDRP	1383	1218
		APDRP [Part-C]	117	<b>9.77</b>

1.52 When the Committee asked for the specific details of the physical and financial targets and their status of achievement for the year 2012-13, the Ministry furnished the following information:

**a. "Physical Target**

- i. Part A-IT – Integration of towns with Data Centre (Nos.): Till date cumulative of 282 towns have been integrated against the target of 400. MoP/PFC have been pursuing with state utilities & their implementation agencies for accomplishing the balance.
- ii. Part A – SCADA Towns – Appointment of SIA: Against the target of 25, Award has already been accomplished in 21 towns in FY12-13. Award for 3 towns in Kerala & 2 towns in J&K is in process.
- iii. Part-B Sanction: 87 no. of schemes have already been sanctioned for Rs.3653 crore in Financial Year 2012-13. .
- iv. Part-B Award/Start of Work: 324 No. already awarded in FY 13 till 13-02-13 against the target of 400. Award placed in cumulative 746 towns. Award for additional 76 towns from among TN/Bihar/UP/Haryana by March'13 is in process.

**b. Financial Targets:**

- i. Loan to PFC under R-APDRP [for onward transmission to utilities]: Target-Rs1387 crore: Already Rs895 crore has been disbursed & balance likely to be disbursed by March'13.
- ii. APDRP [Part-C for operationalization etc.]:Target–Rs.117 crore: An amount of Rs.9.77crore has been utilized so far during 2012-13.

1.53 In regard to the progress being made under the R-APDRP, the Secretary, Ministry of Power during the evidence before the Committee deposed as under:

“This programme has been taken up with the town in the country with a view to reducing AT&C losses in the towns to at least 15 per cent. In the last year, our target physically was to sanction projects for 51 towns. We could sanction 87 projects. We were to get awarded in part ‘B’ of the R-APDRP programme. In 410 towns we could get 410 projects awarded. In all we have awarded the entire set of 410 towns. In a number of 401 towns for part ‘A’, the work has been in progress. In the case of part ‘B’ of R-APDRP programme, 1131 towns stand sanctioned out of 1150 towns. The work in 16 towns is in progress. There have been difficulties with the preparation of the DPR. We have been getting them be done. So, we expect that in the coming year, these 16 towns would get done. It means that part ‘B’ stand completely sanctioned. Out of these 1134 towns sanctioned, the work is in progress in 832 towns.

1.54 Explaining the slow pace of implementation of the R-APDRP, the Secretary further added:

“We should admit that this is an extremely complex programme. This is a programme where the attempt is to bring in the information technology into the power sector to see that we are in a position to actually measure the AT&C losses. This is also a challenge for information technology companies. Some of the world famous companies like Infosys, HCL and others are involved in this programme. Put together, these challenges have been affecting the progress of the programme. Nevertheless, certain States have shown a low progress. Maharashtra, Madhya Pradesh, Andhra Pradesh, West Bengal and Gujarat are some of the leading States in implementation of the R-APDRP programme and we expect to learn from their experience and we expect to ensure that other States also ensure that their programmes are implemented fast. Again, the difficulties in implementing this programme, as I mentioned the technical difficulties, have been experienced on the part of DISCOMs, have also affected the flow of funds for this project. Flow of

funds for this project like any other project is based on physical achievement and as a result when physical achievements do not take place, it will be difficult to release funds.”

1.55 When the Committee desired to know the manner in which the Government proposes to carry forward the scheme in the 12<sup>th</sup> Five Year Plan and its physical targets, it was stated that the proposal to continue the R-APDRP scheme in the 12<sup>th</sup> Plan with the scope as approved in the 11<sup>th</sup> Plan and inclusion of Private Utilities under the scheme, which were not covered in the 11<sup>th</sup> Plan is at EFC stage. The physical targets for 12<sup>th</sup> Plan and FY 2013-14 would be decided on the approval of the scheme.

### **C. National Electricity Fund**

1.56 The Government has also proposed to create National Electricity Fund (NEF) to meet the financial requirement of the power sector. Guidelines for Operationalisation of National Electricity Fund (Interest subsidy) Scheme was issued by Ministry of Power on 05.07.2012. National Electricity Fund (Interest Subsidy Scheme) is setup to provide interest subsidy on loans provided by Financial Institutions & banks, disbursed to the State Power Utilities/ Distribution Companies (DISCOMS) – both in public and private sector. The objective of the NEF scheme is to incentivize the investment in distribution sector to improve the infrastructure and to expedite the reform process in the sector.

1.57 The distribution utilities eligible as per the NEF Guidelines shall avail the interest subsidy benefits of the NEF scheme with interest subsidy ranging from 3-7%. All Distribution Sector Infrastructure capital projects are eligible under the NEF (Interest Subsidy) Scheme provided that the proposed works have not been funded through the R-APDRP or RGGVY schemes. The projects for which any other grant / subsidy from Government of India has already been received / allocated will not be eligible under this scheme.

1.58 The tenure of loans for any eligible project under NEF (Interest Subsidy) scheme would be for a maximum period of 13 years i.e. interest subsidy can be extended up to 2025-26 and 2026-27 for the project sanctioned during 2012-13 and 2013-14 respectively. The utility seeking benefit under the NEF scheme will have to meet pre-eligibility conditions. The utility meeting the pre-eligibility conditions will then be evaluated and assigned marks on the basis of the achievements against the eligibility parameters. The

utility will then be categorized for computation of interest subsidy on the basis of the aggregate marks scored. The utility needs to submit their proposals every year for evaluation of these conditions.

1.59 In regard to corpus of National Electricity Fund, it was stated that NEF would provide interest subsidy aggregating Rs. 8466 crore spread over 14 years for distribution projects sanctioned by Steering Committee during FY 2012-13 and 2013-14 for loan amounting to Rs. 25,000 crore. The outlay of Rs.8466 crore would cover payment of interest subsidy to the borrowers, service charges to the nodal agency, payments to independent evaluators and other incidental expenses.

## **D. Financial Assistance to DISCOMs**

1.60 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.

1.61 The Scheme for Financial Restructurings of State Owned Discoms was notified by Ministry of Power after CCEA's approval. The Scheme is available to all participating State Owned Discoms having accumulated losses and facing difficulty in financing operational losses. An outlay of Rs. 1,500 crore has been kept in the Financial Year 2013-14 for the Scheme.

1.62 The Secretary, Power during the evidence before the Committee elaborated the provisions of scheme for financial restructuring of the Discoms as under:

“the financial condition of distribution companies, this has been a matter of concern for the hon. Committee. In several meetings, the hon. Committee has mentioned about the poor financial condition of the distribution companies. The Ministry of Power has taken up this task. We had series of discussions with the distribution companies concerned, particularly those companies which were most financially stressed. So, at the end of that, we prepared a programme for restructuring of the distribution companies. This programme got approved by the Cabinet. We have issued guidelines for this programme. This programme is open to all States owned distribution companies. Five States, as of now, have given their willingness to be part of the programme. Their financial restructuring plan has been worked out and it is at a different level of approval. Three other States have given their consent. They are under examination by the Government of India. The financial restructuring programme mentions a number of mandatory conditions to be fulfilled by the State distribution companies before they will be eligible for grants to be given by the Government of India. One of the conditions that were mentioned in the mandatory conditions is reduction in

AT&C losses. I mention it because the hon. Committee has time and again reiterated the need to reduce the AT&C losses of the distribution companies. So, in the FRP or the financial restructuring scheme that have been sanctioned, the different distribution companies will be eligible to receive Central Government grants only on the basis of their achievements in the reduction of AT&C losses among other conditions have been kept.”

1.63 He further added:

“To ensure that the financial condition of the distribution companies is put on a sound footing, another attempt that is made by the Ministry was to start an exercise for rating the distributing companies. Rating of distribution companies is done by financial institutions and banks before they advance loans. But, we felt that the rating mechanism that the financial institutions and banks have today is not holistic. It does not cover all the points that a distribution company or a company that is in distribution business should be looking at. So, we made a comprehensive methodology for rating which includes managerial, governance and regulatory aspects. This methodology was announced last year in July and following that we have rated all the distribution companies in the country. The banks and financial institutions will use this rating mechanism to advance loans to the distribution companies and will also look at the rate of interest that they will give to them. We hope that this will put further pressure on the distribution companies to improve their operations.”

## **E Energy Conservation**

1.64 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 in 12<sup>th</sup> Plan.

1.65 Budget allocation for the Bureau of Energy Efficiency (BEE) for the years 2012-13 and 2013-14 are as follows:

(Rs. in crore)

	2011-12	2012-13	2013-14
BE	130.80	200.00	193.41
RE	50.00	58.80	--
Actuals	49.99	--	--

1.66 The outlay of Rs.193.41 crore has been kept for the year 2013-14 including Rs.4.00 crore for the World Bank project. The funds would be utilised for the following schemes of BEE:

1. Bachat Lamp Yojana (BLY) Scheme
2. Standards and Labelling Scheme
3. Energy Conservation Building Codes (ECBCs)
4. Agriculture and Municipal DSM,
5. Small and Medium Enterprises (SMEs),



6. Operationalising EC Act by Strengthening Institutional Capacity of State Designated Agencies (SDAs).

1.67 The Plan outlay for Energy Conservation programme for Ministry of Power for the year 2013-14 is Rs.564.45 crore. The funds would be utilized for carrying out the following Energy Conservation schemes:

- (i) Energy Conservation Awareness
- (ii) Award & Painting Competition
- (iii) National Mission for Enhanced Energy Efficiency (NMEEE)

1.68 When asked how calculation is made about conservation of electricity, the Secretary Power explained during evidence as follows:

“One of the important programmes that BEE had launched is the Standard and Labelling (S&L) programme. They have a number of products where they have established standards for consumption of electricity, and on that basis they rate the equipment. Therefore, one can calculate as to what would be the energy savings given the ratings and given the kind of purchase of equipment that is made.”

1.69 During the 11th Plan (2007-12) period, the Government of India initiated a number of programmes to promote energy efficiency, with the goal of achieving savings equivalent to 10,000 MW generation capacity. The Bureau of Energy Efficiency (BEE)/the Ministry of Power had introduced a number of schemes during 11th Five Year Plan for promoting energy efficiency in India for achieving the energy saving of 5% of the anticipated energy consumption level. As against these targets, under various schemes of BEE and the Ministry of Power, saving of 10,836 MW was achieved in the 11th Plan.

1.70 The Ministry have brought out in their Outcome Budget (2013-14) that several initiatives are identified to reduce peak demand by 12,350 MW in 12th Plan by promoting energy efficiency through BEE programmes and the schemes of the Ministry of Power. The 12th Plan Outlay is ₹ 1,712.50 crore for energy conservation including NMEEE for BEE the plan outlay for 12th Plan is ₹ 787.41 crore.

1.71 The Ministry of Power in their written replies elaborated on the steps taken to strengthen and enhance energy efficiency as follows:

- i) According to the Ministry of Power in 12th Plan, it is proposed to taken forward all the 11th Plan schemes so as to continue to achieve the energy savings due to the regulating financial and facilitative activates. It is anticipated that an avoided peak capacity of 4,861 MW would be achieved in the 12th Five Year Plan under BEE schemes. In 2012-13 BEE has achieved an avoided capacity of 280 MW (unverified) till December, 2012.
- ii) 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 and Trade (NAT), Market Transformation for Energy Efficiency (MTEE), Energy Efficiency Financing Platform (EEFP) and Framework for Energy Efficient Economic Development (FEEED) to enhance energy efficiency in the country, in addition to the energy efficiency schemes being pursued through BEE. Targets for reduction in specific 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. Which is around 4% of the total reported energy consumption these 478 designated consumers assessed by PAT. Implementation document and Rules for operationalization Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE) and Venture Capital Fund for Energy Efficiency (VCFEE) have been prepared. COS has approved the proposal on "Energy in Public Procurement" in principle and guidelines in this regard has been issued by Ministry of Finance.

1.72 Elaborating on procurement of efficient appliances only in the Government Department, the Ministry of Power have stated as follows:

"Government departments, ministries, attached and subordinate offices are being directed to ensure that all the procurement of the specified product categories must carry the threshold BEE star rating indicated against them, or higher, as per instructions issued by the Ministry of Finance. Procurement efficient appliances in public sector establishments is estimated to save up to 15-20% of its energy use (heat and electricity). In the initial stage, the appliances which have been considered for public procurement includes split air conditioners, frost free refrigerator, ceiling fans and water heaters. Public procurement of energy efficient appliances would not only ensure adequate energy savings but will also contribute to monetary savings of 1700 million (Rs.170 Crore) every year through energy cost reduction and 12500 million (Rs.1250 crore) expected avoided installation of a 250 MW capacity thermal power plant, which would have been required to feed extra energy required by inefficient appliances.

