



सत्यमेव जयते

Government of India

OUTCOME BUDGET

of

Ministry of Power

2012-13





सत्यमेव जयते

GOVERNMENT OF INDIA

OUTCOME BUDGET

OF

**MINISTRY OF POWER
2012-13**

EXECUTIVE SUMMARY

The Plan Outlay of the Ministry of Power for the year 2012-13 is ₹ 62424.50 crore which includes Internal Extra Budgetary Resources (IEBR) of CPSUs amounting to ₹ 52782.50 crore and Gross Budgetary Support (GBS) of ₹ 9642.00 crore. The Non Plan outlay of the Ministry of Power for the year 2012-13 is ₹ 133.77 crore.

The salient features of the performance during 2011-12 and projected Outcomes of 2012-13 are as under.

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) : The outlay for 2011-12 under RGGVY is ₹ 6,000 crore. 4,355 villages were electrified and connections were given to 19,61,414 BPL households during the year 2011-12 (upto 31st December, 2011). The cumulative achievements are electrification of 1,00,917 villages and release of electric connections to 1,79,41,795 BPL households. The outlay for 2012-13 is ₹ 4900 crore comprising an amount of ₹ 600 crore for Scheduled Caste Sub Plan (SCSP) and ₹ 490 crore for North East areas. The targets for the year 2012-13 is electrification of 4800 un-electrified villages and offering electricity connections to 34 lakh BPL households.

Re-structured Accelerated Power Development and Reforms Programme(R-APDRP) : The outlay for 2011-12 for R-APDRP is ₹ 2034 crore. The objective of the programmes is to facilitate State Power Utilities to reduce the level of AT&C losses to 15%. Projects execution under the scheme is to be taken up in Two Parts. Part-A includes the projects for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centres. Part-B includes regular distribution strengthening projects.

Under Part-A (IT) of the R- APDRP, 1402 projects worth ₹ 5196.50 crore, to cover all the eligible towns in the country have been sanctioned. Additional, 60 numbers of SCADA Projects worth ₹ 1385.87 crore are also approved under Part-A. Under Part-B, 1039 projects worth ₹ 23658.18 crore for strengthening of sub- transmission distribution system, against 1100 eligible towns in the country have also been sanctioned so far. The outlay for 2012-13 is ₹ 3114 crore which includes ₹ 117 crore as grant and ₹ 2997 crore as loan. The above loan also includes ₹ 200 crore for SCSP & ₹ 311.40 crore for North East Region.

Generation- The Central Sector electricity generation is planned and implemented through the various organizations. The details along with the highlights are given as under:

I. NTPC Ltd

The outlay for 2011-12 is ₹ 26,400 crore. The installed capacity of NTPC and its subsidiaries/ joint ventures as on 01.04.2011 was 34194 MW. During 2011-12 till December 2011, NTPC has added 1820 MW of thermal generation capacity comprising of 1320 (2x660) MW at

Sipat, and 500 MW at Jhajjar. During XIth plan (upto December, 2011) 8040 MW was commissioned by NTPC. In addition, 460 MW at RGPPL & 110 MW at Muzaffarpur were also revived.

The outlay of ₹ 20,995 crore (IEBR) during 2012-13 would result in commissioning of 4055 MW i.e. 2555 MW from NTPC's own capacity (500MW from Rihand, 500 MW from Vindhyachal, 500 MW from Mouda, 250 MW from Bongaigaon, 800MW from Kol Dam and 5MW from A&N Solar PV) and 1500 MW from Joint ventures (500 MW from IGSTPP, Jhajjar and 1000 MW from Vallur).

II. NHPC Ltd

The total plan outlay of ₹ 5090.00 crore which comprised of IEBR of ₹ 4277.39 crore and GBS ₹ 812.61 crore for the year 2011-12 is mainly for ongoing schemes viz. Parbati-II, Teesta Low Dam-III & IV, Subansiri Lower, Uri-II, Chamera-III, Parbati-III, Nimoo Bazgo, Chutak and Kishanganga Project and new proposed projects viz. Kotli Bhel IA, Dibang, Teesta-IV & Tawang I & II. NHPC's total installed capacity including that of NHDC (Joint Venture Company with Govt. of Madhya Pradesh) is 5295 MW through 14 projects as on 01.02.2012.

The plan outlay for FY 2012-13 (i.e. BE 2012-13) is ₹ 4097 crore comprising IEBR of ₹ 3826.63 crore and GBS ₹ 270.37 crore. The activities planned during the year 2012-13 include completion of residual works at Dulhasti, Sewa-II and Chamera-III projects. Further the construction activities at Parbati-II, Teesta Low Dam-III and IV, Subansiri Lower, Uri-II, Parbati-III, Nimoo Bazgo, Chutak and Kishanganga Project are expected to go in full swing. The major works on new projects namely Kotli Bhel-IA, Teesta-IV, Dibang and Tawang-I & II Projects are expected to start in the year 2012-13 subject to availability of pending statutory clearances and Govt. sanction afterwards.

III. NEEPCO

The outlay is ₹ 1037.27 crore for 2011-12 comprised of IEBR of ₹ 949.77 crore and ₹ 87.50 crore as GBS.. This is mainly for (i) Kameng H.E. Project (600 MW), (ii) Pare H.E. Project (110 MW), (iii) Tripura Gas Based Power Project (101 MW), (iv) Tuirial HEP (60 MW), and (v) Agartala Gas Turbine – CC Extension Project (46 MW).

For the year 2012-13, outlay is ₹ 1371.79 crore including IEBR of ₹ 134 crore & DONER grant of ₹ 100 crore against Tuirial HEP. This is mainly for the (i) Kameng H.E. Project (600 MW), (ii) Pare H.E. Project (110 MW) (iii) Tuirial H.E. Project (60 MW) (iv) Tripura Gas Based Power Project (101 MW), and (v) Agartala Gas Turbine – CC Extension Project (46 MW).

IV. THDC India Ltd

For the year 2011-12, the outlay is ₹ 389.85 crore.

For the year 2012-13, the outlay of ₹ 565.39 crore has been made comprising of IEBR ₹ 455.39 crore and ₹ 110.00 crore under GBS. This is mainly for execution of various balance works of Koteshwar HEP Project, works of Tehri PSP (1000MW) Project, Vishnugad pipalkoti HEP (444MW) and Dhukwa SHP (24MW).

V. SJVN Ltd

The outlay for 2011-12, is ₹ 1133.13 crore has been made as IEBR.

This is mainly for (i) other balance works of Nathpa Jhakri HEP (1500 MW) (ii) Rampur HEP (412 MW) and Survey and Investigation Works (iii) Luhri HEP (775 MW) (iv) Devsari HEP (252 MW) (v) Jakhol Sankri HEP (51 MW) (vi) Naitwar Mori HEP (60 MW) (vii) Arun – III HEP, Nepal (900 MW) (viii) Dhaulasidh HEP (66 MW) (ix) Wangchhu HEP (570 MW) (x) Kholongchhu HEP (600 MW) (xi) Tipaimukh HEP (1500 MW) and (xii) Wind Power Project (50 MW).

For the year 2012-13, outlay is ₹ 796.00 crore including World Bank Loan of ₹ 358.34 crore & Internal Resources of ₹ 437.66 crore. This is mainly for (i) works of Nathpa Jhakri HEP (1500 MW) (ii) Projects under construction i.e. Rampur HEP (412 MW)

VI. DVC

The outlay for 2011-12 is ₹ 5890.59 crore as IEBR. This has resulted in commercial operation of Projects CTPS Unit -7 & 8 (2x250 MW), MTPS Unit - 7 (1 x 500 MW). A Joint venture project Unit - 1 (1 x 525 MW) through Maithon Power Limited (MPL) at Maithon Right Bank Thermal Power Station was also commissioned.

The outlay of ₹ 5571.69 crore during 2012-13 would result in commercial operation of Greenfield Projects Koderma Thermal Power Station (KTPS) (2 x 500 MW), Durgapur Steel Thermal Power Station (DSTPS) (2 x 500 MW). RTPS Phase-I (2 x 600 MW) is likely to be commissioned by the end of 2012-13.

Another unit - 2 (1 x 525 MW) of joint venture project Maithon Power Limited (MPL) is likely to be commissioned during 2012-13.

VII. Transmission

The overall outcome in the year 2011-12 with an outlay of ₹ 17,700 crore as IEBR for POWERGRID would be stringing of 9,500 circuit km of transmission lines and 18,000 MVA

of transformation capacity addition/ready for commissioning.

The Outlay for FY 2012-13 is ₹ 20,000 crore. The quantifiable deliverables of 7000 Ckm stringing and 36 Nos. transformer erection has been targeted.

VIII. Bureau of Energy Efficiency:-

The outlay for 2011-12 is ₹ 123.80 crore including ₹ 2.00 crore for World Bank Project. During the 11th Five Year Plan, the avoided generation capacity resulting from the various schemes of the Bureau of Energy Efficiency (BEE) is expected to be about 11,000 MW. Various activities under the National Mission for Enhanced Energy Efficiency (NMEEE) were initiated.

The outlay of ₹ 200 crore has been kept for the year 2012-13 including ₹ 2.60 crore for World Bank project.

IX. NPTI

The outlay for 2011-12 is ₹ 23.29 crore (Plan ₹ 16.89 and Non-Plan ₹ 6.40 crore). During the year 2012-13 existing infrastructure would be upgraded so that trainees can be kept abreast with the latest technology in the power sector in a world class environment with the estimated expenditure of ₹ 11.49 crore (Plan ₹ 5.09 and Non-Plan ₹ 6.40 crore)."

X CPRI

The outlay of ₹ 163.40 crore is for 2011-12. Out of the 9 on-going projects which were under the plan capital schemes, 1 project namely "Centre for Creep & Mechanical Testing" was completed during the period and under R&D projects, 19 Plan R&D schemes, 29 RSoP schemes and 6 NPP projects are under various stages of progress. The proposal of CPRI to join as Fifth Equity Partner in National High Power Test Laboratory Pvt. Ltd. was approved by Ministry of Power and formalities to become equity partner is in progress.

There is a revenue receipt of ₹ 86.94 crore as on December 2011 through Testing & Consultancy .

XI Monitoring Mechanism

The following monitoring mechanism has been put in place in the Ministry of Power: -

- A Power Project Monitoring Panel (PPMP) has been set up to follow up and monitor the progress of the critical projects. PPMP brief the Minister of Power and Secretary (P) on a monthly basis in this regard.

- An Advisory Group under the Chairmanship of Minister of Power advises on completion of on-going power generation projects.
- Central Electricity Authority has a nodal officer associated with each on-going project who monitors the progress at site through frequent visits and interaction. Chairperson, CEA reviews monthly progress of the on-going projects with the nodal officers.
- Quarterly review meetings at Ministry's level by Secretary (Power) of all ongoing and new projects of the CPSEs.
- Periodical reviews with States on capacity addition/APDRP village electrification.
- Periodic Inter-ministerial coordination meetings with Ministry of Petroleum and Natural Gas; Ministry of Coal; Ministry of Environment & Forest; Ministry of Water Resources to expedite clearances for the projects.
- The projects are also monitored by the concerned CPSEs regularly. Supervisory visits are made by their officers to the various projects under construction for identifying bottlenecks and taking corrective measures.

XII Public Information System

Detailed Demands for Grants and Outcome Budget is posted on the website www.powermin.nic.in of the Ministry of Power for information.

C O N T E N T S

		Page No.
CHAPTER – I	Introduction	1
CHAPTER-II	Outcome Budget 2012-13	15
CHAPTER-III	Major initiatives/Reforms & Policy Measures	100
CHAPTER-IV	Review of Performance and highlights of Schemes & Projects	110
CHAPTER-V	Financial Reviews	170
CHAPTER-VI	Review of Performance of Statutory and Autonomous Bodies under the administrative control of the Ministry of Power	181

MINISTRY OF POWER

Chapter – I

INTRODUCTION

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

The main items of work dealt by the Ministry of Power are as under:

- General Policy in the electric power sector and issues relating to energy policy and coordination thereof. (Details of short, medium and long-term policies in terms of formulation, acceptance, implementation and review of such policies, cutting across sectors, fuels, regions and intra-country and inter-country flows);
- All matters relating to hydro-electric power (except small/mini/micro hydel projects of and below 25 MW capacity) and 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 Appellate Tribunal for Electricity, Central Electricity Regulatory Commission, Central Electricity Authority and Bureau of Energy Efficiency;
- Rural Electrification;

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

ORGANISATIONAL SET-UP

Shri Sushilkumar Shinde is the Minister of Power since 30 January, 2006. He demitted office on 22 May, 2009 and again assumed charge as Minister of Power with effect from the 28 May, 2009.