Elaborating the major achievements by the National Mission of Enhance Energy Efficiency, the Ministry Stated as follows:

- Specific Energy Consumption Targets for 478 DCs from 8 industrial sectors have been assigned and it was notified on 30th March, 2012. The scheme became mandatory from 1st April, 2012.
- The total national target of energy saving to the tune of 6.686 million tones of oil equivalent has been kept in the 1st PAT cycle which is expected to be achieved by the year 2014-15. The direct benefit for the 478 participating industries in this period is reductions in input costs related to energy of approximately Rs.6800 crores.
- 22 Nos. of PAT notification workshops have been successfully organized all over the county to disseminate the rules and methodology of the PAT scheme.
- Under EEFP, MoU has been signed by BEE with M/s PTC India Ltd, M/s SIDBI, HSBC Bank, Tata Capital and IFCI Ltd to promote financing for Energy Efficiency projects.
- Under Super-Efficient Equipment Programme, ceiling fans have been identified as the first appliance to be adopted. Performance specification of a super efficient ceiling fans has been finalized and programme development is at advance stage of finalization.
- rules for Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE) and Venture Capital Fund for Energy Efficiency (VCFEE) were approved.

1.73 Enumerating the achievements of the BEE scheme, the Ministry of Power with their outcome budget have stated as follows:

Standards & Labeling (S&L)

- Moving from Voluntary to Mandatory program: 4 products were notified under mandatory programme since January 2010. In 2012-13, 280 MW (unverified) has been avoided for power generation whereas 7766 MW of capacity was avoided in 11th Plan.
  - Up gradation of standards for Split ACs and Frost Free Refrigerators with effect from 1st January, 2012.
  - Rs. 9.35 crores has been disbursed to 2 Government laboratories for 7 products.
- Energy Conservation Building Code (ECBC)
- Odisha, Rajasthan, Uttarakhnad, Karnataka and Uttar Pradesh have already amended and Rajasthan, Odisha and UT of Puducherry have also notified the code in their state. States such as Kerala, Punjab, and Gujarat are in the process of amending ECBC for their state.
  - Up to March 2012, 135 commercial buildings have been awarded Star label
  - 114 ESCOs have empanelled by BEE after accreditation from CRISIL/ICRA/CARE through an open invitation and evaluation process.

Bachat Lamp Yojana (BLY)

- 28 million CFLs have been distributed in the included projects under BLY scheme during 11th plan period upto December, 2012 and an Avoided Generation Capacity of 324.3 MW has been achieved by the CFL distribution till December, 2011.
- An avoided generation capacity of 91 MW (unverified) has been achieved till December, 2012 during 2012-13.

State Designated Agencies (SDA)

- An amount of Rs.16.231 crores has been disbursed to 15 SDAs in FY 2012-13 till date for demonstration projects, workshops/training programme, publicity/awareness campaign, analysis of energy savings accrued etc.

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 11DPRs in 8 States which shown the potential of 96 million units (MU) through replacement of 20,000 pumps 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 convened.

#### 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 completed in SB Engineers at Pune.
- Marketing and Outreach through Awareness workshops, Questionnaire Survey & Focus Group Discussions.
- Knowledge Management & Sharing through E-News letter, demonstration activities at Pune, short videos and case studies.

1.74 When asked for the reasons for shortfall in achieving the targets for the year 2012-13 in their various schemes, the Ministry Stated as follows:

- "In standards & Labeling Programme, delay in identifying the Laboratory for transfer of funds for utilization;
- The funds under Energy Conservation building Code (ECBC) could not be released in the 2nd and 3rd quarter pending compliance of certain conditions;
- Delay in conduct of the impact assessment for verification of the savings in SMEs and conducting of banker's training;
- Non-finalisation of the proposal in respect of Super Efficient Equipment Programme (SEEP);
- The delay in finalization of modalities under BEE-GEF-WB MSME project, for release of funds;
- Non-operationalization of Partial Risk Guarantee Fund for Energy Efficiency (PRGFEE)/Venture Capital Fund for Energy Efficiency (VCFEE)".

1.75 When asked about using LED bulbs instead of conventional bulbs/lamps so that much less electricity is consumed, the Secretary, Ministry of Power submitted before the Committee:

"In fact, in the RGGVY scheme that we would be launching in the 12th Plan, which is to be approved by the Cabinet, we are proposing at the household level that in place of CFL we will be providing LEDs. So, in the next phase of the programme if you are going to provide free BPL connections to 2 crore households, then there will be 2 crore LED bulbs, which will be provided.

The second thing that is being attempted is that some of the big and bulk buyers like Railways, etc. are also being motivated to start using LEDs"

1.76 When suggested that Government of India should come out with mandatory condition to replace conventional bulbs and cut on every consumption, the Secretary, Ministry of Power stated during evidence:

"The Central Government has a Purchase Manual. The Purchase Manual normally only talks about L1. So, we have got that changed to include efficiency. For instance in the case of air conditioners they can use star rated products. They have mentioned for which circumstance, what star rated product can be used or should be used. There are a number of items where the Government of India has now mandated that as part of the central purchase they would also take efficiency into account. They will not be looking at the initial capital cost. That is we normally do. They will take into account the life cycle cost as to how much it will be during the life of that particular product. This is again going to make a big change in terms of purchase of various equipment and materials by the Government of India concerns. So, as far as the municipalities are concerned, one of the efforts of the BE is to look for projects in the municipalities to bring down the consumption of the electricity. The consumption of electricity in the municipality would be basically street lights plus a lot of pumps which they use, like sewage pumps, water pumps, which could be inefficient. So, there is a separate attempt to work with them to see that these pumps are upgraded and energy efficient equipment is used."

1.77 He further added:

"About 120 buildings have already been covered in this kind of programme. Very recently we also awarded a certificate to the Yojana Bhawan in terms of our own star rating programme. According to that they have been rated Star III. They will probably move forward to make it Star V in terms of efficiency of use of electricity."

## **VII DEMAND VIS-À-VIS AVAILABILITY OF ELECTRICITY**

1.78 The forecast of electricity demand of the country is carried out by Central Electricity Authority (CEA) under the direction of Electric Power Survey Committee (EPSC). The 18<sup>th</sup> EPSC has carried out forecast of year-wise demand of the country for 12<sup>th</sup> & 13<sup>th</sup> Plan period. As per report of 18<sup>th</sup> EPS of India, the total Electric Energy Requirement of the country by end of 12<sup>th</sup> Plan is assessed to be 1354.87 BU and by end 13<sup>th</sup> Plan the electric energy requirement is assessed to be 1904.86 BU.

1.79 The 18<sup>th</sup> EPS Committee was constituted in year 2010 and the studies were taken up in the year 2010-11 considering 2009-10 as base year for analysis of the input data requirement for carrying out EPS. The forecast covers the year wise Electricity Demand, Electric Energy Requirement, Electric Energy Consumption, Annual Peak Electric Load etc. for each State/UTs for 12<sup>th</sup> & 13<sup>th</sup> Plan period.

1.80 The 18<sup>th</sup> EPS of India has been carried out by using Partial End Use Methodology (PEUM) which is a combination of Trend and End-use of Electricity consumption for various categories. The important parameters for taking up the EPS for the long term pattern of Electric Energy Consumption for various categories of consumers, growth rate for various categories, projections of population growth and steps/ measures taken by Govt. of India and State Governments for development of infrastructure benefit impact on the growth electricity demand. The categories of consumption for which EPS has been carried out are:

- Domestic
- Commercial
- Public Lighting
- Public water works/Dewatering



- Irrigation
- L.T. Industries
- H.T. Industries having demand less than 1 MW
- H.T. Industries having demand 1 MW & above
- Railway traction
- Non-industrial HT consumers

1.81 Installed generation capacity in the Country as on 31.03.2013:

(in Mega Watt)

Sector	Hydro	Thermal			Nuclear	R.E.S (MNRE)	Total	
		Coal	Gas	Diesel				Total
STATE	27437	51660.5	5676.32	602.61	57939.43	0	3569.92	88946.35
PRIVATE	2595	34505.38	7368	597.14	42491.52	0	22286.22	67372.74
CENTRAL	9459.4	44055	7065.53	0	51099.53	4780	0	65338.93
<b>TOTAL</b>	<b>39491.4</b>	<b>130220.88</b>	<b>20109.85</b>	<b>1199.75</b>	<b>151530.48</b>	<b>4780</b>	<b>25856.14</b>	<b>221658.02</b>

1.82 Plant Load Factor (PLF) of thermal power plants:

2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12
72.7	74.8	73.6	76.8	78.6	77.2	77.48	75.07	72.81

1.83 The power supply position in the country vis-à-vis requirement during the last five years is given as under:

Year	Energy				Peak			
	Requirement (MU)	Availability (MU)	Shortage		Demand (MW)	Met (MW)	Shortage	
			(MU)	%			(MW)	%
2007-08	739,343	666,007	-73,336	-9.9	108,866	90,793	-18,073	-16.6
2008-09	777,039	691,038	-86,001	-11.1	109,809	96,785	-13,024	-11.9
2009-10	830,594	746,644	-83,950	-10.1	119,166	104,009	-15,157	-12.7
2010-11	861,591	788,355	-73,236	-8.5	122,287	110,256	-12,031	-9.8
2011-12	937,199	857,886	-79,313	-8.5	130,006	116,191	-13,815	-10.6
2012-13 (upto Jan13- provisional)	833,230	759,849	-73,381	-8.8	135,453	123,294	-12,159	-9.0

1.84 On being enquired by the Committee about the steps taken/ being taken by the Government to bridge the gap between demand and supply of power in the country, it was stated by the Ministry as under:

“The steps taken/being taken by the Government to bridge the gap between demand and supply of power in the country include the following:

- (i) Acceleration in generating capacity addition during 12th Plan with a proposed target of 88,537 MW (excluding 30,000 MW renewable) against an achievement of 54,964 MW during 11th Plan.
- (ii) Rigorous monitoring of capacity addition of the on-going generation projects. Regular reviews are held at various levels including MOP, Department of Heavy Industries, Planning Commission and Cabinet Secretariat to identify the constraint areas and facilitate faster resolution of inter-ministerial and other outstanding issues.
- (iii) Development of Ultra Mega Power Projects of 4000 MW each to reap benefits of economies of scale.
- (iv) Advance planning of generation capacity addition projects for 12th Plan.
- (v) Augmentation of domestic manufacturing capacity of power equipment through Joint Ventures.
- (vi) Coordinated operation and maintenance of hydro, thermal, nuclear and gas based power stations to optimally utilize the existing generation capacity.
- (vii) Thrust to import of coal by the power utilities to meet the shortfall in coal supplies to thermal power stations from indigenous sources.
- (viii) Renovation, modernization and life extension of old and inefficient generation units.
- (ix) Strengthening of inter-state and inter-regional transmission capacity for optimum utilization of available power.
- (x) Strengthening of sub-transmission and distribution network as a major step towards loss reduction.
- (xi) Promoting energy conservation, energy efficiency and demand side management measures.”

1.85 The details of per capita electricity consumption in India vis-à-vis certain developed countries for the year 2010 as furnished by the Ministry are as under:

<b>S.No.</b>	<b>Name of the Country</b>	<b>Per Capita Consumption (kWh)</b>
1	Canada	15,145
2	USA	13,361
3	Australia	10,063
4	Japan	8,399
5	France	7,756
6	Germany	7,217
7	Korea	9,851
8	UK	5,741
9	Russia	6,460
10	Italy	5,384
11	South Africa	4,803

12	Brazil	2,384
13	China	2,942
14	India*	819
15	World	2,892

Note:- **Basic data obtained from IEA Website.**

\* Per Capita Consumption= (Gross Electrical Energy Availability/Midyear Population).

The per capita Electricity Consumption (gross Electric Energy availability/ Midyear population of India for year 2011-12 is 879kWh (provisional). The per capita electric energy consumption of India by end of 12<sup>th</sup> Plan (2016-17) is expected to be 1276kWh. This has been worked out based on the anticipated electric energy requirement by end of 12<sup>th</sup> Plan and 7% auxiliary consumption and estimated electric energy requirement for Non-Utilities.