Shri K.C.Venugopal is the Minister of State for Power with effect from the 20 January, 2011.

Shri P.Uma Shankar assumed charge as Secretary in the Ministry of Power with effect from the 30 April, 2010. The Ministry has one Additional Secretary and seven Joint Secretaries, including the Financial Adviser.

Shri Gireesh B. Pradhan was Special Secretary with effect from 01 February, 2011 and he demitted office on 01 October, 2011.

Shri Ashok Lavasa, Additional Secretary, oversees the work relating to Reforms & Restructuring, International Cooperation and climate Change, matters relating to Nodal Officer for open Access in Transmission and Distribution including Franchising, Re-organisation of Electricity Boards, Accelerated Power Development and Reforms Programme, Power Finance Corporation, Rural Electrification; Rajiv Gandhi Gramin Vidyutikaran Yojana; Rural Electrification Corporation; Energy Conservation & Efficiency; Demand Side Management; Bureau of Energy Efficiency, Ultra Mega Power Project; Thermal; National Thermal Power Corporation Limited; Damodar Valley Corporation; Independent Power Producers and Fuel Supply, Operation & Monitoring, Attends meetings in Cabinet Secretariat.

The allocation of work among the seven Joint Secretaries in the Ministry of Power is as under:

- i) Administration (Official Language & Parliament), Transmission; Power Grid Corporation of India Limited; Information Technology and Public Grievances.
- ii) Ultra Mega Power Project; Thermal; NTPC Ltd.; DVC; Independent Power Producers and Fuel Supply; Vigilance & Security and Operation & Monitoring;
- iii) Restructured Accelerated Power Development and Reforms Programme, Power Finance Corporation, Rural Electrification; Rajiv Gandhi Gramin Vidyutikaran Yojana; Rural Electrification Corporation; Energy Conservation & Efficiency; Demand Side Management; Bureau of Energy Efficiency, National Electricity Fund.
- iv) Policy & Planning; Power Projects Monitoring Panel, Coordination.
- v) Hydro matters including CPSUs namely NHPC, SJVNL, NEEPCO, THDC, BBMB, Environmental Management for Hydro Project and RTI Cell.
- vi) Internal Finance; Budgetary Control & Internal Audit & Accounts.
- vii) Reforms & Restructuring, International Cooperation and Climate Change, Nodal Officer for open Access in Transmission and Distribution including Franchising, Re-organisation of Electricity Boards.

Apart from seven Joint Secretaries, there is an Economic Adviser at the level of Joint Secretary in the Ministry who has been allocated work relating to Training & Research, Rakesh Mohan Committee on Transportation of Bulk Commodities and all Tax related matters.

There is a Principal Accounts Office headed by the Controller of Accounts who in turn reports to the Financial Adviser in the Ministry of Power. Matters relating to reservations for SC/ST, Physically Handicapped and Ex-Servicemen in the Ministry including PSUs under its administrative control are dealt with by the Deputy Secretary (Admn.), who is also the Liaison Officer for SC/ST and Deputy Secretary (Coord.) is the Liaison officer for OBCs.

In brief, the various organizations in the Ministry are as under:-

a) STATUTORY BODIES (Non-Commercial):

Appellate Tribunal for Electricity (APTEL), New Delhi

An Appellate Tribunal for Electricity has been set up to hear appeals against the orders of the adjudicating officer or the appropriate commission under the Electricity Act, 2003 on 7 April, 2004. The Tribunal also has original jurisdiction to hear petitions under Section 121 of the Act. Delhi is the headquarters of the Tribunal. Under the provisions of the Petroleum and Natural Gas Regulatory Board Act, 2006, APTEL is the Appellate Tribunal for the purpose of that Act. Ministry of Petroleum and Natural Gas has also appointed one Technical Member in APTEL under the provision of the said Act. The Appellate Tribunal consists of a Chairperson, one Judicial Member and three Technical Members, including the Technical Member (P&NG). Every Bench constituted by the Chairperson includes at least one Judicial Member and one Technical Member.

Central Electricity Regulatory Commission (CERC), New Delhi

The Central Electricity Regulatory Commission (CERC), an independent statutory body with quasi-judicial powers, was constituted on 25 July 1998 under the erstwhile Electricity Regulatory Commissions Act, 1998 and has been continued under the Electricity Act, 2003. The Commission consists of a Chairperson and four other Members including the Chairperson, Central Electricity Authority as an ex-officio Member. The main functions of CERC include regulation of tariff of generating companies owned or controlled by the Central Government or if such generating companies enter into or otherwise have a composite scheme for generation and sale of electricity in more than one State, regulation and determination of tariff of inter-State transmission of electricity, issuing licenses to persons to function as transmission licensee and electricity traders with respect to their inter-State operations, adjudicating upon disputes involving generating companies or transmission licensee, specifying Grid Code having regard to Grid Standards; to specify and enforce the standards with respect to quality, continuity and reliability of service by licensees and fixing the trading margin in the inter-State trading of electricity, if considered, necessary.

Central Electricity Authority

The Central Electricity Authority (CEA) is a statutory organization originally constituted under Section 3 of the repealed Electricity (Supply) Act, 1948 and continued under Section 70 of the Electricity Act, 2003. It was established as a part- time body in the year 1951 and made a full- time body in the year 1975.

As per section 70(3) of the Electricity Act, 2003, the Authority shall consist of not more than fourteen (14) Members (including its Chairperson) of whom not more than 8 shall be full-time members to be appointed by the Central Government.

CEA is headed by a Chairperson who as the Chief Executive of the Authority oversees largely the development of Power Sector in the country. There are six wings in CEA namely Planning, Hydro, Thermal, Grid Operation & Distribution, Economic & Commercial and Power System, each headed by a Member of the Authority. Under each Member, there are technical divisions, each headed by an officer of the rank of Chief Engineer. At present, there are twenty nine Divisions in CEA headquarter at New Delhi.

In addition, CEA has fourteen (14) subordinate offices, viz. five (5) Regional Inspectorate Organisations (RIO), four (4) Regional Power Survey Organisation (RPSO) and five (5) Regional Power Committees located in various parts of the country. The CEA is responsible for overall power sector planning, technical coordination, according concurrence to hydro-electric schemes and timely completion of projects, specifying of technical standards, safety requirements, Grid Standards as well as conditions for installation of meters applicable to the electricity sector of the whole country. CEA advises the Central Government on the National Electricity Policy. It also advises the Central & State Governments as well as the Electricity Regulatory Commissions on all technical matters relating to generation, transmission and distribution of electricity. It also has the mandate to collect, record and make public data related to all segments of the electricity sector, carry out investigations and promote research.

Bureau of Energy Efficiency (BEE)

The BEE was established on 1st March 2002, with the mission to develop appropriate policies and strategies with a thrust on self-regulation and market principles. The prime objective of these measures is to stimulate reduction of energy intensity of Indian economy. In order to translate the objectives into result-oriented action, the broad functions of BEE include:

- To be the policy advisor to the Central and State Governments.

- To co-ordinate policies and programmes on efficiency use of energy and its conservation with the involvement of stakeholders.
- To plan, manage and implement energy conservation programmes as envisaged in the EC Act.
- To assume leadership and provide policy framework and direction to national energy efficiency and conservation efforts and programmes.
- To demonstrate energy efficiency delivery mechanisms, as envisaged in the EC Act, through private –public partnership.
- To establish systems and procedures to measure, monitor and verify energy efficiency and conservation efforts and programmes.
- To leverage multi-lateral, bi-lateral and private sector support in implementation of programmes and projects on efficient use of energy and its conservation.

b) STATUTARY BODIES (Commercial)

Damodar Valley Corporation (DVC)

Damodar Valley Corporation, the first major multi-purpose integrated river valley project of the country conceived in line with Tennessee Valley Authority (TVA) came into existence on July 7, 1948 by an Act of Central Legislature. In keeping with industrialization in DVC command area, power generation, transmission and distribution gained priority for providing electricity to the core industries, like Steel, Coal, Railways and other industries/consumers to respective State Electricity Boards. With the passage of time and shift in national priorities, power generation with associated transmission and bulk activities gained priority in Damodar Valley Corporation. Other objectives of DVC, however, received due attention and services as part of its overall responsibilities and commitment. The emphasis on power aspect gained importance since last few years when Ministry of Power, Government of India started advocating for setting up of thermal power plants at or near pitheads and transmit power rather than transporting coal and advise DVC to work towards adequate capacity addition during 11th Plan in order to meet the Vision of Power for all by 2012 of Government of India.

Bhakra Beas Management Board (BBMB), Chandigarh

Bhakra Beas Management Board (BBMB) was constituted under Section 79 of the Punjab Re-organization Act, 1966 for the administration, maintenance and operation of Bhakra

Nangal Project with effect from 01 October 1967. The Government of India transferred the Beas Project Works, on completion, from Beas Construction Board (BCB) to BMB as per Section 80 of the Act and Bhakra Management Board was renamed as Bhakra Beas Management Board (BBMB) with effect from 15 May, 1976. Bhakra Beas Management Board is responsible for the administration, operation and maintenance of Bhakra Nangal Project, Beas Satluj Link Project and Pong Dam including Power House and a network of transmission lines and grid sub-stations. The functions of Bhakra Beas Management Board include regulating the supply of water from Bhakra-Nangal and Beas projects to the States of Punjab, Haryana and Rajasthan and regulation of supply of power generated at the Bhakra-Beas Power Houses to power utilities in-charge of distribution of power in the participating States. BBMB also provides Engineering and related technical and consultancy services in various fields of Hydro Electric Power and Irrigation Projects.

c) PUBLIC SECTOR UNDERTAKINGS

NTPC Limited

NTPC was setup in 1975 as a Central Sector generating company for the development of thermal power. The NTPC 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, 2011 the authorized share capital of NTPC is ₹ 10,000 crore and paid up capital is ₹ 8,245.50 crore. The NTPC is at present engaged in operating fifteen (15) coal based power projects and seven (7) gas/liquid based power projects on its own and four (4) coal based and one (1) gas based project under Joint Ventures. NTPC including its JVs & subsidiaries has installed capacity of 36,014 MW as on 31 December, 2011.

Power Grid Corporation of India Limited (POWERGRID)

Power Grid Corporation of India Limited (POWERGRID) was incorporated as a Government of India enterprise on 23 October, 1989 under the Companies Act, 1956 with an authorized share capital of ₹ 5,000 crore, which has been enhanced to ₹ 10,000 crore in 2007-08 and paid up capital as on 31 March, 2011 is ₹ 4,629.73 crore. POWERGRID, the Central Transmission Utility (CTU) of the country and one of the largest transmission utilities of the world. As on 31 March, 2011, POWERGRID is operating about 82,355 circuit km. of transmission lines and 135 sub-stations having transformation capacity of about 93,050 MVA. The current inter-regional transmission capacity is about 23,800 MW. The transmission

system availability is maintained consistently more than 99% by deploying the best Operation and Maintenance practices at par with international utilities.

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 March, 2011 is ₹12300.74 crore, NHPC is the largest organization for hydro power development in India, with capabilities to undertake all the activities from conceptualization to commissioning of hydro projects.

The main objectives of NHPC include, planning, promoting and organizing an integrated and efficient development of hydroelectric, wind, tidal, geothermal and gas power in all aspects, and transmissions, distribution and sale of power generation at power stations. The total installed capacity of NHPC as on date including that of NHDC (Joint Venture Company with Govt. of Madhya Pradesh) is 5295 MW through 14 projects. The Corporation is presently engaged in construction of 10 hydro projects with aggregate installed capacity of 4502 MW.