1.86 National Electricity Policy aimed to increase per capita availability of electricity to over 1,000 units by 2012. The details of per capita consumption of electricity in different States of the Country during the year 2009-10 are given below:

States / UTs	Per Capita Consumption of Electricity(kWh)
Haryana	1,222.21
Himachal Pradesh	1,379.99
Jammu & Kashmir	952.02
Punjab	1,526.86
Rajasthan	736.20
Uttar Pradesh	348.37
Uttarakhand	1,112.29
Chandigarh	1,340.00
Delhi	1,651.26
<b>Sub-Total (NR)</b>	<b>695.11</b>
Gujarat	1,615.24
Madhya Pradesh	602.07
Chhattisgarh	1,546.94
Maharashtra	1,028.22
Goa	2,263.63
Daman & Diu	7,118.23
D & N Haveli	11,863.64
<b>Sub-Total (WR)</b>	<b>1,116.92</b>
Andhra Pradesh	966.99
Karnataka	903.24
Kerala	525.25
Tamil Nadu	1,131.58
Puducherry	1,743.37
Lakshadweep	418.14
<b>Sub-Total (SR)</b>	<b>938.88</b>
Bihar	122.11

Jharkhand	880.43
Orissa	874.26
West Bengal	550.16
A & N Islands	493.98
Sikkim	850.00
<b>Sub-Total (ER)</b>	<b>481.36</b>
Assam	204.80
Manipur	240.22
Meghalaya	675.19
Nagaland	218.03
Tripura	335.47
Arunachal Pradesh	470.00
Mizoram	376.99
<b>Sub-Total (NER)</b>	<b>257.98</b>
<b>Total(All India)</b>	<b>778.71</b>

1.87 During the evidence the Committee pointed out that there was great disparity in availability consumption of electricity in States particularly in Eastern region. The consumption was lowest particularly in Bihar which is 122.11 kWh against the national average of 778.71 kWh. On being asked about the reasons for this the representatives of PSUs informed that they have approaching the Government of Bihar and the Government of Bihar has not accepted to buy 1,250 MW offered by Central PSUs.

1.88 In the Context very low availability of electricity in Bihar, the Committee wanted to know rationality behind shutting down of Farakka and Kahalgaon power plants, on account of non-availability of coal, situation caused by dispute over quality of coal supplied. The Secretary, Ministry of Power explaining the situation stated before the Committee as under:

“कोल की क्वालिटी के बारे में भी बात बताई गई थी। इसके बारे में इस समिति में बहुत बात उठी है। कोल क्वालिटी को सुनिश्चित करने में कोल इंडिया को कितनी दिक्कतें होती हैं, यह आप भी जानते हैं। पिछले कुछ समय से यह हुआ कि थर्ड पार्टी कोल सैंपलिंग होना चाहिए। coal sampling at the receivers’ end होना चाहिए। इसके लिए हम लोग प्रयासरत हैं। इसी के हिसाब से सीआरसी ने रेग्युलेशन किया है कि Coal quality should be of a particular level and you should not pay anything above the GCV that you receive. Accordingly, the payments to the coal companies were reduced. As a result, a particular coal company decided to

restrict the availability of coal to NTPC. That was what happened day before yesterday. That was what we have sorted out recently and we are getting over that problem. If you have gone to allow full payment to Coal India, despite difficulties in quality of coal, it will continue. Sir, you have to stop it at some level and anything that you do would be at pains to somebody. Our intention is not to stop power supply. Our intention is to ensure that you get good quality coal. How do you do that? You can only do it by stopping payment to a person who is not listening to you for supplying good quality coal. I do not see any other way of doing it. We have taken it up at every possible level in the Coal Ministry. Now this problem is under resolution.”

1.89 The Committee being aware of coal stocking norms for power stations of different categories based on their distance from the coal mines which is 15 days for pit head power stations, 20 days for stations located up to 500 km, 25 days up to 500-1000 km and 30 days for beyond 1000 km, asked as to why the sufficient coal stocking at these two power plants were not maintained. In reply the Chairman and Managing Director (CMD), stated before the Committee as under:

“कोयला मिले तब पन्द्रह दिन की स्टॉकिंग हो। लेकिन वह प्वाइंट नहीं है, प्वाइंट यह है, माननीय सदस्य ने सही कहा है कहलगांव और फरक्का में पीएलएफ सबसे कम रहता है क्योंकि रेलवे नेटवर्क जिसे हम चिकन्स नेट कहते हैं, उससे यहां कोयला प्राप्त होता है। इसलिए हर साल यहां कम कोयला जाता है। इसलिए हम इस बार प्रयास करके इनलैंड वाटरवेज अथॉरिटी के साथ टाइ-अप करके कुछ इम्पोर्टेड कोयला रिवर के माध्यम से मंगवा रहे हैं।”

1.90 When the Committee desired to know the steps being taken by the Government to make energy security a reality, the Ministry in their written reply have stated as under:

“The steps taken by the Government to make energy security a reality is as under:

- Government is making all out efforts to ensure energy security in the country by meeting the stipulated demand of electricity through power generation using a mix of various energy resources including increasing amount of renewable energy sources for power generation. To meet the gap in demand and supply of fuel for power generation, import of fuel is

being done. Efforts are being made to increase the production of indigenous fuel by various means including adoption of latest state of art mining technology, to contain the level of imported fuel.

- Thrust is being given to R&M and life extension of old power plants to ensure better availability and improved power generation from old and ageing plants.
- Other measures such as Energy Efficiency & DSM are also being implemented to improve the Energy Security.
- Government of Indian has been assisting the neighboring country of Bhutan in the development of the hydro power potential for mutual benefits. Similar assistance is under consideration of the Government for development of hydro power potential in Nepal and Myanmar for mutual benefits.”

## **VIII PRIVATE SECTOR PARTICIPATION IN POWER SECTOR**

1.91 As the growing demand for power have been outpacing the power availability in the Country, the role of private investors in growth of power sector has become more important. The stipulation under section 63 of the Electricity Act 2003 has provided impetus to the participation of private sector in Generation and Transmission. Provision of open access and tariff framework under Tariff Policy has been put in place to create an enabling environment for the private investors.

1.92 The private investors have responded to the policy initiatives very positively. As a result, a capacity of 23,011 MW has been added in private sector in the 11<sup>th</sup> Plan out of the total of 54,964 MW which is about 42% of the total capacity addition during the period. For the 12<sup>th</sup> Plan also the Private Sector has got the lion's share in generation capacity addition targets. Out of total generation proposed capacity addition of 88,537 MW planned for 12<sup>th</sup> Plan, the share of Private Sector is 46,825 MW which is 53% of the total. The Ministry have informed that this year (2012-13) also, projects of 11,257 MW (which is 155% of their targets) from private sector has been commissioned out of the total capacity addition of 20,622 MW during the period.

1.93 The total installed generation capacity in the country including renewable energy is 2,11,766.22 MW, whereas, the share of private sector in installed generation capacity (including renewable) as on 31.01.2013 is 62,459.24 MW which is 29.49% of the total installed capacity. The total generation of power during April, 2012 to January, 2013 was 762.66 BU, whereas, the private sector generated 151.89 BU during the period which is 19.91% of the total.

1.94 On being asked by the Committee the information about the investment made by the Private Sector in the 11<sup>th</sup> Plan, the Ministry furnished the following details:

“Provisional figures of private investment in thermal and hydro projects by states, based on current figures submitted by the project authorities to the Central Electricity Authority are as below:

( ₹ crore )

State	Thermal	Hydro	Total
Jharkhand	7,296.36		7,296.36
Orissa	19,055.92		19,055.92
Sikkim		8,871.37	8,871.37
West Bengal	1,011.71		1,011.71
Delhi	250		250.00
Himachal Pradesh		7,453.91	7,453.91
Haryana	5,215.87		5,215.87
Rajasthan	10,967.67		10,967.67
Uttar Pradesh	7,802.29		7,802.29
Uttaranchal	2,523.58	4,013	6,536.58
Andhra Pradesh	18,292.47		18,292.47
Karnataka	5,592.99		5,592.99
Tamil Nadu	3513		3513
Chhatisgarh	43,741.49		43,741.49
Gujarat	46,062.75		46,062.75
Madhya Pradesh	8,932.18	2,038.58	10,970.76
Maharashtra	39,807.12		39,807.12
All India	2,20,065.4	22,376.86	2,42,442.3

1.95 Share of private investment in generation project to total investment during the 11<sup>th</sup> Plan:

( ₹ crore )

	Thermal	Hydro	Total
<b>Investment by Private Sector</b>	1,92,834.68	22,233.91	2,15,068.59
<b>Total Investment</b>	3,83,202.78	55,828.34	4,39,031.12
<b>Private Investment in (%)</b>	50.32%	39.83%	48.99%



1.96 When the Committee asked about the problems which had been faced by the Private Sector during the 11<sup>th</sup> Plan, which caused delay in commissioning of the projects, the Ministry stated as under:

“Electricity Act 2003 has encouraged participation of private sector in the power sector. During XIth Plan, Private Sector has achieved the Capacity addition target by commissioning 23012 MW against a target of 19797 MW fixed under MTA. However following constraints are faced in the power sector:

- (a) Inadequate availability of coal and non-signing of FSA.
- (b) Inadequate availability of gas has delayed commissioning.
- (c) Environment clearance of the linked mines.
- (d) In case of power plants based on imported coal, change in the government policies in the countries where the coal mines were located.
- (e) Availability of Land, ROW for ash/water pipelines, ash dykes, coal conveyors and transmission lines, Rehabilitation and Resettlement (R&R) of the project affected people (PAP) issues and environmental clearance of land for power projects.
- (f) Hydro projects suffer from poor geology, particularly in the North-East, and also inclement weather conditions and geological surprises.”

1.97 Being desirous to know the quantum of investment that has been proposed by the Private Sector in 12<sup>th</sup> Plan, the Committee was apprised by the Ministry that out of the total power investment projected in the 12<sup>th</sup> Plan of ₹.15.02 lakh crore, the share of the private sector is likely to be ₹ 7.14 lakh crore. Investment in generation is expected to be 56%, leaving the balance for transmission and distribution projects. They were further apprised that a ratio of 2:1:1 for generation, transmission and distribution projects appears appropriate.

1.98 Considering the huge quantum of investment that will be required for the 12<sup>th</sup> Plan, the Committee asked about the benefits and exemptions which are proposed for the Private Sector to attract them. The Ministry in their written reply have stated as under:

“As per extant policy, Foreign Direct Investment (FDI) up to 100% is permitted in power sector, under the automatic route for generation, transmission and distribution. Moreover, the Budget 2013-14, following Tax reliefs were provided to the power sector:

- Tax Holiday u/s 80-IA (100% deduction of profits for 10 years) extended by one year for units commissioned upto 31.03.2014.
- Rationalisation of Customs Duty & CVD on both steam and bituminous coal to 2% customs duty and 2% CVD.
- Withholding tax on Rupee denominated Infrastructure Funds reduced to 5% from 20%.
- Zero customs duty for electrical plants and machinery.
- Investment allowance of 15% over and normal depreciation for manufacturing companies for investments above Rs. 100 crores.”

1.99 It was further stated by the Ministry:

“Following benefits were extended to power sector under Finance Act 2012 which are still in force:

- External Commercial Borrowings (ECB) to part finance Rupee Debt of existing power projects was allowed.
- Rate of withholding tax on interest payments reduced on ECBs from 20% to 5% for three years to provide low cost funds to infrastructure sectors including power.”

1.100 The Ministry also added:

“Apart from this, Government of India has taken a number of legislative, policy and administrative measures to enhance private participation in the power sector. Some of these measures are:

- i) Enactment of new Electricity Act, 2003.
- ii) De-licensing of thermal generation. Further captive generation is freely permitted.
- iii) Structural reforms for State Electricity Board.
- iv) Formation of Central & State Regulatory Commissions.
- v) Formulation of National Grid.
- vi) Open access in Transmission & Distribution
- vii) Power trading being recognized as a distinct activity.
- viii) Accelerated Power Development & Reforms Programme
- ix) Reduction in T&D losses
- x) Mega Power Policy under which further rationalization measures have been approved recently (withdrawn since 19.07.2012)
- xi) Issue of guidelines for competitive bidding for procurement of Power by distribution licensees under the Electricity Act.