North Eastern Electric Power Corporation (NEEPCO)

North Eastern Electric Corporation Ltd. (NEEPCO), a Schedule “A” Government of India Enterprise under the Ministry of Power was set up on 02 April, 1976 under the Indian Companies Act, 1956 with the objective of developing the power potential of the North Eastern Region of the country through planned, development & commissioned of power generation projects, which in turn would effectively promote the development of the North Eastern Region. Since then NEEPCO has grown into one of the pioneer Public Sector Undertaking under the Ministry of Power, Govt. of India, with an authorized share capital of ₹ 5000 crore and having an installed capacity of 1,130 MW (755 MW Hydro & 375 MW Thermal), which meets more than 60% of the energy requirements of the N.E. Region.

Rural Electrification Corporation Limited (REC)

Rural Electrification Corporation Limited(REC) was incorporated in the year 1969 to facilitate the development of power infrastructure in the rural India. The authorized Share Capital of the Corporation is ₹ 1200 crore and the Paid up Capital as on 31 December, 2011 stood at ₹ 987.459 crore. The main objectives of the Corporation are to promote and finance projects aimed at Integrated System Improvement, Power Generation, Promotion of decentralized & non-conventional energy sources, energy conservation, renovation & maintenance, power distribution with focus on pump sets energisation, rural households electrification and other

related works in rural & urban areas. REC is the nodal agency for implementation of RGGVY programme.

Power Finance Corporation (PFC)

Power Finance Corporation Limited (PFC), is a Non-Banking Financial Company, which was incorporated on 16 July, 1986 as part of Government of India's initiative to enhance funding of power projects in India, with an objective to provide financial resources and encourage flow of investments to the power and associated sectors.

PFC's priorities include not only accelerating the pace of existing business of funding generation, transmission and distribution projects, but also to exploit the new opportunities available in the sector. With this philosophy, PFC has around half-a-dozen strategic business units, focusing on different business segments – conventional lending to generation, transmission and distribution projects; consortium lending to generation, transmission and distribution projects; lending to power equipment manufacturers and fuel producers and suppliers; renewable energy and CDM; equity funding through its Associate company, Power Equity Capital Advisor Pvt Ltd (PECAP).

PFC is the nodal agency for implementing Restructured Accelerated Power Development & Reform Program (R-APDRP), develop Ultra Mega Power Projects (UMPPs) and Independent Transmission Project (ITP), based on tariff based competitive bidding process.

d) JOINT VENTURE CORPORATIONS

THDC India Limited

THDC India Ltd. (THDCIL) is a Joint Venture of Govt. of India & Govt. of UP was incorporated as a Limited Company under the companies Act, 1956 in July, 1988 to develop, operate and maintain the Tehri Hydro Power Complex and other projects.

THDCIL is generating power from Tehri Dam & HPP and Koteshwar HEP with present installed capacity of 1200 MW and power generated is supplied to nine (09) beneficiary States/UT of Northern Region.

THDCIL is a Miniratna Category –I Schedule 'A' company with an authorized share capital of R 4000 Cr.

SJVN LIMITED

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 75:25 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% 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.

SJVN is committed for generating reliable and eco friendly power by means of State of the Art Technology, excellence in engineering and continual improvement in quality management. SJVN as a responsible corporate entity, has established sound business, financial and regulatory policies ever since it has come into existence. SJVN presently is operating 1500 MW Nathpa Jhakri Hydro Power Station (NJHPS).

e) AUTONOMOUS BODIES:

National Power Training Institute (NPTI)

National Power Training Institute (NPTI), an ISO 9001 & ISO 14001 organization under Ministry of Power, Govt. of India is a National Apex body for Training and Human Resources Development in Power Sector with its Corporate office at Faridabad. NPTI had been providing its dedicated service for more than four decades and trained over 1,80,000 Power Professionals in regular Programs over the last 4 decades. NPTI operates on an all India basis with manpower strength of 366 including 104 officers through its nine Institutes in different zones of the country.

Apart from numerous training programs, NPTI is also conducting AICTE approved industry interfaced academic programs such as B.Tech (Power), Post Graduate Diploma in Thermal Power Plant Engg. and MBA in Power Management with the objective to make available a pool of trained manpower.

Central Power Research Institute (CPRI)

The Central Power Research Institute (CPRI) was established by the Government of India in 1960 and was re-organized into an autonomous society under Ministry of Power in 1978 to serve the country as a National Level Laboratory for applied research in the field of power engineering and also to function as an independent authority for testing, evaluation and certification of electrical equipment and components. The Principal Executive Officer of the

Institute is the Director General. The affairs of the Society are managed by Governing Council with Secretary to the Government of India, Ministry of Power as its President. The Governing Council has representation from various Ministries of Government of India, Utilities, Manufacturers and academia.

As a premier research organization in the field of electrical engineering, the Institute has several research laboratories and testing installations engaged in different specialized fields. The Head Office and its largest unit-Central Research & Testing Laboratory (CRTL) is at Bangalore. Other units are the Switchgear Testing and Development Station at Bhopal, Regional Testing Laboratory at Noida, Ultra High Voltage (UHV) Research Laboratory at Hyderabad, Thermal Research Centre at Nagpur. CPRI has also established Regional Testing Laboratories at Kolkata and Guwahati catering to the Eastern and North Eastern States to test transformer Dielectrics.

Programmes and Schemes Implemented by the units/organizations of the Ministry:

1. **Secretariat:** Provision is there for expenditure on establishment matters for the Secretariat of the Ministry of Power and under the Plan scheme “Computerization & Office Equipment”.
2. **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. CEA is implementing various schemes such as Renovation & Modernisation Scheme of Thermal Power Stations, Upgradation of IT facilities, Computerization of PTCC process, Selection of sites, etc.
3. **Research & Development:** Central Power Research Institute, Bangalore serves as a National Laboratory for applied research in the field of electrical power and also functions as an independent authority for testing, evaluation and certification of electrical equipment and components. The provision is there for R&D activities, strengthening and augmenting the test facilities, etc.
4. **Training:** National Power Training Institute is engaged in imparting training in various aspects of power sector including operation and maintenance of power stations. A provision of has been kept for the year 2012-13 under the Plan schemes namely Modernization & Up gradation of Training Facilities at Corporate office Faridabad and Setting up of National Power Training Institute at Alappuzha Kerala.

5. **Joint Electricity Regulatory Commission (JERC) for Manipur and Mizoram:** Pursuant to a Memorandum of Agreement (MoA) signed by the State Governments of Manipur and Mizoram, authorizing the Central Government to constitute a Joint Electricity Regulatory Commission (JERC), the Central Government has constituted a JERC for these states under section 83 of the Electricity Act 2003. The Central Government had also approved a plan scheme for meeting the recurring and non-recurring expenditure of the Commission during the five years which is ending in January, 2013 as agreed in the MoA.
6. **Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY):** This scheme of rural Electricity Infrastructure and Household Electrification has been introduced in April, 2005 for providing access to electricity to all rural households. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under the scheme, projects are financed with 90% capital subsidy for provision of Rural Electricity Distribution Backbone (REDB), creation of Village Electrification Infrastructure (VEI) and Decentralised Distributed Generation and Supply. REDB, VEI and DDG would also cater to the requirement of agriculture and other activities. Under this scheme un-electrified Below Poverty Line (BPL) households will get electricity connection free of charge. The continuation of the scheme in XI Plan was sanctioned on 3rd January, 2008 with the capital subsidy of ₹ 26,500 crore. To increase the coverage of small habitations, Government allowed electrification of habitations upto 100 population instead of earlier limit of 300 during 11th Plan.
7. **Funds for Evaluation Studies and Consultancy:** This provision is for conducting evaluation studies of various projects/programmes/ schemes.
8. **Joint Electricity Regulatory Commission (JERC) for UTs:** The Central Government has set up a Joint Electricity Regulatory Commission (JERC) for Goa and all Union Territories except Delhi. Expenditure of the Joint Commission shall be borne by the Central Government and the Government of Goa in the ratio of 6:1.
9. **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.
10. **Energy Conservation:** The primary objective of Energy Conservation Act, 2001 is to reduce energy intensity in the Indian economy. In order to translate the objectives into result-oriented action, the Act has indicated that the Government must take to provide a strong policy framework and direction through national energy efficiency and conservation enshrined programs. Some of these are as under:-

- (i) National Energy Conservation Day/Awards
- (ii) National Level Painting Competition for School Children
- (iii) Awareness & Publicity
- (iv) National Mission for Enhanced Energy Efficiency (NMEEE)

11. **Bureau of Energy Efficiency (BEE):** BEE through various programmes/schemes strives for realization of large scale energy savings in industrial, commercial, residential and agriculture sectors as well as expanding and reaching out to new areas, through Standard & Labelling programme, Energy Conservation Building Codes, promoting energy conservation for Small & Medium Enterprises Sector, Demand Side Management activities in Agriculture Sector and Municipalities, creation of State Energy Conservation Fund, implementation of Super Efficient Equipment Programme etc.
12. **Re-structured Accelerated Power development Reforms Programme:** 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 in urban areas-towns and cities with population of more than 30,000 (10,000 in case of special category states). Projects execution under the scheme to be taken up in Two Parts. Part-A include the projects for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centres. Part-B include regular distribution strengthening projects. Besides, there is an enabling component namely, Part-C under which grant will be provided to meet the expenditure for facilitating activities of the programme.
13. **Assistance to Forum of Regulator for Capacity building:** Provisions are made for Forum of Regulators for capacity building and availing consultancy.
14. **National Electricity Fund (Interest Subsidy) Scheme:** Cabinet Committee on Economic Affairs has approved the setting up of National Electricity Fund (Interest Subsidy) Scheme in its meeting held on 13 December, 2011 to provide interest subsidy aggregating to ₹ 8466 crore on loan disbursement amounting to ₹ 25,000 crore to the State Power Utilities, both in public & private sector, to improve the distribution network for non-RGGVY and non R-APDRP. Rural Electrification Corporation (REC), would be the Nodal Agency to operationalize the programme under the guidance of Steering Committee being constituted for the scheme.

15. Investment in Public Enterprises: Provision under the scheme is towards capital investment in the generation/transmission projects taken upon in the Central Sectors through CPSUs like NTPC Limited, NHPC Limited, NEEPCO, THDC India Ltd., SJVN Limited and POWERGRID. The investment in CPSUs is ₹ 53296.67 crore comprising of IEBR of ₹ 52782.50 crore and GBS ₹ 514.37 crore during 2012-13.

Chapter-II

Outcome Budget 2012-13

Outcome focused budgeting has been introduced as a tool to improve the quality and accountability of Government's expenditure programmes. Outcome Budget has become an integral part of budgetary process since 2005-06. This is to ensure that we get better value for money we spend.

An amount of ₹ 62424.50 crore is the outlay approved by the Planning Commission for the year 2012-13 as per details given below: -

Annual Plan 2012-13

(₹ in crore)

SL. NO.	ORGANISATION/ SCHEMES	INTERNAL RESOURCES	BONDS/ DEBENTURES	ECB/ SUPPLIER CREDIT	OTHERS	(IEBR)	(GBS)	TOTAL PLAN OUTLAY
1	2	4	5	6	7	8	9	10
A.	CENTRAL PLAN							
1	NTPC	8219.00	10511.00	2265.00	0.00	20995.00	0.00	20995.00
2	N.H.P.C.	-499.12	3594.38	0.00	731.37	3826.63	270.37	4097.00
3	POWERGRID	3482.00	13471.00	3047.00	0.00	20000.00	0.00	20000.00
4	D.V.C.	1622.37	2600.00	0.00	1349.32	5571.69	0.00	5571.69
5	T.H.D.C.	189.33	0.00	154.25	111.81	455.39	110.00	565.39
6	S.J.V.N.	437.66	0.00	358.34	0.00	796.00	0.00	796.00
7	NEEPCO	344.29	100.00	126.00	567.50	1137.79	134.00	1271.79
	TOTAL (A)	13795.53	30276.38	5950.59	2760.00	52782.50	514.37	53296.87
B.	MOP Schemes							
1	Rural Electrification Schemes	0.00	0.00	0.00	0.00	0.00	4900.00	4900.00
2	R-APDRP	0.00	0.00	0.00	0.00	0.00	3114.00	3114.00
3	NPTI(Training & HR)	0.00	0.00	0.00	0.00	0.00	5.09	5.09
4	CPRI (Research & Testing)	0.00	0.00	0.00	0.00	0.00	265.00	265.00
5	Programmes & Infrastructure Improvement of CEA	0.00	0.00	0.00	0.00	0.00	19.08	19.08
6	Bureau of Energy Efficiency	0.00	0.00	0.00	0.00	0.00	200.00	200.00
7	MOP other schemes	0.00	0.00	0.00	0.00	0.00	624.46	624.46
	Total (B)	0.00	0.00	0.00	0.00	0.00	9127.63	9127.63
	Total (A+B)	13795.53	30276.38	5950.59	2760.00	52782.50	9642.00	62424.50

Non Plan 2012-13

(₹ in crore)

SL.NO.	ORGANISATION/SCHEMES	NON PLAN BUDGET
1.	MOP Secretariat	25.84
2.	Central Electricity Authority	78.80
3.	CERC Fund	34.79
4.	CERC Fund	-34.79
5.	NPTI	6.40
6.	Appellate Tribunal for Electricity	8.78
7.	Setting up of Joint SERC for UTs & Goa except Delhi	4.00
8.	B.T.P.S.	9.95
	Grand Total	133.77

The Plan outlay has been broadly divided into following categories:

- (a) Rajiv Gandhi Grameen Viduytikaran Yojana
- (b) Re-structured-Accelerated Power Development Reforms Programme
- (c) Generation Scheme & Programmes
 - i) NTPC Ltd.
 - ii) NHPC Ltd.
 - iii) NEEPCO
 - iv) THDCIL
 - v) SJVN Ltd.
 - vi) DVC
- (d) Transmission Network by POWERGRID.
- (e) Transmission schemes
 - i) Strengthening of Transmission system in the States of Arunachal Pradesh and Sikkim.
 - ii) 220 KV Transmission Line from Srinagar to Leh via Kargil.
- (f) Energy Efficiency
 - (i) Bureau of Energy Efficiency
 - (ii) Energy Conservation Scheme of MOP

- (g) Research & Testing by CPRI
- (h) Training and skill improvement by NPTI
- (i) Other schemes

The outcomes for each of the above categories in detail have been given in the table annexed serially to this chapter. Briefly, the position is as under:-

- (a) **Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)** Rajiv Gandhi Grameen Vidyutikaran Yojana is a flagship scheme for creation of rural electricity infrastructure and households electrification. The targets for the year 2012-13 is for electrification of 4,800 un-electrified villages and offering electricity connections to 34 lakh BPL households. The outlay for 2012-13 is ₹ 4900 crore. **The details are at Annexure-I.**
- (b) **Restructured Accelerated Power Development & Reform Programme (R-APDRP)** – Cabinet Committee on Economic Affairs (CCEA) approved the “Re-structured APDRP” for XI Plan as a Central Sector Scheme in its meeting held on 31 July, 2008. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction.

The financial target for the Financial Year 2012-13 are as under:

R-APDRP scheme	Targets for FY 12-13		
	Sanction of projects		Disbursement
	Nos.	₹ crore	₹ crore
Part-A(IT)			2000
Part-A(SCADA)			100
Part-B	50	1000	897
Total(Loan)		1000	2997
Part-C(Grant)			117
Total(Loan +Grant)		1000	3114

The details are at **Annexure-II.**

(c) Generation

The generation in the central sector is implemented through the various organizations as under:

(i) NTPC Limited

The outlay of ₹ 20995 crore (IEBR) during 2012-13 would result in commissioning of 4055 MW, out of which 2555 MW is directly by NTPC ie. from Koldam, Mauda, Bongaigaon, Rihand-III, Vindhyachal IV and Andaman & Nicobar Solar and balance 1500 MW through NTPC Joint Venture ie. from IGSTPP, Jhajjar and Vallur. The details are at **Annexure-III.**

(ii) NHPC Limited

The outlay for the year 2012-13 is ₹ 4097 crore which comprises ₹ 3826.63 crore IEBR & ₹ 270.37 crore GBS. The activities planned during the year 2012-13 include completion of residual works at Dulhasti, Sewa-II and Chamera-III projects. Further the construction activities at Parbati-II, Teesta Low Dam-III and IV, Subansiri Lower, Uri-II, Parbati-III, Nimoo Bazgo, Chutak and Kishanganga Project are expected to go in full swing. The works on new projects like Kotli Bhel-IA, Teesta-IV, Dibang and Tawang-I & II Projects are expected to start in the year 2012-13 subject to availability of pending statutory clearances and Govt. sanction afterwards. The details are at **Annexure IV**.

(iii) North Eastern Electric Power Corporation (NEEPCO)

For the year 2012-13, total outlay against the Projects / Schemes of NEEPCO is ₹ 1371.79 crore including Subordinate Loan of ₹ 80 crore and DONER Grant of ₹ 100 crore against Tuirial HEP. Out of GBS of ₹ 134.00 crore, ₹ 54 crore is earmarked for Pare HEP (110 MW) and ₹ 180 crore for Tuirial HEP (60 MW). IEBR provision of ₹ 1137.79 crore is proposed for (i) Kameng H.E. Project (600 MW), (ii) Pare H.E. Project (110 MW) (iii) Tuirial H.E. Project (60 MW) (IV) Tripura Gas Based Power Project (101 MW), and (V) Agartala Gas Turbine – CC Extension Project (46 MW). There are also other prospective new projects like Garo Hills Coal Based Power Project (500 MW), West Khasi Hills Coal Based Power Project (240 MW), Survey & Investigation Schemes, Renovation & Modernisation of Kopili Power Station etc. against which funds have been proposed out of the above outlay. The details are at **Annexure – V**.

(iv) THDC India Limited

The outlay for the year 2012-13 is ₹ 565.39 crore which comprises ₹ 455.39 crore IEBR & ₹ 110 crore GBS. A provision of ₹ 98.78 crore has been made for execution of various balance works of Koteswar HEP Project and ₹ 171.67 crore for execution of various works of Tehri PSP (1000MW) Project. A provision of ₹ 80 crore has been made under GBS for Tehri PSP Project. The details are at **Annexure – VI**.

(v) SJVN Limited

A provision of ₹ 796.00 crore has been made in the IEBR. During the year 2012-13 the construction activities of Rampur HEP (412 MW) and Luhri HEP (775 MW) would achieve considerable progress. The details are at **Annexure-VII**.

(vi) Damodar Valley Corporation (DVC)

The outlay of ₹ 5571.69 crore (IEBR) during 2012-13 would result in commercial operation of Greenfield Projects Koderma Thermal Power Station (KTPS) (2 x 500 MW), Durgapur Steel Thermal Power Station (DSTPS) (2 x 500 MW). RTPS Phase-I (2X 600 MW) is likely to be commissioned by the end of 2012-13.

Another Unit-2 (1x525 MW) of Joint Venture project Maithon Power Limited (MPL) is likely to be commissioned during 2012-13. The details are at **Annexure-VIII**

(d) Transmission Network by POWERGRID

The outlay of ₹ 20000 crore (IEBR) of POWERGRID, the quantifiable deliverables of 7000 ckm. stringing and 36 Nos. transformer erection has been targeted. The details are at **Annexure-IX**.

(e) Transmission Schemes

- (i) A Plan outlay of ₹ 145.00 crore for 2012-13 is kept for strengthening of transmission system in the State of Arunachal Pradesh and Sikkim. The PIB note is under submission.
- (ii) A Plan outlay of ₹ 200.00 crore for 2012-13 is kept for construction of 220 KV transmission line from Srinagar to Leh via Kargil. The PIB note is under submission.

(f) Energy Efficiency

- (i) **Bureau of Energy Efficiency:** The Plan Outlay for BEE is ₹ 200.00 crore. To promote energy efficiency during the XII Plan period and to achieve the target of reducing consumption, BEE has initiated several programmes/schemes viz. House hold lighting, Commercial Buildings, Standards & Labeling of appliances, Demand Side Management in Agriculture/Municipalities, SMEs and Large Industries and Capacity Building of SDAs. The details are at **Annexure X**.
- (ii) **Energy Conservation Scheme of MOP** - The Plan Outlay for Energy Conservation is ₹ 200.00 crore. The funds would be utilized for carrying out the Energy Conservation related activities i.e. National Level Awareness Campaign, National Energy Conservation Awards and National Level Painting Competition for Children. National Action Plan on Climate Change contains 8 National Missions representing multi-project, long term and integrated strategies for achieving key goals in the context of climate change. One of the Missions is National Mission for Enhanced Energy Efficiency (NMEEE), which is being pursued by MOP through Bureau of Energy Efficiency (BEE). Performance Achieve and Trade Mechanism (PAT), Market Transformation for Energy Efficiency (MTEE), Energy Efficiency Financing Platform (EEFP) and Framework for Energy Efficient Economic Development (FEEED) are various components of the Mission. The details are at **Annexure XI**.

(g) Research & Testing by CPRI :

Central Power Research Institute (CPRI) is a National Level Laboratory for applied research in the field of power engineering and functions as an independent authority for testing, evaluation and certification of electrical equipment and components. The plan outlay for CPRI is ₹ 265 crore. The details are at **Annexure XII**.

(h) Training and skill improvement by NPTI :

For the training activities, NPTI needs to provide the extra facilities in the Institute i.e. class rooms, Hostel facilities, Guest House, Laboratory, Increase in Library facilities, latest technology equipment, Computer Labs etc. An amount of ₹ 5.09 crore has been provided under Plan Scheme and ₹ 6.40 crore under Non-Plan Schemes. The details are at **Annexure XIII**.

(i) **Other Schemes:**

Central Electricity Authority – There is an outlay of ₹ 19.08 crore in Plan and ₹ 78.80 crore under Non-Plan in the Financial Year 2012-13. 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. The details are at **Annexure XIV**.

Joint Electricity Regulatory Commission (JERC) for the State of Manipur & Mizoram – There is a provision of ₹ 2.46 crore (under Plan) for operationalisation of JERC for the State of Manipur & Mizoram during the financial year 2012-13. Central Government had approved a plan scheme of financial assistance of ₹ 6.60 crore for meeting the recurring and non-recurring expenditure of the Commission during the first five years. The five year period agreed will be completed in January, 2013. It is proposed to continue the scheme in the first year of 12th Five Year Plan. The details are at **Annexure- XV**.

Apart from these, during the financial year 2012-13, there is a provision of ₹ 2.00 crore under Assistance to Forum of Regulators for Capacity Building during Financial Year 2012-13 (**Annexure-XVI**), ₹ 0.90 crore under Comprehensive Award Scheme (**Annexure-XVII**), ₹ 0.10 crore under MoP Sectt. under Plan scheme and ₹ 25.84 crore under Non-Plan scheme (**Annexure-XVIII**) and ₹ 2.00 crore under Funds for Evaluation Studies (**Annexure-XIX**). A provision of ₹ 72.00 crore has been kept for National Electricity Fund (Interest Subsidy) Scheme. An amount of ₹ 4.00 crore has been kept under the scheme JERC for Union Territories Goa & UTs except Delhi (under Non-Plan) and a provision of ₹ 8.78 crore has also been kept under the scheme APTEL (Non Plan) (**Annexure XX and XXI**).

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)
OUTCOME BUDGET 2012-13

(₹ in crores)

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Outputs (2012-13)	Processes/ Timelines	Projected Outcomes	Remarks/risk Factors
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
1	Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)	Electrifying all villages and providing access to electricity to all rural households.		₹ 4900 crore		Electrification of 4,800 un-electrified Villages and offering electricity connections to 34 lakhs BPL households	Total 578 projects targeting to electrify 1.10 lakh un-electrified villages and release of electricity connections to 230.13 lakh BPL households have been sanctioned for execution. Up to 31.12.2011, the cumulative achievement is 100917 un-electrified villages and release of electricity connections to 179.41 lakh BPL households.	Will facilitate overall rural development, employment generation and poverty alleviation	The projects are being implemented throughout the country and unexpected events, natural calamities can cause delay.