- xii) Notification of Tariff Policy
- xiii) Notification of National Electricity Policy
- xiv) Notification of the Hydro Policy, 2008
- xv) Ultra Mega Power Plants (UMPP) initiative.”

1.101 In reply to a specific query of the Committee regarding the problems being anticipated/ faced in development of the Private Sector’s power projects and the pre-emptive measures being taken/ proposed by the Government to overcome them, the Ministry in their reply have furnished the following information:

“Problems faced by the Power sector in the Country and the Steps taken by MOP

SL No	Problems faced by Power Sector in the country	Action taken by MOP
1	Inadequate availability of domestic coal to the power plants	<ul style="list-style-type: none"> <li>• Allocation of more coal for power sector from Coal India.MOC/CIL is pursued periodically to enhance supply of coal to the power stations in the country.</li> <li>• CIL has been directed to sign FSA with power plants that have entered into long-term power purchase agreements with Discoms and have been commissioned on or before 31.03.2015.This will include projects of about 32000 MW to be commissioned in the 12th Plan upto 31.03.2015.The FSA will be signed for full quantity of coal mentioned in the LOA for a period of 20 years with trigger level of 80% for levy of disincentive and 90% for levy of incentive. FSA signed for 21 GW of capacity.</li> <li>• CIL has agreed to increase the committed supply to the Power Sector Utilities at 347 MT from 319 MT committed initially during 2012-13.</li> <li>• MOP had asked CIL to liquidate the coal stock lying at the Pithead (69 MT as on 01.04.2011). 11 MT supplied during Apr-Jun by CIL from pithead stock.</li> <li>• MOP has demanded that E-auction of coal to be resorted only after the committed supply of coal has been made to the power sector utilities.</li> <li>• Coal transportation through Inland Water ways.</li> <li>• MOP has stressed the need for setting up an independent Coal Regulator.</li> </ul>

2	Environment clearance of the linked mines: In some cases, linked coal mines declared as "NO GO" area mines which resulted in delay in commissioning of linked projects.	<ul style="list-style-type: none"> <li>• 7 Coal mining blocks cleared from the NO-GO area list, estimated production from these blocks stood at 1800 MT ( Talcher, Parsa-Kanta Basin, Dulanga, Meenakshi-B, Manoharpur, Manoharpur-Dipside, Parsa-East)</li> <li>• MOEF revised circular and agreed for environmental clearance of thermal power projects if the information on coal quality parameters provided in the EIA/EMP report.</li> <li>• Environment clearance accorded to Taliapalli Coal Block of NTPC by MOEF. R&amp;R plan of PakriBarwadih approved and mining activities are likely to start soon.</li> </ul>
3	In case of power plants based on imported coal, change in the government policies in the countries where the coal mines were located have raised the cost of coal, whereas the power tariff is based on a competitive bid which does not contain a provision for passing on such increases.	Central Electricity Regulatory Commission is seized with the matter.
4	Poor financial health of the State Discoms have resulted in nonpayment/delayed payment of power dues to the power producers.	<ul style="list-style-type: none"> <li>• The scheme for Financial Restructuring of State Owned Discoms was notified by Ministry of Power vide OM dated 05.10.2012 after CCEA approval. Scheme was effective from the date of issue of order and upto 31.12.2012. MOP vide OM dated 21.01.2013 extended the scheme upto 31.03.2013.The Scheme is available to all participating State Owned Discoms having accumulated losses and facing difficulty in financing operational losses.</li> <li>• Ministry of Power has developed an Integrated rating Methodology covering the State Power Distribution Utilities. The system is an attempt to harmonize the rating of State Power Distribution Utilities by Banks/ FI. The objective is to rate all utilities on the basis of their performance and their ability to sustain commercially viable operations in the long run.</li> </ul>
5	Constraint in the domestic power equipment manufacturing facility and Balance of Plant (BOP) suppliers and construction equipments.	<ul style="list-style-type: none"> <li>• Ministry of Power took initiative to broaden the manufacturing base of super critical BTG in India with the Indian firms tying up technology with best world players and setting up of manufacturing plants in the country.</li> <li>• Ministry has also taken initiative to Bulk Tender around 14500 MW of capacity with mandatory phased domestic manufacturing clause to help this initiative and will go a long way in self sufficiency of the country on power equipment front.</li> </ul>

## Part – II

### Observations/ recommendations of the Committee

2.1 The Committee note that the detailed Demands for Grants (2013-14) of the Ministry of Power were laid in Lok Sabha on 21<sup>st</sup> March, 2013. The Demands show a budgetary provision of GBS of ₹9,642.00 crore with a provision of ₹ 7,337.95 crore in revenue and ₹2,304.05 crore in capital section. The Central Plan Outlay including IEBR i.e. ₹ 49,687.41 crore, however stands at ₹ 59,329.41 crore. The Committee have examined the Demands for Grants of the Ministry of Power for the year 2013-14 in detail. The Committee endorse the Demands for Grants of the Ministry for the year 2013-14. Recommendations/ observations of the Committee are detailed in succeeding paragraphs.

### 12<sup>th</sup> Five Year Plan

2.2 The Committee in their previous year's Report on Demands for Grants, considering the slippages of projects of 33,415 MW from the 11<sup>th</sup> Five Year Plan to 12<sup>th</sup> Plan, had expressed their displeasure over the moderate generation capacity addition target set for the 12<sup>th</sup> Plan in general and for Central Sector in particular. The Committee are glad to note that the generation capacity addition for the 12<sup>th</sup> Five Year Plan has been enhanced to 88,537 MW from the earlier proposal of 75,785 MW. Now, the share of Central, State and Private Sector in the said capacity addition is 26,182 MW, 15,530 MW and 46,825 MW against the earlier proposal of

19,858 MW, 13,796 MW and 42,131 MW respectively. In regard to the achievement for the first year of the 12<sup>th</sup> Plan i.e. 2013-14, the Ministry have informed that a generation capacity addition to the tune of 20,622.8 MW has been achieved against the target of 17,956.3 MW. The Committee have also been assured by the Ministry to add 20,000 MW each year for the rest of the 12<sup>th</sup> Plan. The Committee are satisfied with the commendable achievement of the Ministry in terms of the generation capacity addition for the year bygone and are appreciative of the Ministry's resolve to add 20,000 MW of capacity annually for the rest of the plan period. The Committee would like the Ministry not to lower their guards in their efforts in ensuring the timely completion of the projects set for completion in the 12<sup>th</sup> Plan. The Committee, therefore, recommend the Government that instead of becoming complacent they should put relentlessly sincere efforts for full attainment of the generation capacity addition targets set for the 12<sup>th</sup> Plan.

(Recommendation SI. No.1, Para No.2.2)

2.3 The Committee note that fund requirement for the power sector (conventional sources) for the 12<sup>th</sup> Five Year Plan will be ₹ 15,01,666 crore, whereas, ₹ 3,18,573 crore will be required for Renewable Energy. Thus a total fund requirement of ₹ 18,20,239 crore has been projected for the Power Sector. In regard to the making arrangements of the funds of this magnitude, the Committee further note that the total Plan Outlay earmarked for the Power Sector for the 12<sup>th</sup> Plan is ₹ 4,40,814 crore comprising ₹ 54,297 crore of GBS and ₹ 3,86,517 crore of IEHR. For the arrangement

of remaining fund, the Ministry has stated that they have taken steps to create an enabling environment to promote investment in infrastructure, specifically private investment through 100% foreign direct investment permitted in power projects, tax-free bonds to finance infrastructure projects, enhanced ceiling on External Commercial Borrowings under the automatic route and tax concessions and tax holidays. They have further informed that various benefits have been granted to Power Sector in Union Budget of 2013-14. The Committee while appreciating this believe that these are the steps in right directions and will go a long way in ensuring adequate availability of the required funds. However, the Committee, considering the quantum of required amount, are a bit apprehensive about the adequacy and efficacy of the measure taken for creating congenial environment for the desired level of investments for ensuring the availability of required funds for the sector. The Committee, therefore, recommend that the Government should ensure that the power projects coming up in the 12<sup>th</sup> Plan are not held up/ delayed or abandoned due to paucity of funds. For this they expect the Ministry of Power to persuade the Ministry of Finance for the grant of more concessions for the Power Sector during annual Government budget presentation/approval process.

(Recommendation SI. No.2, Para No.2.3)

#### Annual Plan Outlay

2.4 The Committee while scrutinizing the Gross Budgetary Support (GBS) for the year 2012-13 note that against the Budgetary Estimation (BE) of ₹ 9,642.00 crore, which was revised to ₹ 4,708.00 crore, the actual utilization was ₹ 2,535.60 crore

only. The poor financial performance of the Ministry is not limited to one or two programmes but is across the board. In regard RGGVY, against the BE of ₹ 4,900 crore the actual utilization was meager ₹ 967.94 crore. Against the BE of ₹ 3,114.00 crore for the R-APDRP, the actual spending was only ₹ 1,234.49 crore. The poor financial performance continued to other important programmes of the Ministry such as Central Power Research Institute (CPRI), Energy Conservation and Bureau of Energy Efficiency also where against the BE of ₹ 265.00 crore, ₹ 200.00 crore and ₹200.00 crore the actual utilization was ₹ 40.36 crore, ₹ 37.00 crore and ₹ 44.10 crore respectively. The financial figures for the year 2012-13 poorly reflects on working of the central power sector. Though, the Ministry have assigned various reasons for under-utilization of funds allocated, the Committee are not fully convinced. The Committee do appreciate that there may be some under utilization of allocated fund due to unforeseen circumstance which may impede the progress of one or two programmes but poor performance in all segments indicates to overall poor management and lackadaisical approach of the Ministry. It is very unfortunate that at the time when instead of slow and incremental growth, rapid and multiple development of the power sector is required, the Ministry has not been able to even fully utilize the funds leaving behind various crucial projects in lurch. However, the Committee are pleased to note that despite the poor financial performance by the Ministry during the year 2012-13, the Planning Commission has not resorted to any cut in the demand of the Ministry for the year 2013-14. Further, despite repeated recommendations of the Committee regarding proper quarterly utilization of funds, the figures furnished by the Ministry shows no improvement at all. The spendings



for the first three quarters for the year 2012-13 have been 2.79%, 14.85% and 2.59% respectively. The Committee have time and again stressed that the poor spending in first quarter of the financial year has cascading effects on the later quarters. The Committee, therefore, strongly recommend that the Ministry should sincerely put indefatigable efforts to fully utilize the allocated funds according to the norms laid down by the Ministry of Finance.

(Recommendation SI. No.3, Para No.2.4)