**Restructured Accelerated Power Development and Reforms Programme
(R-APDRP) In XI Plan
Outcome Budget 2012-13**

(₹ in crore)

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Outputs (2012-13)	Processes/ Timelines	Projected Outcomes	Remarks/risk Factors
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
	Accelerated Power Development and Reforms Programme (APDRP)	To reduce Aggregate Technical and Commercial (AT&C) loss of the State Power Utilities	-	3114.00 Loan-2997.00 Grant-117.00	The focus of the programme is on actual, demonstrable performance in terms of loss reduction. Projects under the scheme are to be taken up in Two Parts. Part-A is to include the projects for establishment of baseline data and IT applications	Adoption of Information Technology in the areas of energy accounting & auditing for establishment of baseline data. Reduction in outage, improvement in quality of supply/ losses, consumer satisfaction etc.	Under Part-A of the programme, projects will be sanctioned for establishment of baseline data and IT applications for energy accounting/ auditing and establishment of IT based consumer service centers. Since the programme has a high performance orientation, initially the necessary amount will be released as loan from Government of India. The loan shall be converted into grant once the establishment of the	Implementation of the projects sanctioned under Part-A and Part – B of the programme. After implementation, in the project area, the State Power Utilities are expected to achieve Aggregate Technical & Commercial (AT&C) loss reduction target of 15%. The Utilities are also to achieve the following target of AT&C loss reduction at utility level: Utilities	A Steering Committee for implementation of the programme has also been constituted. Power Finance Corporation Ltd. (PFC) has been appointed as Nodal Agency for operationalising the programme. Implementation capacity can act as constraint. Some States are reluctant for Part-B funding as conversion of loan to grant is linked to loss reduction.

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Outputs (2012-13)	Processes/ Timelines	Projected Outcomes	Remarks/risk Factors
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
					for energy accounting / auditing & IT based consumer service centers. Part-B includes regular distribution strengthening projects. Initially 100% funds for Part-A and 25% (90% for special category states) funds for Part-B projects would be provided through loan from the Govt. of India. The		required system is achieved and verified by an independent agency. Part-B includes regular distribution strengthening projects. These projects on completion should benefit in AT&C loss reduction in project areas. Physical target for Year 2012-13: PFC has proposed to sanction 50 Part-B projects worth ' 1000 crore Financial target for Year 2012-13: Loan: ₹ 2997 crore: PFC has proposed to disburse ₹ 2000 crore. under Part-A(IT), ₹ 100 crore. under Part-A(SCADA) and ₹ 897 crore under Part-B of R-	having AT&C loss above 30%: Reduction by 3% per year Utilities having AT&C loss below 30%: Reduction by 1.5% per year .	

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Outputs (2012-13)	Processes/ Timelines	Projected Outcomes	Remarks/risk Factors
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
					balance funds for Part-B projects would be raised from financial institutions. The entire amount of loan for Part-A projects would be converted into grant once the establishment of the required Base-line data system is achieved and verified by an independent agency appointed by MoP. Up-to 50% (90% for special		ADPRP.Grant: ₹ 117 crore PFC has proposed to disburse ₹ 117 crore as grant under Part-C.		

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Outputs (2012-13)	Processes/ Timelines	Projected Outcomes	Remarks/risk Factors
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
					category States) of the project cost of Part-B projects would be converted into grant in five equal tranches on achieving the 15% AT&C loss in the project area on a sustainable basis for a period of five years. In addition, utility level AT&C loss reduction @ 3% per annum for utilities with baseline AT&C loss levels exceeding				

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Outputs (2012-13)	Processes/ Timelines	Projected Outcomes	Remarks/risk Factors
			Non- Plan Budget	Plan Budget	Comple- mentary Extra- Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
					30% and @ 1.5% per annum for utilities with baseline AT&C loss levels less than 30% have to be achieved.				

NTPC LIMITED
OUTCOME BUDGET 2012-2013

Sl. No.	Name of Scheme/ Programme/Project	Objective Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Milestones	Processes / Timelines	Projected Outcomes	Remarks / Ant.	
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8	
i	Ongoing Schemes									
1	Barh-I	Addition of 1980 MW of generation Capacity		1289.11		Unit-1 Hydro test	01/13	Addition of 1980 MW of generation Capacity	Pressure part erection to start in Jan'12	
						Unit-1 TG Box up	03/13		Condenser erection to start in Dec'11	
						Unit-2 Ceiling girder erection completion	09/12			Structure erection in progress
2	Barh-II	Additon of 1320 MW of generation Capacity		1690.52		Unit-4 Boiler Light up	10/12	Additon of 1320 MW of generation Capacity	Pump house civil works in progress	
						Unit-4 CW Pump motor trial run	09/12		TG erection started	
						Unit-4 Synchronisation	03/13		Pressure part erection in progress	
						Unit-5 hydro test	03/13			
3	Simhadri II	Addition of1000 MW of generation Capacity		491.04		U#4 Trial run operation	07/12	Addition of1000 MW of generation Capacity		
4	Mauda -I	Additon of 1000 MW of generation Capacity		1589.22		Unit#2 Boiler light up	08/12	Additon of 1000 MW of generation Capacity	Work in progress ant in Aug'12	
						Unit#2 TG Oil flushing completion	12/12		Work in progress ant in Dec'12	
						Unit#2 TG Box UP	11/12		Work in progress ant in Nov'12	
						Completion of Flue can erection for BLU unit 2	06/12			
						Unit#2 Commissioning	02/13			Work in progress ant in Feb'13

5	Bongaigaon	Additon of 750 MW of generation Capacity		1431.48		Unit#1 Boiler light up	07/12	Additon of 750 MW of generation Capacity	
						Unit#1 TG Box UP	08/12		
						Unit#1 TG Oil flushing completion	09/12		
						Commissioning of Unit #1	03/13		
6	Rihand III	Additon of 1000 MW of generation Capacity		1028.44				Additon of 1000 MW of generation Capacity	Work not started
									placed on platform
						Completion of Flue can erection for BLU unit 6	06/12		Control room: unit#6: 8.5 m /16 m up to bay 16: all slab casted.Remaining elevations(5.5 m , 24 m , 32m): all slab pending . Brick works, AC duct, Fire protection system, false ceiling etc. works are pending.
						Charging of Station transformer #6	07/12		
						Control room civil readiness for unit# 6	06/12		
						Unit # 6 BLU	09/12		
						Turbine #6 box up	11/12		
									Subjected to availability of Unit # 6: Despatch fo HPT by March'12.IPT by March '12.
7	Vindhyachal IV	Additon of 1000 MW of generation Capacity		1627.54		Commissioning of Unit #6	12/12	Additon of 1000 MW of generation Capacity	Subjected to timely supplies of HPT / IPT/LP rotor
						Completion of Flue can erection for BLU unit 12	06/12		
						Charging of Station transformer #12	07/12		
							06/12		
						Unit # 12 BLU	09/12		
						Turbine #12 TG box up	11/12		
8	Koldam	Addition of 800 MW of generation capacity		562.92		Commissioning of Unit #12	12/12	Addition of 800 MW of generation capacity	Work in progress
						Power intake gate erection	08/12		
						Charging of MV/LV & DC System	10/12		
						Bottom outlet plug completion	06/12		
						Commissioning of Units #1 to 4	03/13		
									Work in progress

9	Tapovan-Vishnugad	Addition of 520 MW of generation capacity		583.98		Cum 10 km HRT excavation Completion	03/13	Addition of 520 MW of generation capacity	Work yet to start
						Pit liner erection for all units	02/13		Erection of unit-1 in progress
						Power house machine hall concrete upto EL1272 For all units	10/12		Work in progress
10	Singrauli Hydro	Addition of 8 MW of generation capacity		43.77		Construction of Coffor Dam	04/12	Addition of 600 MW of generation capacity	
						EOT rane commissioning	04/12		
						Erection commencement of TG	11/12		
	Sub Total (i)			10338.02					
	New Projects								
1	Singrauli III , U.P	Additon of 500 MW of generation Capacity		89.47		Main Plant Package Award	2012-13	Additon of 500 MW of generation Capacity	This milestone is linked to avilability of tie up of all inputs and required clearance.
2	Solapur, Maharashtra	Additon of 1320 MW of generation Capacity		662.93		Commencement of Civil works U1	06/12	Additon of 1320 MW of generation Capacity	These milestone are linked to issue of Main Plant LOA in FY 2011-12. Matter Subjudice.
						Commencement of Boiler erection U1	03/13		
3	Mauda II , Maharashtra	Additon of 1320 MW of generation Capacity		319.93		Commencement of Civil works U1	06/12	Additon of 1320 MW of generation Capacity	These milestone are linked to issue of Main Plant LOA in FY 2011-12. Matter Subjudice.
						Commencement of Boiler erection U1	03/13		
4	Darlipalli , Orissa	Additon of 1600 MW of generation Capacity		412.15		Commencement of Civil works U1	06/12	Additon of 1600 MW of generation Capacity	These milestone are linked to issue of Main Plant LOA in FY 2011-12.
						Commencement of Boiler erection U1	03/13		
5	Kudgi , Karnataka	Additon of 2400 MW of generation Capacity		755.08		Commencement of Civil worksU1	06/12	Additon of 2400 MW of generation Capacity	These milestone are linked to issue of Main Plant LOA in FY 2011-12.
						Commencement of Boiler erection U1	03/13		

[illegible]

12	Other New Projects			217.75					
	Sub-Total (ii)			4070.05					
iii	Coal Mining			1803.07					
iv	Renovation & Modernization Schemes			1151.32					
v	Other Misc. Schemes			3632.54					
	Sub Total (iii+iv+v)			6586.93					
	Total			20995.00					

NHPC LIMITED
OUTCOME BUDGET 2012-13

(₹ in crore)

Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2012-13		Quantifiable deliverables / Physical Output	Targets	Projected Outcomes	Process/ Timelines	Remarks/ Risk factors
			Sub Debt	IEBR	Physical Activity				
1	2	3		4	5		6	7	8
C.	New Schemes								
1	Kotli Bhel Stage-1A	Addition of 195 MW capacity		186.83	Part payment for RR plan and to forest department for NPV, CAT plan etc	100%	All activities subject to CCEA clearance of Project by Mar.i12. Work Plan will be revised after approval and enhancement of Budget allocation.	Mar.i13	Permission for diversion of forest land required for construction of Kotli Bhel Stage-IA HE Project may be accorded and prior approval for diversion of forest land required for construction of Kotli Bhel Stage - IB and Kotlibhel Stage II HE Projects may not be accorded.NHPC vide letter dated 12.08.2011, approached MOEF to reconsider its decision w.r.t Kotlibhl - 1B and Kotlibhel - II Projects.
2	Kotli Bhel Stage- I B	Addition of 320 MW capacity		6.07	Part payment for RR plan and to forest department for NPV, CAT plan etc	100%		Mar.i13	
3	Kotli Bhel Stage- II	Addition of 530 MW capacity		10.83	Part payment for RR plan and to forest department for NPV, CAT plan etc	100%		Mar.i13	

									NHPC vide letter dated 17.08.2011 requested MOP to take up the case of reconsideration with MoEF. CEA has been requested to extend the validity of concurrence for another one year vide letter dated 08.09.2011.
3	Dibang	Addition of 3000 MW capacity		145.04	Construction of New road double lane between Dam to DT outlet at right bank-Formation cutting	5Km	All these activities are subject to the Environment and Forest clearance at the earliest	Mar.i13	Environment and forest clearance are being pursued and as such the project is poised before CCEA for Govt. sanction.Forest proposal has been forwarded by State Govt. to MoEF on 18.08.2011. Public hearing is still awaited.
					Construction of New road from Dam site to Dambuk on right bank-Formation cutting	5Km		Mar.i13	
					Construction of Pathan Camp colony road-Formation cutting	5Km		Mar.i13	
					Construction of New double lane road from + 19 Km point to confluence of Dibang & Ashu pani-Formation cutting	5Km		Mar.i13	
					Final survey and preparation of alignment track on the approach roads from Dambuk to Dam site and + 16 KM to dam site - 60Km	40Km		Mar.i13	
					Maintenance of G and D site and Establishment expenses etc.	100%		Mar.i13	
2	Teesta-IV	Addition of 520 MW capacity		122.56	Provision for kept for complete land acquisition	100%	Achievement is subject to Public	Mar.i13	SPCB has notified 22.07.2011 as the

					Approach road to Dam & Power House site	100%	hearing and CCEA clearance	Mar.i13	date of Public hearing. However, the same was postponed till further orders due to boycott of Public Hearing by the project affected people.
					Construction of field hostel and office building	75%		Mar.i13	
					Establishment and other ongoing investigation works	100%		Mar.i13	
4	Tawnag- I	Addition of 600 MW capacity		58.76	Post DPR drilling/drifting works Establishment & Preliminary works			Mar,13	MOEF has accorded Environment Clearance to Tawang-II (800 MW) HEP and Tawang-I (600 MW) HEP vide letters dated 10.06.11. CEA has accorded concurrence to Tawang-II HEP (800 MW) with Mega Power Status vide OM dated 22.09.2011 and to Tawang I HEP (600 MW) with Mega Power Status vide OM dated 10.10.2011.
5	Tawnag-II	Addition of 800 MW capacity		84.11	Post DPR drilling/drifting works Establishment & Preliminary works				
D. S&I and Other Schemes									
3	Bursar	Addition of 1020 MW capacity		30.67	Provision has been kept mainly for establishment Expenses, ancillary works	100%	Further investigation works are held	Mar,13	Balance investigation works not yet started

					and R&M works.		up pending sanction of funds by MoWR/ Planning Commission.		due to security reason.MOWR has now indicated that competent authority has approved Rs. 56.20 crore for preparation of DPRis of Gypsa and Bursar National Projects. However, actual release of funds from CWC is still awaited
E.	Other new schemes	Preparation of DPR / FR of new projects		10.00					
F.	Schemes under Joint Venture								
1	Loktak Downstream	Addition of 66 MW capacity		1.00	Establishment & Preliminary works				
2	Pakal Dul	Addition of 1000 MW capacity		55.58	Provision kept for building & communication, maintenance of G&D sites, ancillary works and establishment expenses only.	100%		March13	The M&AOA of the company has been finalized by the JV partners and company has been registered as M/s Chenab Valley Power Projects Private Limited with he Registrar of Companies on 13.06.2011.
3	Kiru	Addition of 600 MW capacity		13.26	Provision kept mainly for establishment expenses and some ancillary works only.	100%		March13	
4	Kwar	Addition of 520 MW capacity		13.54	Provision kept mainly for establishment expenses and some ancillary works only.	100%		March13	

G.	R&M of Power House	Renovation of Loktak PS (105 MW)		2.00					
H.	R&D works and CDM			13.60					
	Total		270.37	3826.63					

Chamera -III, URI-II & Chutak HE projects are anticipated to be commissioned by Mar,12, Apr,12 & May,12 respectively have budget provision of ₹75.15 Crore, ₹81.36 Crs & ₹89.73 crs.

Annexure-V

NEEPCO LTD.
Outcome Budget 2012 -13

(₹ in crore)

Sl. No.	Name of the Scheme / Programmes	Objective / Outcome	Outlay 2012-13			Quantifiable Deliverable	Projected Outcome	Process / Timelines	Remarks
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
			4(i)	4(ii)	4(iii)				
1	2	3		4		5	6	7	8
1	Kameng HEP (600 MW), A.P.	Generation of Hydro Power	0.00	0.00	400.00	Package-I: Bichom Dam Concreting (2012-13 target = 40000 cum)	Completion of Dam	Mar -13	Project Works are under progress
						HRT Face-II Boring (2012-13 target = 849 m)	Completion of WCS	Mar -13	
						Face-I Kerb concreting (2012-13 target = 100%)	ó Do ó-	Mar - 13	
						Face-I Overt Lining (2012-13 target = 100%)	ó Do ó-	Mar - 13	
						Package-II:	ó Do ó-		
						HRT Face - III Boring (2012-13 target = 700 m)	ó Do ó-	Dec - 12	
						HRT Face nVI Boring (2012-13 target = 100%)	ó Do ó-	May - 12	
						Tenga Dam Excavation (2012-13 target = 15000 cum)	Completion of Dam	Dec - 12	
						Tenga Dam Concreting (2012-13 target = 25000 cum)	ó Do ó-	Mar -13	
						Package-III:			
						High Pressure Tunnel:	Completion of WCS		
						Boring of HPT (2012-13 target = 197 m)	ó Do ó-	Feb - 13	
						Open excavation of surface Penstock (2012-13 target = 65000 cum)	ó Do ó-	Feb - 13	
						Power House & TRC:			

						Concreting of Power House (2012-13 target = 12000 cum)	Completion of Power House	Mar -13	
						Package-IV:			
						Fabrication of steel Liner (2012-13 target = 3000 MT)	Completion of WCS	Mar - 13	
						Erection of Steel Liner at:	ó Do ó-		
						BP-2 to Valve House (2012-13 target = 111.17 Rm)	ó Do ó-	Nov - 12	
						Surge Shaft to BP-2 (2012-13 target = 20 Rm)	ó Do ó-	Feb - 13	
						Vertical Shaft ñ 2 (2012-13 target = 30 Rm)	ó Do ó-	Feb - 13	
						Vertical Shaft ñ 3 (2012-13 target = 30 Rm)	ó Do ó-	Aug - 12	
						Face ñ X (2012-13 target = 200 Rm)	ó Do ó-	Feb - 13	
						Face ñ XI (2012-13 target = 200 Rm)	ó Do ó-	Feb - 13	
						Overground Penstock ñ II (2012-13 target = 72 Rm)	ó Do ó-	Feb - 13	
						At Tenga Dam (2012-13 target = 72 Rm)	ó Do ó-	Feb - 13	
						Package - V			
						Laying of Earth Mat at Unit-IV (2012-13 target = 100%)	Completion of Power House	Jun - 12	ó -
						Stator Core Building of Unit ñ I at Service Bay (2012-13 target = 100%)	ó Do ó-	Nov - 12	ó -
						Erection of DT Liner for Unit ñ III & IV (2012-13 target = 100%)	ó Do ó-	Aug - 12	
						Extension of EOT Crane at Unit ñ I (2012-13 target = 100%)	-ó Do ó-	Feb - 13	
						Package-VI			
						Excavation, filling and Levelling of Switch Yard area (2012-13 target = 5000 cum)	Completion of Switch Yard	Jun - 12	
						Erection of 400 KV Bus Reactor Bay (2012-13 target = 100%)	ó Do ó-	Feb - 13	
						Erection of 400 KV Feeder # 2 Bay (2012-13 target = 100%)	ó Do ó-	Jan - 13	

						Erection of 400 KV Feeder # 1 Bay (2012-13 target = 100%)	ó Do ó-	Mar - 13	
						Erection of 400 KV Bus Coupler Bay (2012-13 target = 100%)	ó Do ó-	Mar - 13	
2	Pare H.E. Project (110 MW), AP.	Generation of Hydro Power	0.00	54.00	126.00	Package-I (Civil Works) Dam excavation (2012-13 target = 176000 cum)	Completion of Dam	Dec - 12	
						Dam concreting (Cumulative target = 150000 cum)	ó Do ó-	Mar - 13	
						HRT Boring (2012-13 target = 1300 Rm)	Completion of WCS	Mar - 13	
						Surge Shaft lining (2012-13 target = 100%)	ó Do ó-	Dec - 12	
						Power House concreting (Cumulative target = 14000 cum)	Completion of Power House	Feb - 13	
						Package-II (Hydro Mechanical Works):	Completion of WCS		
						Erection of HRT Intake Gate (2012-13 target = 100%)	ó Do ó-	Feb - 13	
						Erection of of Steel Liner in HPT (2012-13 target = 150 Rm)	ó Do ó-	Jan - 13	
						Package-III (Electro Mechanical Works):	Completion of E/M Works		
						Erection of Draft Tube Liner (2012-13 target = 100%)	ó Do ó-	Jul - 12	
						Installation of 2 nd Stage embedments and erection of Spiral Casing for Unit ñ I & II (2012-13 target = 100%)	ó Do ó-	Oct - 12	
						Package-IV (Switchyard & Transformer Works):			
						Excavation and concreting of Equipment foundation of Switch Yard(2012-13 target = 100%)	Completion of Switch Yard	Nov - 12	
3	Tripura Gas Based Power Project (101 MW)	Generation of Thermal Power	0.00	0.00	275.00	Foundation of HRSG and Stack (100% completion)	Completion of Project	Aug - 12	Project Works are under progress
						Foundation of GTG (100% completion)	ó Do ó-	Aug - 12	

						GTG Hall Super Structure	ó Do ó-		
						Construction of Raw water Intake Structure	ó Do ó-	Dec - 12	
						GT Despatch & Receipt at site	ó Do ó-	Nov - 12	
						GTG Synchronisation	ó Do ó-	Mar - 13	
4	Tuirial HEP (60 MW), Mizoram	Generation of Hydro Power	0.00	180.00 (Subordinate Loan = 80 Crs & DONER Grant = 100 Crs)	29.00	Lot-I: Completion of Diversion Tunnel i/c Lining (100% completion) Lot ñ II: Spillway concreting (Target for the year 2012-13 = 30000 cum) Lot ñ III: Service bay concreting (Target for the year = 890 cum)	Completion of WCS Completion of Spillway Completion of Service Bay	Jan - 13 Feb - 13 Nov - 12	Project Works are under progress
						Switchyard excavation (Target for the year = 40000 cum)	Completion of Switch Yard	Jun - 12	
						Lot ñ IV:			
						Design and fabrication of Power Water Way Roller Gate (1 no) & Radial Gate (3 nos)	Completion of WCS	Dec - 12	
						Design and fabrication of Penstock, Steel Liner, Bends & bifurcation etc. (400 MT)	ó- Do ó-	Feb - 13	
						Lot ñ V:			
						Erection of Draft Tube Liner	Completion of Project	Jul - 12	
						Completion of Ground Mat laying in Switchyard area	ó Do ó-	Oct - 12	
						Erection of EOT crane for Machine Hall upto Unit - II	ó Do ó-	Mar - 13	
9	Agartala Gas Turbine Plant - CC Extension Project (46 MW)	Generation of Thermal Power	0.00	0.00	65.00	Award of Package -II (Transformers and Switchyard). Award of Review Consultancy Services.	Award ó Do ó-	Mayí 12 Mayí 12	
6	Garo Hills Coal Based Power Project (500 MW), Meghalaya	Generation of Thermal Power	0.00	0.00	200.00	Coal Linkage & award of works.	Coal Linkage	Mar-13	MoA signed between NEEPCO & Govt. of Meghalaya on 17 th Mar, 2012. Regarding coal Linkage for the proposed Project, NEEPCO on priority has taken up the following initiatives to address to the Coal requirement for the proposed Project.A series of meetings were held between,

									MECL, Nagpur, MMDC, and NEEPCO regarding Coal Linkage for the project on Joint Venture mode.
7	West Khasi Hills Coal Based Thermal Power Project (240 MW), Meghalaya	Generation of Thermal Power	0.00	0.00	0.20	Land acquisition survey, preliminary investigation, EIA/EMP studies etc.(40% completion)	Land acquisition survey, preliminary investigation, EIA/EMP studies etc. (40% completion)	Mar-13	NEEPCO is pursuing with the Govt. of Meghalaya for conclusion of the MoA for implementation of the project.
10	Survey and Investigation	Preparation of DPR etc.	0.00	0.00	16.20	Survey & Investigation works of the S&I schemes	Survey & Investigation works of the S&I schemes	Mar-13	
11	Renovation & Modernisation of Kopili Power Station	Renovation & Modernisation	0.00	0.00	26.39	Renovation & Modernisation (75%)	Renovation & Modernisation (75%)	Mar-11	The equipment of the Kopili Unit-I & II machines, which were commissioned in the year 1988, indicates signs of ageing after operation for more than 20 years. It was envisaged that the replacement of worn out / deteriorated or obsolete equipment with improved version of materials and equipment would ensure safe, reliable and economic generation and higher availability of machines especially during peak hours in the NER Grid. Accordingly, the proposal for the R&M of Kopili Unit-I & II as well as the 220/132 kV Kopili, 132/33 kV Khandong switchyards and other associated systems of Kopili HEP has been taken up by NEEPCO at an revised estimated cost of ₹ 50.22 Crs. The work shall be executed in two phases (Phase I & II at estimated cost of ₹ 35.21 Crs and ₹ 15.01 Crs respectively). The Letter of Intent (LOI) for manufacture & supply of the Turbine & Generator items and technical supervision has already been placed with BHEL on 19/2/11. The delivery of the items is expected within October, 2012.Few items of work which are incorporated in the Phase-II R&M works, like procurement of one no. 20 MVA , 11/220 kV Generator Transformer with Coolers and installation of 7.5/5.0 MVA Transformer for Construction of 132/33 kV Transformers bays at Kopili switchyard by PGCIL has already been placed. The R&M activities of Kopili has been quarterly monitored and reviewed by CEA. The completion schedule of the R&M Scheme of the Kopili Power Station is 12th FYP, as decided in the meeting of CEA held in April 2010. The revised completion schedule of the work is March13.
	Grand total:	0.00	234.00*	1137.79					