### RGVY

2.5 The Committee note that RGVY is a Scheme aiming at rural electrification infrastructure through Creation of Rural Electricity Distribution Backbone (REDB) with one 33/11 kV (or 66/11kV) substation in every block where it does not exist, 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, Decentralised Distributed Generation (DDG) and Supply System from conventional sources for Villages/Habitations where grid supply is not cost effective and where the Ministry of Non-Conventional Energy Sources would not be providing electricity through their programme(s). Under this scheme 90 per cent capital subsidy is being provided towards the overall cost of the project and Balance 10% will be loan assistance on soft terms by REC. During 10<sup>th</sup> and 11<sup>th</sup> Plan, 648 projects in 579 districts covering 1,12,795 un-electrified census villages; 3,96,336 partially electrified census villages and 274.98 Lakh BPL households with total project cost

of ₹ 42,413.46 Crore (Revised Cost) have been sanctioned. In regard to achievements made under the scheme so far, it was stated that as on 31st January, 2013 electrification in 1,06,474 un-electrified villages, intensive electrification in 2,87,827 partially-electrified villages has been completed and free electricity connection to ₹ 205.15 Lakhs BPL households released. It was stated by the Ministry that the remaining ongoing work are expected to be completed by the end of 2014-15. The 12<sup>th</sup> Plan outlay under the Scheme has been earmarked as ₹ 23,397 crore whereas, for the year 2013-14, the allocation is ₹ 4500 crore. The Committee find that the Ministry is committed to complete the unfinished work by 2014-15 whereas, allocation has been made for the entire 12<sup>th</sup> Plan period which will last till March, 2017. This reflects the 'not very sure' belief with regard to the completion of remaining task under the scheme which was initially targeted to be completed during the 11th Plan itself. For the year 2012-13 only 2292 villages could be electrified against the target of 6,000 un-electrified villages while only 12.29 lakh BPL families could be provided electricity connection against the target of 35 lakh BPL connections. Consequently the financial performance during the year (2012-13) has been disappointing as only ₹ 525 crore (as on 31.01.2013) could be spent against the outlay of ₹ 4,900 crore. In regard to reasons poor utilization of funds, it was stated that an amount of Rs. 2,500.00 crore (approx.) subsidy is lying as unspent with the Implementing agencies as of 31.12.2012, delay in award of Phase II projects involving an amount of Rs. 1800 crore as 1<sup>st</sup> installment planned for release in 2012-13, non submission of closure proposals by Implementing agencies for X plan projects, non-release of final 10% due to non-fulfillment of conditionalities

including franchisee deployment conditionality, slow progress of works particularly in the states of Arunachal Pradesh, Bihar, Chhattisgarh, MP and J&K, downward revision in project cost (approx. amount Rs. 500.00 crore) for 11th plan projects due to inclusion of state taxes while awarding but not payable under RGGVY. Besides, the Committee were apprised that the bulk of remaining villages were difficult and inaccessible areas. On the question of minimum hours of power supply under this Scheme, it has been stated that States have committed for a daily supply of 6-8 hours of electricity in the RGGVY network. As regards projection of the requirements of electricity at the time of the full achievement of the targets, the Committee have been apprised that it would be of the order of 4,919 MW. The Committee, in the past also, have pointed out the drawbacks in the implementation of the Scheme which include sub-contracting, low capacity transformers, non-maintenance of transformers, poor quality of work, definition of electrified villages under the scheme etc. The Committee are of the view that even after 8 years after the introduction of the Scheme, (The scheme was originally scheduled to be completed within 5 years) these identified lacunae still plague the scheme and its effective implementation. Despite diverse factors being the component of the Scheme the lacunae in the scheme needs to be addressed at the earliest in coordination with the State Governments to make the scheme a successful one. The Committee, therefore, strongly recommend that the Government should become sensitive to the aspirations of the people, by improving its implementation by taking effective measures with a view to bring sub-contracting under the scheme to the minimum, involving the elected representatives in the implementation of the

scheme, making provision of adequate capacity transformers ensuring the installed infrastructures and strengthening monitoring mechanism by keeping provisions of enhancing the random checking mechanism to ensure the success of the Scheme.

(Recommendation SI. No.4, Para No.2.5)

2.6 Another vital aspect related to the programme is the concept of 'free electricity connection' to BPL families. During their Study Tour in January, 2013 to Mumbai, it came out while connection to BPL families is without any charges, they have to make regular payment of electricity consumption. Due to non-payment capacity of BPL families, the energized connections remain operational for few months and thereafter disconnected for non-payment of bills. The Committee are not very sure that the Ministry or Central Electricity Authority maintain data of such cases. In this connection, the Committee were glad to hear from the representatives of Government of Maharashtra that the State Government provide free electricity to BPL for the first five years of electricity connection during which the BPL families are expected to improve/sustain their paying capacity. The Committee feel that to stop de-electrification of villages/BPL families, this Scheme run by Maharashtra Government should become a model for all the States. The Ministry should become a nodal agency to guide the State Governments in formulation/implementation of such a scheme for implementation across the country.

(Recommendation SI. No.5, Para No.2.6)

## R-APDRP

2.7 The Committee note that the objective of R-APDRP is to bring down AT&C losses in the Country to the level of 15%. The programme with a provision of ₹ 51,577 crore, has four Part namely, A, B, C and D. Part-A is the projects for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centres, whereas, Part-B is regular distribution strengthening projects. Part-C of the programme is an enabling component for the implementation of APDRP, while under Part-D of the programme there is provision for incentive for utility staff in towns where AT&C loss levels are brought below 15%. 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 was at 27.37% which have slightly come down to 26.15% in the year 2010-11. The Committee are aware that the originally APDRP was started in the year 2002-03. It is evident from the facts given above that despite several years and spending crores of rupees, the tangible results yielded by the programme leaves much to be desired. IT enabled data base line is yet to take any definite shape and strengthening of distribution utilities are inter-linked to it. In the year 2012-13, the outlay at BE state was ₹ 3,114 crore which was reduced to ₹ 1,500 crore at RE stage. The outlay for the year 2013-14 has been pegged at ₹ 575 crore which itself is a testimony of the failure of the programme. The Ministry has assigned the slow progress of R-APDRP to the complexity of this programme. In regard to slow implementation of Part-A of the scheme, the Ministry *inter alia* has stated that none of the States could complete the projects within the stipulated time of 3 years from the date of sanction and even the

best Utilities have taken almost 4 years. The Committee feel if best of the utilities are finding it difficult to implement the programme within stipulated timeframe, it would be even tougher for the not so efficient utilities. The Committee feel that some mechanism will have to be evolved wherein all the stakeholders should be told to draw their own strategies for containing AT&C losses in definitive way and specific time frame. The scheme should also be implemented in a graded manner instead of extending it to more cities to make it successful. The Committee, considering the technicality of the programme, recommend that the Government should work on developing 4-5 cities from each of the regions of the Country as a role model for this programme so that the rest of the cities/utilities can be guided accordingly, ascertaining the method to be adopted by them which are tested and proven.

(Recommendation SI. No.6, Para No.2.7)

2.8 The Committee further note that Power Finance Corporation (PFC) has been mandated to maintain data for AT&C losses. A perusal of the data of the last 3 years shows that it lacks authenticity and it needs to be vetted by the Ministry. For instance for the State of Jharkhand for years 2008-09, 2009-10 and 2010-11 AT&C losses have been shown as 54.16%, 10.21% and 46.79% respectively. Similar very high variations are visible in the data shown for several States like Orissa and Uttar Pradesh. AT&C losses are increasing in about dozen States prominently in Bihar, Arunachal Pradesh, Meghalaya, Mizoram, Nagaland, Tripura, J&K, Uttar Pradesh etc. The Committee are unable to comprehend as to whether the data can vary on year

to year basis to such extent that one year is very less and next year it jumps as it is shown in case of Jharkhand. The Committee would like the Ministry to monitor such vital aspect and a statement of State-wise AT&C losses should be given in the Annual Report of the Ministry on annual basis. This assumes higher significance when AT&C losses becomes the basis for approval of projects under national programmes like R-APDRP, NEF and a new scheme for financial assistance to DISCOMs.

(Recommendation SI. No.7, Para No.2.8)

#### National Electricity Fund

2.9 The Committee note that under National Electricity Fund (NEF) interest subsidy is provided on loans taken by State Power Utilities/DISCOMs from financial institutions and banks. Guidelines for operationalisation of National Electricity Fund were received in the year 2012. Under the Scheme both private and public sector companies are eligible for subsidy subject to the fulfillment of the conditions. The objective of NEF is to incentivize the investment in distribution sector to improve the infrastructure and to expedite the reform process therein. All distribution sector infrastructure capital projects are eligible for interest subsidy under NEF Scheme provided that the proposed works have not been funded through the R-APDRP or RGGVY Schemes. The projects for which any other grant/subsidy from the Government of India has already been received/allocated will not be eligible under

**this Scheme. The Committee have been apprised that NEF would provide interest subsidy aggregating ₹ 8,466 crore spread over 14 years for distribution projects sanctioned by the Steering Committee during FY 2012-13 and 2013-14 for loan amounting to ₹ 25,000 crore. The outlay of ₹ 8,466 crore would cover payment of interest subsidy to the borrowers, service charges to the nodal agency, payments to independent evaluators and other incidental expenses. However, the process for availing interest subsidy under the Scheme has been made quite cumbersome and it is yet to be ascertained whether the scheme will be of any assistance to the users as interest subsidy will be extended upto 2025-26 and 2026-27 for the projects sanctioned during 2012-13 and 2013-14 respectively. The Committee find that the objective of this Scheme is also akin to R-APDRP and new scheme for financial assistance to DISCOMs as the goal of all these schemes is to usher in effective reforms in the area of distribution and transmission in the power sector. The multiplicity of the Schemes for the sole purpose of power reforms may be useful from micro-perspective, but they add to the confusion besides creating multiple operational set-ups without corresponding results. The Committee, therefore, strongly recommend that a holistic view should be taken about these problems plaguing the sector and lean and efficacious steps should be taken to cure the malady instead of burdening it with multiple schemes.**

**(Recommendation SI. No.8, Para No.2.9)**



Financial Assistance to Discoms

2.10 The Committee note that a scheme for financial restructuring of the State 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. The Scheme for Financial Restructurings of State Owned Discoms was notified by Ministry of Power after CCEA's approval. The Scheme is available to all State Owned Discoms having accumulated losses and facing difficulty in financing operational losses. An outlay of ₹ 1,500 crore has been kept for the year 2013-14. Guidelines about the programmes have been issued. Five States, as of now, have given their proposals under the programme. Their financial restructuring plans have been worked out and are at different stages of approval. Three other States have also given their consent. They are under examination by the Government of India. The financial restructuring programme mentions a number of mandatory conditions to be fulfilled by the State distribution companies before they will be eligible for grants to be given by the Government of India. One of the conditions is reduction in AT&C losses. Under the Scheme the different distribution companies will be eligible to receive Central Government grants only on the basis of their achievements in the reduction of AT&C losses. The Committee note that that the financial conditions of the State DISCOMs are in doldrums because of various reasons including high AT&C losses.

The R-APDRP also aims at reducing AT&C losses through its own mechanism. The aim of financial support to DISCOMs, thus, supplements the efforts under R-APDRP. The Committee would await outcome of plans approved for the States in first lot. Whether any time limit has been set under the Scheme is also not known. The Committee would like to recommend that with a view to improve the financial conditions of the State DISCOMs, it should be ensured that there is no inadequacy of funds, the results achieved by the States under the Scheme should be sustainable and every effort should be made with regard to the stability of the objective achieved under the Scheme failing which State should either be debarred for central assistance or money spent be recovered if possible. The Committee expect the Government to ensure implementation of result oriented projects in a time bound manner in coordination with concerned States/DISCOMs and taking cue from the experience of RGGVY, R-APDRP Programmes etc. The Committee would keenly await the outcome of the new scheme at the end of the year.

(Recommendation Sl. No.9, Para No.2.10)

### Energy Conservation

2.11 The Committee have been apprised that with the implementation of the Ministry of Power and BEE scheme, the Government have been able to achieve energy saving of 10,836 MW. The Committee are, however, not very sure of the methodology in calculating exact energy savings. The Committee, therefore, would

like the Government to review the assessing methods so as to ensure that accurate assessment is made of energy saving and large funds made available for energy conservation schemes gives value of the money. Needless to emphasize the assessing agencies should adopt best practices being followed by advanced countries in this area.

(Recommendation Sl. No.10, Para No.2.11)

2.12 The Committee note that 28 million CFL have been distributed projects under Bachat Lamp Yojana Scheme during 11<sup>th</sup> Plan period upto December, 2012. They also note that an avoided generation capacity of 324.3 MW has been achieved by the CFL distribution till December, 2011. The Committee had earlier recommended to the Ministry to examine the feasibility of promoting installation of CFL/LED Lamps/bulbs as one of the measures of energy conservations, eco-compatibility in view of the global warming and its cost effectiveness. The Ministry has now submitted before the Committee that they are proposing to provide LED instead of CFL under RGGVY scheme. The Ministry has stated that 2 crore BPL families would be provided free connections with LED bulbs also. It was also informed that attempts are being made to involve some of the big and bulk buyers like Railways to promote the use of LED bulbs. The Ministry also informed that if there is huge demand for LED bulbs, then the cost of LED will come down. The Committee are happy to note the initiatives taken by the Ministry to use LED under RGGVY scheme in the 12<sup>th</sup> Plan and also pursuing big and bulk buyers to use LED lamps/bulbs. This

would significantly reduce the consumption of electricity while reducing the cost of LEDs also. They recommend the Ministry to expedite implementation of this proposal and should make vigorous efforts to pursue large users such as Ministry of Defence (regarding border lightings) and all other Government offices to replace the conventional bulbs since this would lead to enormous energy conservation. The Committee also emphasise the need to create awareness, through visual and print media even in vernacular languages, among general masses. BEE should enhance their publication for use of energy efficient equipments and appliances, LED etc.