- (Including Subordinate Loan of Rs.80 Crs for Tuiriel HEP, Rs.54 crore for Pare HEP and DONER Grant of 100 Crs against Tuiriel HEP

THDC India LTD.
Outcome Budget (2012-13)

(₹ in crore)

Sl. No.	Name of the Scheme / Programmes	Objective / Outcome	Outlay 2012-13			Quantifiable Deliverable/ Physical Outputs	Process / Timelines	Projected Outcome	Remarks
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
1	KOTESHWAR (4X100)				98.78				Project about to be completed. Amount kept for miscellaneous/ pending works
2	VISHNUGAD PIPALKOTI HEP (4X111MW)	Hydro Power Generation	0.00	30.00	151.54				
						Excavation of Adit upto De-silting Chamber (150M)	Mari13	Excavation of Adit upto De-silting Chamber (150M) by Mari13	
						Completion of Birahi Bridge	Mari13	Completion of Birahi Bridge by Mari13	
3	TEHRI PSP (1000 MW)	Hydro Power Generation		80.00	171.67				
						Completion of Approach Adit AA-2 to Butterfly Valve Chamber	Juni12	Completion of Approach Adit AA-2 to Butterfly Valve Chamber by Juni12	
						Completion of Approach Adit AA-3 to Penstock Assembly Chamber	Juni12	Completion of Approach Adit AA-3 to Penstock Assembly Chamber by Juni12	
						Completion of Adit AA-7 to bottom of Penstocks	Febi13	Completion of Adit AA-7 to bottom of Penstocks by Febi13	
						Completion of Access Adit AA-8 to Service bay of Machine Hall	Septi12	Completion of Access Adit AA-8 to Service bay of Machine Hall by Septi12	
						Excavation of Service Bay area upto crane Beam level	Febi13	Excavation of Service Bay area upto crane Beam level by Feb. 13	

						Completion of Access Adit AA-6 to top of D/S Surge Shaft	Juní12	Completion of Access Adit AA-6 to top of D/S Surge Shaft by Juní12	
						Completion of Adit AA-11 to bottom of D/S Surge Shaft	Decí12	Completion of Adit AA-11 to bottom of D/S Surge Shaft by Decí12	
						Completion of Approach Adit EA-7 to TRT- 3&4	Juní12	Completion of Approach Adit EA-7 to TRT- 3&4 by Juní12	
						Start of excavation of TRT ñ 3	Juní12	Start of excavation of TRT ñ 3 by Juní12	
						Start of excavation of TRT ñ 4	Octí12	Start of excavation of TRT ñ 4 by Octí12	
4	DHUKWAN HEP (3X8MW)	Hydro Power Generation			12.55				
						Start of Infrastructure works	Marí13	Start of Infrastructure works by Marí13	subject to transfer/diversion of land (UP Irrigation Department Land & Forest Land)
5	NEW PROJECTS	Hydro Power Generation	0.00		20.85				
	i) Karmoli (140MW)					Survey & Investigation works		Survey & Investigation works	Subject to Wild Life clearance
	ii) Jadhganga (50MW)					Survey & Investigation works		Survey & Investigation works	
	iii) Bokang Bailing (330MW)					Survey & Investigation works		Survey & Investigation works	Subject to drilling/driftin permission from MOEF
	iv) Malari Jhelam (55MW)					Preperation of DPR		Preperation of DPR	
	v) Jhelam Tamak (60 MW)					TEC Implementation		TEC & Implementation of project	
	vi) Sankosh Multi Purose Project (4060 MW)					Updation of DPR (Submitted to CWC)		Updation of DPR (Submitted to CWC)	
	vii) Bunakha HEP (180 MW)					Updation of DPR (Submitted to CWC)		Updation of DPR (Submitted to CWC)	
	viii) Malshej GhatPSS(600MW)					Implementation agreement to be signed by GoMH		After cabinet approval, Implementation agreement to be signed by GoMH	
	ix) Humbarli PSS (400 MW)					updation of DPR of Humbarli		updation of DPR of Humbarli	Subject to Wild Life clearance
		TOTAL			110.00	455.39			

SJVN LIMITED

Outcome Budget 2012-13

(₹ in crore)

Sl. No.	Name of the Scheme / Programmes	Objective / Outcome	Outlay 2012-13			Quantifiable Deliverable/ Physical Outputs	Process / Timelines	Projected Outcome	Remarks
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
1	Nathpa Jhakri Hydro Electric Project	Balance works/ payments of 1500 MW Hydro Power Station (Project commissioned on May 18, 2004)		9.55 54.88 13.07		Major Civil Works (Process primarily comprises following) Balance other works Works other than Electro-Mechanical Packages (Process primarily comprises following) Design, manufacture, erection, testing & commissioning of 400/22 Kvsbstation at GIS-II of NJHPS Infrastructural Works	Balance works and payments	March, 2013 March, 2013 March, 2013	
			0.00			Sub Total			
2	Rampur Hydro Electric Project (412 MW)	Construction of RHEP		244.1		Completion of Heading and benching excavation Goshai upstream.		January, 2013	
						Completion of Heading and benching excavation Kasholi downstream.		January, 2013	
						Completion of ovet lining Goshai Upstream (1000 mtrs.)		March , 2013	
						Completion of ovet lining Kasholi downstream (1000 mtrs.)		March , 2013	
						Completion of overt lining of HRT Kajo upstream		June , 2012	
						Completion of lining of HRT Bayal U/S (1901 mtrs.)		January, 2013	
						Concreting of generator barrel of IVth unit		September , 2012	
						Concreting of generator barrel of Vth & Vith unit		December, 2012	

					Completion of erection of penstock steel liner		November, 2012	
					Completion of Butterfly valve house		October, 2012	
					Completion of lining of surge shaft		December, 2012	
			114.24		Electro-Mechanical Packages(Process primarily comprises following)		March , 2011	
					Infrastructural Works			
					Erection of Stay Ring & Spiral Casing of Vth and VIth Unit		August, 2012	
					Stator assembly including HV test in service bay of IIIrd & IVth unit		September, 2012	
					Stator assembly including HV test in service bay of Vth and VIth unit		March, 2013	
					Boxing up of Ist unit		February, 2012	
					Boxing up of IInd unit		March, 2013	
			40.83		Infrastructural Works (Process primarily comprises R&R expenses and buildings)		Continuous process	
			24.16		Interest During Construction		Continuous process	
			76.67		IEDC		Continuous process	
			293.19		Sub Total			
3.	Luhri Hydro Electric Project (775 MW)	Construction of	38.64		Construction of various infrastructural works such as approach roads, bridges to various Project components and Construction of Residential and non-residential buildings		Running payments upto March, 2013	
					Expenditure towards CAT Plan.		Running payments upto March, 2013	
			21.36		IEDC		Continuous process	
		Sub-Total	60.00					
4	Dhulasidh HEP (66 MW)	Construction of DSHEP	20.38		Issue of bidding documents to pre-qualified bidders for major civil works	Development of infrastructure and obtaining various clearances	June 2013	
					Completion of approach roads to project site		September, 2012	
			9.62		IEDC		Continuous process	
					NIT for roads and bridges (3 No.)		June , 2012	
					Prequalification of bidders for major civil works		September, 2012	

				16.92		IEDC		Continuous process	
		Sub-Total		30.00					
6	Naitwar Mori HEP (60 MW)	Construction of NMHEP	13.74			Acquisition of private and forest land		Running payments upto March, 2011	
						Acquisition of private and forest land		Running payments upto March, 2011	
						Acquisition of private and forest land		Running payments upto March, 2011	
				4.97		Acquisition of private and forest land Cost of land to be acquired and other R&R related expenditure	Obtaining various clearances, Land acquisition and development of infrastructure	Running payments upto March, 2011 Running payments upto March, 2013	
						Construction of various infrastructural works such as buildings, arrangement of construction power, environment and ecology expenses and approach roads and bridges to various Project components		Running payments upto March, 2013	
						CAT Plan		Running payments upto March, 2013	
				7.03		IEDC		Continuous process	
		Sub-Total		12.00					
7	Jakhhol Sankari HEP (51MW) Construction of JSHEP		1.25			Survey & Investigation work and development of Infrastructure mainly comprising of approach roads/ paths and buildings etc.	Obtaining various clearances, Land acquisition and development of infrastructure	Running payments upto March, 2013	
				4.25		IEDC		Continuous process	
		Sub-Total		5.50					
8	Arun-IIIHEP (900 MW)	Construction of Arun-III HEP		12.28		Land acquisition	Obtaining various clearances, land acquisition and development of infrastructure	Running payments upto March, 2013	
						Development of Infrastructure mainly comprising of roads and bridges, Residential and non-residential buildings.		Running payments upto March, 2013	
				7.72		IEDC		Continuous process	
		Sub-Total		20.00					

9	Wangchu HEP (600 MW)	DPR preparation of Wangchu HEP		2.01		Development of Infrastructure mainly comprising of approach roads and bridges and development of dumping sites etc.	Obtaining various clearances and development of infrastructure	Running payments upto March, 2013	
				2.99		IEDC		Continuous process	
		Sub Total		5.00					
10	Kholongchu HEP (650 MW)	DPR preparation of Kholongchu HEP		2.20		Survey & Investigation work and development of Infrastructure mainly comprising of approach roads and bridges etc.	Obtaining various clearances and development of infrastructure	Running payments upto March, 2013	
				2.80		IEDC		Continuous process	
		Sub-Total		5.00					
11	50 MW Wind Farm Project	Setting up of 50 MW of Wind Farm		50.00		Consultancy and erection Work	Commencement of work on wind farm project	Running payments upto March, 2013	
		Sub-Total		50.00					
12	Tipaimukh HEP (1500 MW)	Construction of Tipaimukh HEP		1.00		Towards Equity contribution of SJVN	Equity contribution	Running payments upto March, 2013	
		Sub-Total		1.00					
Grand	Total of SJVN			796.00					
Total Budget Estimate for 2012-13 = 796.00 Crores									

DAMODAR VALLEY CORPORATION
Outcome Budget 2012-13

(₹ in crore)

Sl. No.	Name of Project	Objective/Outcome	B.E. 2012-13				
			Outlay B.E. 2012-13 (Rs. Cr.)	Quantifiable Deliverables/ Milestones / Outcomes (Targets)	Projected Outcomes	Processes / Timelines	Remark
1	2	3	4	5	6	7	8
A.	A1] DVC's own Thermal Power Projects						
1	Mejia TPS Extn. Unit # 5 & 6 (2x 250 MW)	Capacity addition of 500 MW	36.69	To Complete balance works & Contract Closing	Capacity addition of 500 MW	03/2013	
2	Chandrapura TPS Extn. Unit# 7 & 8 (2x 250 MW)	Capacity addition of 500 MW	47.64	To Complete balance works & Contract Closing	Capacity addition of 500 MW	03/2013	
3	Mejia TPS Unit# 7&8 (2x 500 MW)	Capacity addition of 1000 MW	528.14	To Complete balance works & Contract Closing	Capacity addition of 1000 MW	03/2013	
4	Koderma Stage-I:U# 1 & 2 (2x500 MW)	Capacity addition of 1000 MW	734.34	Unit-1: 1] COD	Capacity addition of 1000 MW	05/2012	
				2] Complete balance works		03/2013	
				Unit-2: 1] TG Box up		04/2012	
				2] Synchronisation		05/2012	
				3] Full load		05/2012	
				4] Completion of balance activities for both units		03/2013	
5	Durgapur Steel TPS U# 1&2 (2x500 MW)	Capacity addition of 1000 MW	541.81	Unit-1: 1] Complete balance works	Capacity addition of 1000 MW	03/2013	
				Unit-2: 1] COD		05/2012	
				2] Completion of balance activities for both units		03/2013	
6	Raghunathpur TPS Ph-I: Unit# 1&2 (2x 600 MW)	Capacity addition of 1200 MW	1082.84	Unit-1: 1] Synchronisation	Capacity addition of 1200 MW	05/2012	
				2] Full load		06/2012	
				3] Completion of balance activities		03/2013	