(Recommendation Sl. No.11, Para No.2.12)

2.13 The Committee note that the Central Government Departments have Purchase Manual for Procurement. The representative from the Ministry of Power informed the Committee that they have got the Purchase Manual changed to include efficiency and star-rated products to be used as part of the central purchases. They apprised the Committee that there are a number of items where the Government of India has now mandated that as a part of the Central Purchase they would also take efficiency into account. They would not be looking at the initial capital cost. They would take into account the life cycle cost as to how much it will be during the life of that particular product. The Committee was also informed that the Committee of Secretaries has approved the proposal on 'Energy Efficiency in Public Procurement', in principle and guidelines in this regard have been issued by the Ministry of Finance. The Committee feel that this is a step in right direction. The

Committee desire that the Ministry should expedite the implementation of their proposal on Energy Efficiency in Public Procurement and also monitor it regularly to ensure its adherence.

(Recommendation SI. No.12, Para No.2.13)

*Demand vis-à-vis Availability of Electricity*

2.14 The Committee are pained to note that there is great disparity in terms of per capita consumption of electricity in different States of the Country. Dadra & Nagar Haveli have the highest per capita electricity i.e. 11,863.64 kWh, whereas, Bihar is having the lowest i.e. 122.11 kWh. There are many States viz. Uttar Pradesh, West Bengal, Assam etc. where per capita consumption of electricity is way below the national average of 778.71 kWh. The Committee are very much aware of the fact that the electricity is under List III viz. a concurrent subject under seventh Schedule of the Constitution which means both, the Centre and the States, have to share the onus to ensure adequate electricity availability for every citizen of the Country. Primarily, the States are required to set up power plants corresponding to their needs for the electricity and available resources with them. However, they try to set up plants based on availability of funds. Whereas, the duty of the Central Government is to ensure the holistic and inclusive growth of the Power Sector by providing assistance, physical and financial, to the States who are lagging behind in the race of development due to one or the other reason. Though, the Government

claims that they are focusing on planning the generation and the transmission system in the Country on the concept of optimization of utilization of resources on all-India basis rather on regional self-sufficiency, the Committee find that the Central Government have failed in ensuring equitable availability of electricity, which is base of social and economical activities and lead to overall growth of the State. Often, the less per capita consumption in certain States become a reason for setting less generating units in that State, which is not only misleading but also an injustice to the people such States. The less per capita consumption does not necessarily indicate to the less demand but it could be due to less availability of electricity. The Committee believe that this kind of disparity in States in terms of per capita availability and consumption of electricity is not in the interest of integrated and inclusive growth of the Country. The Committee, therefore, strongly recommend that the Central Government should ensure more equitable availability of electricity across the Country by providing every assistance to the lagging States for setting up more generating units and allocating more electricity from the central pool and by transmitting it to deficit regions from surplus regions.

(Recommendation SI. No.13, Para No.2.14)

2.15 The Committee take note of the news that two thermal power plants of NTPC in Bihar namely Farakka and Kahalgaon had been forced to shut down due to non-availability of coal forcing the crores of the people of that region to remain in dark. It has been reported that NTPC for long have complained about the poor quality of

coal being supplied which was not paid heed by the CIL, forcing NTPC to stop the payment. In return CIL stopped the supply of coal to these two power plants. The Committee observe that there is coal stocking norms for power stations of different categories based on their distance from the coal mines which is 15 days for pit head power stations, 20 days for stations located up to 500 km, 25 days up to 500-1000 km and 30 days for beyond 1000 km. While scrutinizing the matter, the Committee found that these plants were in super critical/ critical categories for long time not maintaining normative coal stock which is necessary for averting any undesirable emergent situation in case of short supply of coal. The reason for not maintaining the normative coal stocks at these power plants have been assigned to short supply of coal from CIL. The Committee feel that the matter has been handled in very casual and dreadful manner forcing the people of the region to go without power, bringing the agricultural, commercial and other essential services to halt. The Committee in first instance find NTPC at fault for not taking necessary and effective measure to ensure adequate coal stocks at these two power plants which were under the supercritical/ critical category having coal stocks for less than 4/7 days. Had the NTPC maintained the normative coal stocks at these two power plants, their shut down in wake of no supply of coal from CIL could have been delayed till the resolution of the issue averting the blackout. Secondly, the Committee feel that CIL, before resorting to stop the supply of coal to these power plants should have given the thought about the repercussions of their action. The Committee strongly believe that the step of discontinuing supply to supercritical power stations over the issues that could have easily been resolved through dialogues and better coordination

between the two organizations, who are also service providers of this Country, is in no way a prudent decision. The Committee while deprecating, both the organizations for their coordination failure which resulted in inconvenience to the crores of people of the Country, strongly recommend that the issue of quality of coal should be resolved at earliest by the Ministry of Power and the Ministry of Coal. Simultaneously, they also recommend that utmost efforts should be made to ensure in maintenance of adequate coal stocks not only at Farakka and Kahalgaon Power Stations which are having the lowest PLF due to lack of coal but at other power stations as well. The Committee would like to be apprised of the coal stocking status at these power stations. The Committee would also like to emphasize that such occurrences do not happen in future failing which the responsible officers of both the organizations be held accountable for exemplary punishment.

(Recommendation Sl. No.14, Para No.2.15)

#### Private Sector Participation in Power Sector

2.16 The Committee note that the capacity addition achieved by the Private Sector in the 11<sup>th</sup> Plan stood at 23,011 MW which is 153% of their target of 15,043 MW and 42% of the total generation capacity addition achieved during the period i.e. 54,964 MW. It is evident that the Private Sector came to rescue the Power Sector when the Central and State Sector badly failed to achieve their generation capacity addition targets during the 11<sup>th</sup> Plan. Even in the proposed capacity addition target for 12<sup>th</sup>



Plan, they have got the lion's share. Out of the total 88,537 MW proposed during the period, 46,825 MW will come from Private Sector. The energy deficit situation and ever growing demands for power in the Country make it imperative to facilitate the Private Sector for ensuring their continuous participation in the Sector. Though, in the 11<sup>th</sup> Plan the Private Sector exceeded their target despite the presence of several obstacles, their share in 12<sup>th</sup> Plan targets warrants that the issues, already surfaced as well anticipated, which possibly can hinder the growth of this Sector should be dealt with urgency and diligence. The issues that the Private Sector is presently facing includes, the inadequate availability of coal and gas, difficulty in obtaining environmental clearances, constraints in the domestic power equipment manufacturing facility, etc. besides need for huge capital investment. The Committee believe that the issues are not of insurmountable nature and could be redressed through proper, effective and timely interventions of the Government. As the role of private players in power sector of the Country has become indispensable, it becomes necessary that the Government facilitates them in overcoming the hurdles and issues that are impeding the progress of the Sector. The Committee, therefore, recommend that the Government should extend all possible assistance to the private sector in overcoming their problems with regard to their target achievement mission.

(Recommendation SI. No.16, Para No.2.17)

2.17 The Committee note that the private sector's participation in the hydro power sector is not as encouraging as in thermal power sector. Private Sector, whose physical achievement in thermal power had been exceptionally well, could achieve only 1,292 MW of hydro power generation capacity addition against the moderate target of 3,491 MW for the 11<sup>th</sup> Five Year Plan. Considering the targets for capacity addition in hydro sector planned for 12<sup>th</sup> Plan, the Committee believe that the focus will be on thermal power generation leaving the hydro sector marginalized in coming years also. Though the development of thermal generation projects take comparatively shorter time in commissioning and involves lesser complications, yet the Committee believe that the issues of constraints in fuel supply, pollution and the high cost of electricity production etc. neutralize the advantages in long run and thus underlying the importance of the hydro sector. Due to initial problems and complication in grant of various clearances, forest clearances, problems in land acquisition, reallocation and resettlement, difficult geographical conditions etc. in establishing a hydro power project, flow of private investment in this Sector is constrained. The Committee are of the view that these problems faced initially in, development of the hydro projects better be handled by the Government and therefore, need their timely intervention, physical as well as financial. Once the projects are commissioned, the hydro power projects are the source of clean and cheap energy which does not require any fuel for their sustenance. When UMPP concept for thermal power under which various clearances and fuel linkages etc. are sorted out by the Ministry of Power why such a policy cannot be evolved for hydro-sector. The Committee, therefore, strongly recommend that the Government should

**take serious and sincere initiative to streamline the process of establishing hydro projects by better coordination among the various Central and State Government agencies for attracting private investment in a big way paving the way for rapid development of the Sector.**

**(Recommendation Sl. No.16, Para No.2.17)**

**New Delhi;  
16<sup>th</sup> April, 2013  
Chaitra 26,1935 (Saka)**

**MULAYAM SINGH YADAV  
Chairman,  
Standing Committee on Energy.**

## MINISTRY OF POWER

DEMAND NO. 76

## Ministry of Power

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

(In crores of Rupees)

Major Head	Actual 2011-2012			Budget 2012-2013			Revised 2012-2013			Budget 2013-2014			
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	
Revenue	2418.44	-309.57	2108.87	5929.63	-122.89	5806.74	2820.18	-132.46	2687.72	7337.95	431.07	7769.02	
Capital	2206.95	...	2206.95	3712.37	...	3712.37	1887.82	3326.39	5214.21	2304.05	...	2304.05	
<b>Total</b>	<b>4625.39</b>	<b>-309.57</b>	<b>4315.82</b>	<b>9642.00</b>	<b>-122.89</b>	<b>9519.11</b>	<b>4708.00</b>	<b>3193.93</b>	<b>7901.93</b>	<b>9642.00</b>	<b>431.07</b>	<b>10073.07</b>	
1. Secretariat-Economic Services	3451	0.60	22.78	23.38	0.10	25.84	25.94	0.10	25.20	25.30	0.75	27.74	28.49
2. Waiver of Interest													
North Eastern Electric													
2.01 Power Corporation (NEEPCO)	2801	...	...	...	...	...	...	...	90.21	90.21	...	...	...
2.02 Less Receipts Netted	0049	...	-16.13	-16.13	...	...	...	...	-90.21	-90.21	...	...	...
2.03 Write off losses of NEEPCO	2801	...	16.13	16.13	...	...	...	...	...	...	...	...	...
Total- Waiver of Interest		...	...	...	...	...	...	...	...	...	...	...	...
<b>Power General</b>													
3. Central Electricity Authority	2801	3.32	67.62	70.94	18.08	78.80	96.88	5.53	72.59	78.12	35.70	78.26	113.96
	4801	0.38	...	0.38	1.00	...	1.00	1.00	...	1.00	1.50	...	1.50
	<b>Total</b>	<b>3.70</b>	<b>67.62</b>	<b>71.32</b>	<b>19.08</b>	<b>78.80</b>	<b>97.88</b>	<b>6.53</b>	<b>72.59</b>	<b>79.12</b>	<b>37.20</b>	<b>78.26</b>	<b>115.46</b>
4. Research and Development													
4.01 Central Power Research Institute, Bengaluru	2801	64.00	...	64.00	265.00	...	265.00	80.00	...	80.00	298.73	...	298.73
5. Training													
5.01 National Power Training Institute (NPTI)	2801	2.09	6.40	8.49	5.09	6.40	11.49	5.09	5.76	10.85	11.00	6.40	17.40
6. Setting up of JERC for Manipur & Mizoram	2801	1.56	...	1.56	2.46	...	2.46	2.24	...	2.24	...	...	...
7. Central Electricity Regulatory Commission													
7.01 CERC Fund	2801	...	31.48	31.48	...	34.79	34.79	...	32.28	32.28	...	36.20	36.20
7.02 Amount met from CERC Fund	2801	...	-31.48	-31.48	...	-34.79	-34.79	...	-32.28	-32.28	...	-36.20	-36.20
Net		...	...	...	...	...	...	...	...	...	...	...	...
8. National Investment Fund (NIF)													
8.01 Transfer to National Investment Fund	2801	2086.04	...	2086.04	4761.00	...	4761.00	3808.80	...	3808.80	...	...	...

Major Head	Actual 2011-2012			Budget 2012-2013			Revised 2012-2013			Budget 2013-2014		
	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total
8.02 Amount met from NIF for Subsidy for Rural Electrification - RGGVY	2801	-2086.04	... 2086.04	-4761.00	...	4761.00	-3808.80	...	3808.80	...	...	...
<i>Net</i>		...	...	...	...	...	...	...	...	...	...	...
9. Subsidy for Rural Electrification-RGGVY	2801	2237.31	... 2237.31	4410.00	...	4410.00	2002.02	...	2002.02	4041.30	...	4041.30
10. Funds for Evaluation Studies and Consultancy	2801	...	...	2.00	...	2.00	0.50	...	0.50	2.00	...	2.00
11. Appellate Tribunal for Electricity	2801	...	7.26 7.26	...	8.78	8.78	...	8.10	8.10	...	9.05	9.05
12. Setting up of Joint JERC for UTs and Goa	2801	...	3.80 3.80	...	4.00	4.00	...	3.60	3.60	...	4.00	4.00
13. Comprehensive Award Scheme for Power Sector	2801	0.69	... 0.69	0.90	...	0.90	0.90	...	0.90	0.99	...	0.99
14. Energy Conservation	2801	49.99	... 49.99	200.00	...	200.00	55.00	...	55.00	564.45	...	564.45
<i>15. Bureau of Energy Efficiency</i>												
15.01 Non EAP Component	2801	62.00	... 62.00	197.40	...	197.40	56.20	...	56.20	189.41	...	189.41
15.02 EAP Component	2801	2.00	... 2.00	2.60	...	2.60	2.60	...	2.60	4.00	...	4.00
<i>Total- Bureau of Energy Efficiency</i>		<i>64.00</i>	<i>... 64.00</i>	<i>200.00</i>	<i>...</i>	<i>200.00</i>	<i>58.80</i>	<i>...</i>	<i>58.80</i>	<i>193.41</i>	<i>...</i>	<i>193.41</i>
16. APDRP	2801	67.87	... 67.87	117.00	...	117.00	117.00	...	117.00	75.00	...	75.00
17. Assistance to Forum of Regulator Capacity Building	2801	1.60	... 1.60	2.00	...	2.00	2.00	...	2.00	3.00	...	3.00
18. LahoriNagpala HEP	2801	...	...	...	...	...	...	...	...	...	536.30	536.30
19. Financial Support for Debt Restructuring of DISCOMs	2801	...	...	...	...	...	...	...	...	1500.00	...	1500.00
20. Loan to PFC for APDRP	6801	1600.00	... 1600.00	2685.60	...	2685.60	1071.60	...	1071.60	442.50	...	442.50
21. Interest Subsidy to National Electricity Fund	2801	...	...	72.00	...	72.00	...	...	...	151.92	...	151.92
22. Tehri Hydro Development Corporation India Ltd.	4801	45.00	... 45.00	110.00	...	110.00	89.45	...	89.45	133.72	...	133.72
23. Acquisition of Coal bearing Areas for NTPC	4801	147.43	... 147.43	720.04	...	720.04	250.00	...	250.00	474.00	...	474.00
23.01 Deduct Recoveries	4801	-147.43	... -147.43	-720.04	...	-720.04	-250.00	...	-250.00	-474.00	...	-474.00
<i>Net</i>		...	...	...	...	...	...	...	...	...	...	...
<b>Total-General</b>		<b>4137.81</b>	<b>85.08 4222.89</b>	<b>8091.13</b>	<b>97.98</b>	<b>8189.11</b>	<b>3491.13</b>	<b>90.05</b>	<b>3581.18</b>	<b>7455.22</b>	<b>634.01</b>	<b>8089.23</b>
<b>Thermal Power Generation</b>												
<i>24. Badarpur Thermal Power Station</i>												
24.01 Revenue Expenditure	2801	...	3.38 3.38	...	9.95	9.95	...	8.95	8.95	...	9.95	9.95
24.02 Less Revenue Receipts	0801	...	-420.81 -420.81	...	-256.66	-256.66	...	-256.66	-256.66	...	-240.63	-240.63
<i>Net</i>		...	<i>-417.43 -417.43</i>	...	<i>-246.71</i>	<i>-246.71</i>	...	<i>-247.71</i>	<i>-247.71</i>	...	<i>-230.68</i>	<i>-230.68</i>
<b>Transmission and Distribution</b>												
25. 220 KV Transmission Line from Srinagar to Leh via Kargil	4801	...	...	200.00	...	200.00	10.00	...	10.00	226.00	...	226.00

(In crores of Rupees)

	Major Head	Actual 2011-2012			Budget 2012-2013			Revised 2012-2013			Budget 2013-2014				
		Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total	Plan	Non-Plan	Total		
26.	<i>Lumpsum provision for Project/Schemes benefit of NE Region &amp; Sikkim</i>														
26.01	Subsidy for Rural Electrification-RGGVY	2552	...	...	490.00	...	490.00	490.00	...	490.00	458.70	...	458.70		
26.02	Loan to PFC under APDRP	6552	...	...	311.40	...	311.40	311.40	...	311.40	57.50	...	57.50		
26.03	Strengthening of Transmission System in the States of Arunachal Pradesh and Sikkim	2552	...	...	145.00	...	145.00	1.00	...	1.00	1.00	...	1.00		
26.04	Investment in Public Enterprises in N.E. Region	4552	...	...	54.00	...	54.00	54.00	...	54.00	398.34	...	398.34		
26.05	Investment in Public Enterprises in N.E. Region	6552	...	...	80.00	...	80.00	80.00	...	80.00	48.66	...	48.66		
	<i>Total- Lumpsum provision for Project/Schemes for the benefit of NE Region &amp; Sikkim</i>		...	...	1080.40	...	1080.40	936.40	...	936.40	964.20	...	964.20		
	<b>Total-Transmission and Distribution</b>		...	...	<b>1280.40</b>	...	<b>1280.40</b>	<b>946.40</b>	...	<b>946.40</b>	<b>1190.20</b>	...	<b>1190.20</b>		
	<b>Total-Power</b>		<b>4137.81</b>	<b>-332.35</b>	<b>3805.46</b>		<b>9371.53</b>	<b>-148.73</b>	<b>9222.80</b>	<b>4437.53</b>	<b>-157.66</b>	<b>4279.87</b>	<b>8645.42</b>	<b>403.33</b>	<b>9048.75</b>
27.	<i>Investment in Public Enterprises other than NE Region</i>														
27.01	Investment in North Eastern Electric Power Corporation Ltd.	4801	...	...	...	...	...	...	...	...	...	...	...		
27.02	Loans for Power Projects	6801	398.44	...	398.44	270.37	...	270.37	270.37	...	270.37	995.83	...	995.83	
27.03	Loans to NEEPCO	6801	163.13	...	163.13	...	...	...	...	...	...	...	...		
	<i>Total- Investment in Public Enterprises other than NE Region</i>		561.57	...	561.57	270.37	...	270.37	270.37	...	270.37	995.83	...	995.83	
28.	Assistance to GNCT of Delhi to settle past DESU dues	7602	...	...	...	...	...	...	3326.39	3326.39	...	...	...		
29.	Actual Recoveries	2801	-74.59	...	-74.59	...	...	...	...	...	...	...	...		
	<b>Grand Total</b>		<b>4625.39</b>	<b>-309.57</b>	<b>4315.82</b>	<b>9642.00</b>	<b>-122.89</b>	<b>9519.11</b>	<b>4708.00</b>	<b>3193.93</b>	<b>7901.93</b>	<b>9642.00</b>	<b>431.07</b>	<b>10073.07</b>	
	Head of Dev		Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	
	<b>B. Investment in Public Enterprises</b>														
27.01	National Thermal Power Corporation Ltd.	12801	...	15954.42	15954.42	...	20995.00	20995.00	...	20995.00	20995.00	...	20200.00	20200.00	
27.02	National Hydro Electric Power Corporation Ltd.	12801	398.44	3147.10	3545.54	270.37	3826.63	4097.00	270.37	2697.46	2967.83	995.83	2453.76	3449.59	
27.03	Damodar Valley Corporation Ltd.	12801	...	2826.53	2826.53	...	5571.69	5571.69	...	4180.29	4180.29	...	4080.82	4080.82	
27.04	North Eastern Electric Power Corporation Ltd. (North Eastern Region Component)	12801	163.13	657.22	820.35	134.00	1137.79	1271.79	134.00	1046.36	1180.36	447.00	1542.61	1989.61	
27.05	Satluj Jal Vidyut Nigam Ltd.	12801	...	552.32	552.32	...	796.00	796.00	...	796.00	796.00	...	964.08	964.08	
27.06	Tehri Hydro Development	12801	45.00	506.89	551.89	110.00	455.39	565.39	89.45	272.90	362.35	133.72	446.14	579.86	

	Head of Dev	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total	Budget Support	IEBR	Total
27.07 Power Grid Corporation of India Ltd.	12801	...	17814.00	17814.00	...	20000.00	20000.00	...	20000.00	20000.00	...	20000.00	20000.00
<b>Total</b>		<b>606.57</b>	<b>41458.48</b>	<b>42065.05</b>	<b>514.37</b>	<b>52782.50</b>	<b>53296.87</b>	<b>493.82</b>	<b>49988.01</b>	<b>50481.83</b>	<b>1576.55</b>	<b>49687.41</b>	<b>51263.96</b>
<b>C. Plan Outlay</b>													
1. Power	12801	4625.39	41458.48	46083.87	8561.60	52782.50	61344.10	3771.60	49988.01	53759.61	8677.80	49687.41	58365.21
2. North Eastern Areas	22552	...	...	...	1080.40	...	1080.40	936.40	...	936.40	964.20	...	964.20
<b>Total</b>		<b>4625.39</b>	<b>41458.48</b>	<b>46083.87</b>	<b>9642.00</b>	<b>52782.50</b>	<b>62424.50</b>	<b>4708.00</b>	<b>49988.01</b>	<b>54696.01</b>	<b>9642.00</b>	<b>49687.41</b>	<b>59329.41</b>

**State-wise & Yearwise release of BPL connections under RGGVY (As on 31.01.2013)**

Sr. No.	State	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13	Total Revised Coverage (Phase-I&II)
<b>Annual Target-----&gt;</b>		<b>300,000</b>	<b>4,000,000</b>	<b>4,000,000</b>	<b>5,000,000</b>	<b>4,700,000</b>	<b>4,700,000</b>	<b>5,200,000</b>	<b>3,680,000</b>	<b>27,498,652</b>
<b>Yearly Achievement</b>										<b>Cumulative Achievement</b>
1	Andhra Pradesh	0	226654	606750	945368	566518	258751	98232	81117	2783390
2	Arunachal Pradesh	0	0	0	0	967	9205	11474	2969	24615
3	Assam	0	0	0	32718	189816	352237	232519	75264	882554
4	Bihar	487	2724	64609	474277	560985	641016	405736	155870	2305704
5	Chhattisgarh	0	0	15302	75592	145990	196552	481971	28696	944103
6	Gujarat	0	10373	67944	116310	85931	420126	102134	24970	827788
7	Haryana	0	0	6907	16930	69453	90535	10617	19	194461
8	Himachal Pradesh	0	0	0	392	148	3637	5901	4675	14753
9	Jammu & Kashmir	0	0	4062	3924	14163	8452	13413	6998	51012
10	Jharkhand	0	0	2826	243830	555289	359213	111597	11015	1283770
11	Karnataka	12268	107047	255421	226046	134949	48861	49604	22205	856401
12	Kerala	0	0	6596	3394	6131	1117	0	35755	52993
13	Madhya Pradesh	0	0	1099	76026	75477	211816	352976	225340	942734
14	Maharashtra	0	0	56287	145715	429026	403387	126317	19552	1180284
15	Manipur	0	0	1300	2056	1640	4397	19421	0	28814
16	Meghalaya	0	0	0	1264	17832	12880	30792	20299	83067
17	Mizoram	0	0	0	0	378	8129	6236	401	15144
18	Nagaland	0	0	0	0	4368	13434	10712	7548	36062
19	Odisha	0	0	72	144056	650678	1435007	518324	54084	2802221
20	Punjab	0	0	0	0	19507	28890	5528	25179	79104
21	Rajasthan	0	9236	246142	237727	208695	255939	85783	76720	1120242
22	Sikkim	0	0	0	0	66	7121	2179	329	9695
24	Tamilnadu*	0	0	0	296	383533	115044	4083	-1754	501202
23	Tripura	0	0	0	0	22085	36886	22015	16639	97625
25	Uttar Pradesh	4060	251628	191576	251575	157263	15818	172574	-1901	1042593
26	Uttarakhand	0	21539	61642	50111	72382	19596	5288	4035	234593
27	West Bengal	0	26572	32647	37181	345198	925309	559476	194165	2120548
<b>Total</b>		<b>16815</b>	<b>655773</b>	<b>1621182</b>	<b>3084788</b>	<b>4718468</b>	<b>5883355</b>	<b>3444902</b>	<b>1090189</b>	<b>20515472</b>

\* In the State of Tamilnadu and Uttar Pradesh, progress during 2012-13 has been reduced by 1754 and 1901 BPL connections respectively.



## State-wise no. of villages wherein RE works have been completed under RGGVY (As on 31.01.2013)

Sl. No.	State	2005-06			2006-07			2007-08			2008-09			2009-10			2010-11			2011-12			2012-13			Total (Revised Coverage - Phase-I & Phase-II)		
		Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total	Un-electrified	Partially Electrified	Total
Annual Target -->		10,000	-	-	40,000	-	-	10,500	-	-	19,000	-	-	17,500	-	-	17,500	-	-	14,500	-	-	6,000	-	-	112,795	396,336	509,131
Year-Wise Achievement																												
1	Andhra Pradesh	0	0	0	0	0	0	0	5,614	5,614	0	11,018	11,018	0	2,836	2,836	0	1,995	1,995	0	4,099	4,099	0	1,194	1,194	0	26,756	26,756
2	Arunachal Pradesh	0	0	0	0	0	0	0	0	0	0	0	0	215	134	349	464	388	852	634	303	937	247	79	326	1,560	904	2,464
3	Assam	0	0	0	0	0	0	84	175	259	651	655	1,306	1,198	1,942	3,140	4,086	5,887	9,973	1,810	3,013	4,823	161	525	686	7,990	12,197	20,187
4	Bihar	1,600	0	1,600	8,415	0	8,415	3,347	0	3,347	3,098	66	3,164	2,584	991	3,575	1,937	2,065	4,002	1,048	1,145	2,193	536	723	1,259	22,565	4,990	27,555
5	Chattisgarh	0	0	0	0	0	0	296	296	50	1,213	1,263	48	2,606	2,654	77	4,653	4,730	682	1,744	2,426	84	1,369	1,453	941	11,881	12,822	
6	Gujarat	0	0	0	625	625	0	622	622	0	890	890	0	1,886	1,886	0	3,487	3,487	0	6,947	6,947	0	1,860	1,860	0	16,317	16,317	
7	Haryana	0	0	0	0	0	0	15	15	0	1,150	1,150	0	868	868	0	106	106	0	605	605	0	1,943	1,943	0	4,687	4,687	
8	Himachal Pradesh	0	0	0	0	0	0	0	0	0	730	730	0	329	329	26	0	26	52	0	52	5	10,139	10,144	83	11,198	11,281	
9	Jammu & Kashmir	0	0	0	0	0	0	169	169	46	355	401	22	778	800	45	404	449	35	674	709	25	387	412	173	2,767	2,940	
10	Jharkhand	0	0	0	0	0	1,259	619	1,878	4,933	1,358	6,291	7,088	1,995	9,083	3,901	941	4,842	724	592	1,316	177	223	400	18,082	5,728	23,810	
11	Karnataka	47	350	397	0	8,000	8,000	0	9,404	9,404	11	2,606	2,617	0	1,202	1,202	1	2,095	2,096	2	918	920	1	96	97	62	24,671	24,733
12	Kerala	0	0	0	0	0	0	0	0	0	18	18	0	11	11	0	8	8	0	0	0	0	144	144	0	181	181	
13	Madhya Pradesh	0	0	0	0	0	15	50	65	69	2,610	2,679	5	2,398	2,403	187	5,899	6,086	228	6,985	7,213	62	5,287	5,349	566	23,229	23,795	
14	Maharashtra	0	0	0	0	0	0	1,080	1,080	0	2,943	2,943	0	3,136	3,136	0	17,283	17,283	0	8,086	8,086	0	4,185	4,185	0	36,713	36,713	
15	Manipur	0	0	0	0	0	36	13	49	57	56	113	35	30	65	143	147	290	345	155	500	0	154	154	616	555	1,171	
16	Meghalaya	0	0	0	0	0	0	0	0	90	117	207	47	600	647	13	344	357	1,022	476	1,498	434	590	1,024	1,606	2,127	3,733	
17	Mizoram	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	196	232	53	142	195	5	8	13	94	346	440	
18	Nagaland	0	0	0	0	0	0	0	0	0	0	0	14	81	95	43	296	339	22	348	370	5	335	340	84	1,060	1,144	
19	Odisha	0	0	0	0	0	0	0	1,427	1,445	2,872	5,870	4,724	10,594	5,890	8,838	14,728	1,039	6,200	7,239	98	3,161	3,259	14,324	24,368	38,692		
20	Punjab	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21	Rajasthan	230	0	230	765	570	1,335	633	7,849	8,482	158	5,835	5,993	773	4,417	5,190	1,258	7,348	8,606	182	3,064	3,246	103	3,211	3,314	4,102	32,294	36,396
22	Sikkim	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20	325	345	5	50	55	0	7	7	25	382	407	
23	Tamil Nadu *	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4,862	4,862	0	5,130	5,130	0	-319	-319	0	9,673	9,673		
24	Tripura	0	0	0	0	0	0	0	0	0	0	0	13	47	60	65	192	257	49	224	273	16	131	147	143	594	737	
25	Uttar Pradesh	7,503	0	7,503	16,620	0	16,620	2,862	448	3,310	695	1,574	2,269	56	719	775	23	214	237	0	27	27	3	0	3	27,762	2,982	30,744
26	Uttarakhand	87	0	87	798	2,332	3,130	341	2,898	3,239	175	1,838	2,013	80	1,049	1,129	28	572	600	2	339	341	0	193	193	1,511	9,221	10,732
27	West Bengal	352	0	352	2,108	0	2,108	724	0	724	596	0	596	326	2,217	2,543	63	8,442	8,505	0	7,698	7,698	16	3,649	3,665	4,185	22,006	26,191
Total		9,819	350	10,169	28,706	11,527	40,233	9,301	29,252	38,553	12,056	36,477	48,533	18,374	34,996	53,370	18,306	76,987	95,293	7,934	58,964	66,898	1,978	39,274	41,252	106,474	287,827	394,301

\* In the State of Tamilnadu, progress report during 2012-13 has been reduced to 319 partially electrified villages.

Note:- Annual target for partially electrified villages not envisaged.

**STANDING COMMITTEE ON ENERGY**

**MINUTES OF THE SEVENTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2012-13) HELD ON 4<sup>th</sup> APRIL, 2013 IN COMMITTEE ROOM 'D' PARLIAMENT HOUSE ANNEXE, NEW DELHI**

The Committee met from 1100 hrs. to 1350 hrs.

**PRESENT**

**LOK SABHA**

**Shri Motilal Vora - in the Chair**

2. Shri P.C.Chacko
3. Shri Syed Shahnawaz Hussain
4. Shri Ravinder Kumar Pandey
5. Shri Nityananda Pradhan
6. Shri A.Raja
7. Shri Bajju Ban Riyan
8. Shri C.L. Ruala
9. Shri Sushil Kumar Singh
10. Shri Radhan Mohan Singh
11. Shri Jagda Nand Singh
12. Shri Bhishma Shankar alias Kushal Tiwari

**RAJYA SABHA**

13. Shri Shyamal Chakraborty
14. Shri Y.S.Chowdary
15. Shri Kiranmay Nanda
16. Dr. Anil Kumar Sahni
17. Shri Birender Singh

**SECRETARIAT**

1. Shri Brahm Dutt - Joint Secretary
2. Smt. Abha Singh Yaduvanshi - Director
3. Shri N.K.Pandey - Director

## LIST OF WITNESSES

### **Ministry of Power**

<b>Sl. No.</b>	<b>Name</b>	<b>Designation</b>
1.	Shri P. Uma Shankar	Secretary
2.	Shri Ashok Lavasa	Addl. Secretary
3.	Shri Devendra Chaudhry	Addl. Secretary
4.	Shri B.N. Sharma	Joint Secretary
5.	Smt. Jyoti Arora	Joint Secretary
6.	Shri I.C.P. Keshari	Joint Secretary
7.	Shri G. Sai Prasad	Joint Secretary
8.	Shri Rakesh Jain	Joint Secretary & F.A.
9.	Smt. Rita Acharya	Joint Secretary
10.	Shri Manoranjan Kumar	Economic Advisor

### **Central Electricity Authority**

1.	Shri A.S.Bakshi	Chairperson
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### **PSUs, Autonomous Bodies, Statutory Bodies, etc.**

1.	Shri R.N. Nayak	CMD, Powergrid
2.	Shri Arup Roy Choudhury	CMD, NTPC
3.	Shri R.N.Sen	Chairman, DVC
4.	Shri R.P.Singh	CMD, SJVNL
5.	Shri P.C. Pankaj	CMD, NEEPCO
6.	Shri R.S.T. Sai	CMD, THDC
7.	Shri Satnam Singh	CMD, PFC
8.	Shri Rajeev Sharma	CMD, REC
9.	Shri A.B. Agrawal	Chairman, BBMB
10.	Shri Rajiv Bansal	Secretary, CERC
11.	Shri J.K. Sharma	Director, NHPC
12.	Shri Subodh Garg	DG, NPTI
13.	Shri N.Murugesan	DG, CPRI
14.	Shri Harvir Singh	Registrar, APTEL

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

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

4. Thereafter, the representatives of the Ministry made a power-point presentation on the Demands for Grants of the Ministry for the year 2013-14 *inter alia* covering financial and physical targets and achievements under major programmers of the Ministry, tax benefits for the power sector in Union Budget, financial restructuring of state owned DISCOMs and major new initiatives of the Ministry.

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

- (i) Targets for the 12<sup>th</sup> Five Year Plan and the strategy of the Ministry to achieve them.
- (ii) Achievement under generation capacity addition programme during the year 2012-13.
- (iii) Reasons for the poor utilization of the allocated funds during the year 2012-13 by the Ministry.
- (iv) Targets vis-à-vis achievements under RGGVY so far and the timeline for electrification of remaining villages under this scheme.
- (v) Limitations of RGGVY - irregularities in its implementation and their possible redressal.
- (vi) Reasons for slow implementation of R-APDRP and non-achievement of desired results under the scheme.
- (vii) Constraints in supply of coal for power sector – issue of quantity and quality of coal.

- (viii) Disparity in availability of power in different regions of the Country - need for more equitable growth of power sector in the Country.
- (ix) Steps taken to remove Regional imbalances in power distribution.
- (x) Evacuation of Power from deficit Regions to Surplus Regions.

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

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

*The Committee then adjourned*

**STANDING COMMITTEE ON ENERGY**

**MINUTES OF THE EIGHTH SITTING OF THE STANDING COMMITTEE ON ENERGY (2012-13) HELD ON 16<sup>th</sup> APRIL, 2013 IN COMMITTEE ROOM 'D' PARLIAMENT HOUSE ANNEXE, NEW DELHI**

The Committee sat from 1100 hrs. to 1140 hrs.

**PRESENT**

**LOK SABHA**

**Shri Mulayam Singh Yadav - Chairman**

2. Shri P.C. Chacko
3. Shri Nityananda Pradhan
4. Shri Bajju Ban Riyan
5. Shri Nripendra Nath Roy
6. Shri C.L. Ruala
7. Shri Jagada Nand Singh

**RAJYA SABHA**

8. Shri Shyamal Chakraborty
9. Shri Bhagat Singh Koshyari
10. Dr. Anil Kumar Sahani
11. Shri K.C. Tyagi
12. Shri Motilal Vora

**SECRETARIAT**

1. Shri Brahm Dutt - Joint Secretary
2. Smt. Abha Singh Yaduvanshi - Director
3. Shri N.K. Pandey - Director
4. Smt. L. Nemjalhing Haokip - Under Secretary

2. At the outset, after welcoming the Members, the Chairman congratulated Shri K.C. Tyagi, Member, Rajya Sabha on his nomination to the Committee w.e.f. 28<sup>th</sup> March, 2013. The Chairman briefly apprised the Committee about the Agenda for the sitting. The Committee then took up for consideration of the following draft Reports:

- i) Thirty-Fourth Report on Demands for Grants of the Ministry of New and Renewable Energy for the year 2013-14.
- ii) Thirty-Fifth Report on Demands for Grants of the Ministry of Power for the year 2013-14.

3. After discussing the contents of the Reports in detail, the Committee adopted the aforementioned draft Reports without any modification.

4. The Committee placed on record their appreciation for the officials of the Secretariat attached to the Committee for providing valuable assistance to the Committee.

5. 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.

*The Committee then adjourned*