				Unit-2: 1] BOILER LIGHT UP		06/2012	
				2] Synchronisation		08/2012	
				3] Completion of balance activities		03/2013	
7	Bokaro ėAi TPS: (1x 500 MW)	Capacity addition of 500 MW during 12th plan	1129.13	1] Placement of Orders for CHP Pkg.	Capacity addition of 500 MW	05/2012	
				2] Placement of Orders for Water Pkg.		05/2012	
				3] Boiler Drum lifting		05/2012	
				4] Boiler Hydro Test		03/2013	
8	Raghunathpur TPS Ph-II: Unit# 1&2 (2x 660 MW)	Capacity addition of 1320 MW during 12th plan	870.49	1] Order placement for SG package	Capacity addition of 1320 MW during 12th plan	08/2012	
				2] Order placement for STG package		09/2012	
	A2] DVC's Joint Venture Power Projects						
9	Maithon RB TPS (1050 MW) [Equity contribution @26% from DVC to MPL, Joint Venture of TPC & DVC]	Capacity addition of 525 MW	5.00	Provision kept for providing equity to M/s MPL for balance payment if any.	Capacity addition of 525 MW	03/2013	
10	A3] Investigation / Feas. Studies / DPR etc. for future projects, if any.	Study/ DPR /Reports, if any.	18.00	Provision for expenditure towards Investigation / Feas. Studies / DPR etc. for new projects, if any alongwith fund requirement for Coal linkage (mining).	investigation reports of New Projects, Coal Mining	03/2013	
B.	Balpahari Dam/Hydel: Preparation of DPR for Balpahari Project	Preparation of DPR	5.92	Completion of DPR for Balpahari dam project by CWC		03/2013	
	Total: A & B:		5000.00				

C.	T & D schemes						
	TSC Schemes: T & D		188.87	Please Refer to Appendix-	T&D-3		
	R&A of T&D		72.65	Please Refer to Appendix-	T&D-3		
	Total T & D schemes	To facilitate T&D of power	261.52		To facilitate T&D of power		
D.	Communication schemes		6.80				
	1] Power Line Carrier Communication (PLCC)	Speech and data communication between i)existing CTPS 220KV (CTPS A) & New CTPS 220KV (CTPSB) ii) Mejia & Ramgarh iii) Pathardih S/Stn & Dhanbad S/Stn. iv) Jamshedpur(PGCIL) & DSTPS. V) RTPS & DSTPS vi) RTPS & Maithon TPS vii) RTPS & Ranchi(PGCIL)	2.18	Procurement, Erection & Commissioning for Speech and data communication	Speech and data communication	By 03/2013	Erection & Commissioning to match with T & D progress.
	2] Satellite Communication (VSAT)	Establishment of Satellite communication station at upcoming new Power Stations along with complete augmentation of VSAT system	2.34	Procurement, Erection & Commissioning for Speech and data communication	Establishment of Satellite communication station at upcoming new Power Stations along with complete augmentation of VSAT system	By 03/2013	
	3] Very High frequency communication (VHF)	Speech communication for up-coming stations.	0.05	Obtaining frequency clearance , Erection & Commissioning for Speech communication	Speech communication for up-coming stations.	By 03/2013	
	4] Unified Load Despatch & Communication scheme (ULDC)	Extension of Voice Communication to new Power House and addition of subscribers in existing stations	0.19	Integration for voice communication	voice communication	By 03/2013	

	5] MPLS - VPN Network connectivity	Data communication	0.80	Erection & Commissioning for data communication	data communication	By 03/2013	
	6] Leased line for new Power House	Data communication	0.04	Erection & Commissioning for data communication	data communication	By 03/2013	
	7] OPGW for Transmission lines/ UGFO for Sub stations	Speech and data communication	1.13	Erection & Commissioning for data communication	data communication	By 03/2013	
	8] Distribution SCADA	Implementation of SCADA for 33 KV and below system	0.01	Erection & Commissioning for data communication	data communication	By 03/2013	
	9] Establishment of Carrier Protection where Indoor PLCC equipment have already been replaced	Carrier Aided Protection of High Tension lines 0.06	0.06	Commissioning for protection of High tension lines	Protection of High Tension lines	By 03/2013	
E.	R&M Schemes						
	PHS U-1 (Phase -IV)	RLA Consultancy & Refurb.	0.50	Engagement of Consultant for R&M job. Tendering and commencement of R&M works.	R&M/LE	By 03/2013	
	MHS U- 1&3 (Phase -IV)	RLA Consultancy & Refurb.	0.75	Engagement of Consultant for R&M job. Tendering and commencement of R&M works.	R&M/LE	By 03/2013	
	MHS U-2 (Phase -IV)	RLA Consultancy & Refurb.	0.30	Balance payment to the consortium of M/s Alstom & M/s BHEL.	R&M/LE	By 03/2013	
	Others (Phase ñ II & III) (CTPS & DTPS)	Improved performance	0.51	Completion of balance work of 9th plan activities & closing of 8th & 9th plan contracts.	Improved performance	By 03/2013	
	Consultancy & Expert fees (Phase-IV)	RLA Consultancy & Refurb.	2.00	Gap Analysis / Technical Audit & Other Consultancy Service by NTPC		By 03/2013	
	Sub Total R&M :		4.0600			By 03/2013	
F.	Pollution:	For Environmental compliance	42.86	Dry Ash Disposal Sys. for BTPS ãBi: Part completion of supply & erection of Dry Ash sys. For other plants	For Environmental compliance	By 03/2013	

				requirement for various works relating to environmental compliance.			
G.	Misc. Spill Over Works					By 03/2013	
	[1] Mejia TPS U#1,2 ,3 & 4 (4x 210 MW)		2.00	For settlement of final bills.		By 03/2013	
H.	Refurbishment/Extension/Improvement	To improve performance of Generating units with improved infrastructural network	207.68	Procurement & erection of major equipments for existing power stations including Transmission and Distribution for improvement of Generation	To improve performance of Generating units with improved infrastructural network	By 03/2013	
I.	R&D Centre	To serve the requirement of DVC power stations and Transmission & Distribution system	2.77	Procurement of consumables and other running expenditure.	To serve the requirement of DVC power stations and Transmission & Distribution system	By 03/2013	
J.	SLDC scheme	Equity contribution to SLDC	8.00	Equity participation in SLDC	Equity contribution to SLDC	By 03/2013	
K.	Equity participation NHPTL	Equity contribution to NHPTL	8.50	Equity participation in NHPTL	Equity contribution to NHPTL	By 03/2013	
L.	Equity participation: MAMC	Equity contribution to MAMC	26.00	Equity participation in MAMC	Equity contribution to MAMC	By 03/2013	
M.	Equity participation: DVTDPL	Equity contribution to DVTDPL	1.50	Equity participation to DVTDPL	Equity contribution to DVTDPL	By 03/2013	
	Grand Total in Rs. Cr. :A to M		5571.69				

**Power Grid Corporation of India Ltd.
Outcome Budget 2012-13**

₹ in crore

SL NO	NAME OF PROJECTS/ SCHEMES	Objective/ Outcome	Outlay 2012-13	Quantifiable Deliverables		Process/ Timelines	Projected Outcomes	Remarks
				Stringing (ckm)	Transformer Erection (No)			
	A. ONGOING Projects							
1	DVC& Naithin RB- Common scheme for 765kV pooling stations and network for NR (Common for Sasan MPP+NKP+ Maithon/ Koderma/ Mejia / Bokaro/ Raghunathpur/ Durgapur + Import by NR from ER and from NER/ SR/WR via ER) and Common scheme for network for WR (Commo)	Power Evacuation	556.0	363	6	Mar13	Aug12	
2	Eastern Region System Strengthening-I (ERSS-I)	System Strengthening	41.3			Dec12	Mar12	Project elements except Re-conductoring of Siliguri-Purnea line expected to be completed by Mar12. Outlat kept for Re-conductoring works. Expected to be completed by Mar12.
3	Eastern Region System Strengthening-II(ERSS-II)	System Strengthening	4.3			Dec11	Feb12	Project anticipated completed by Mar12. Outlet kept for final payment.
4	Eastern Region System Strengthening-III (ERSS-III)[LILO of Meramundali - Jeypore at Bolangir]	System Strengthening	348.3	100	8	Nov12	Nov12	Implementation affected due to delay in land acquisition.
5	Eastern Region System Strengthening - IV (ERSS - IV)	System Strengthening	40.3		2	Mar13	Apr13	
6	ER-I RHQ office & township	Infrastructure Development	6.5					Building & township works under implementation.

7	Indian Bangladesh (India Portion) acquisition.	Power Evacuation	36.0	100		Oct12	Oct12	Implementation affected due to delay in land
8	Immediate evacuation system for Nabinagar TPS	Power Evacuation	8.1			Mar12	Mar12	Efforts being made to complete the project Mar12.
9	Transmisison system for development of pooling Stations in Northern part of West Bengal and Transfer of power from Bhutan	Power Evacuation	214.1			Mar13	Jan15	Outlet kept for infrastructural & civil works for Alipurduur HVDC Pooling station.
10	Transmission System for Farakka Stage-III	Power Evacuation	0.4				Aug11	Project completed in Aug11. Outlay kept for final payments
11	Transmission system for Phase I generation Projects in Orissa -Part A	Power Evacuation	410.8	200		Mar13	Mar13	
12	Transmission System for Start up power to DVC & Maithon RB Projects	Power Evacuation	2.1				May11	Project completed in May11. Outlay kept for final payments
13	Strengthening of East West Transmission Corridor	Inter Regional	2.7				JUN11	Project completed in Jun11. Outlay kept for final payments
14	Tranmission System for BARH	Power Evacuation	196.8			Dec12	Dec12	Efforts being made to complete the balance project (Pole-II) by Mar12. Outlay kept for speares supply & final payments.
15	Transmission System associated with Rihand-III & Vindhyachal-IV	Power Evacuation	1162.3	500		Nov12	Nov12	
16	Transmission System for transfer of power from different projects from Sikkim to NR/WR (part-A)	Power Evacuation	86.1			Jan13	Jan13	Implementation affected due to delay in land acquisition. Out lay kept for preparatory and supply activites.
17	North East - NR/WR Inter-connector (Subansiri & Kameng)	Power Evacuation	1100.4	432		Mar13	Sep14	Gen. Project delayed.
18	Transmission System associated with Pallatana Gas Based Power Project and Bongaigaon Thermal Power Station	Power Evacuation	612.4	750		Dec12	Jun13	
19	Augmentation of 220/132 kV Transformation Capacity at Raebareli (POWERGRID) by 1*100 MVA Transformer	System Strengthening	0.7					Project completed in Sep11. Outlay kept for final payments

20	Establishment of 400/220 kV GIS Pooling Station Near CHAMERA-II	Power Evacuation	9.4				Marí11	Project completed in Octí11. Outlay kept for final payments
21	Northen Region System Strengthening-IX(NRSS-IX)	System Strengthening	7.4					Project completed in Octí11. Outlay kept for final payments
22	Northen Region System Strengthening-X(NRSS-X)	System Strengthening	1.8					Project completed in Octí11. Outlay kept for final payments
23	Northen Region System Strengthening-XII(NRSS-XII)	System Strengthening	1.4					Project completed in Juní10. Outlay kept for final payments
24	Northen Region System Strengthening-XIII(NRSS-XIII)	System Strengthening	36.2	34	1	Marí12	Marí12	Progress affected due to ROW problem.
25	Northen Region System Strengthening-XIV(NRSS-XIV)	System Strengthening	1.9				Augí11	Project completed in Augí11. Outlay kept for final payments
26	Northen Region System Strengthening-XV(NRSS-XV)	System Strengthening	56.2	31	2	Febě12	Decí12	Implementation affected due to delay in land acquisition.
27	Northen Region System Strengthening-XVI(NRSS-XVI)	System Strengthening	140.6	100		Marí13	Julyě13	
28	Northen Region System Strengthening-XVII(NRSS-XVII)	System Strengthening	6.6			Febě12	Janí12	Project getting completed by Febí12. Outlay kept for final payments.
29	Northen Region System Strengthening-XVIII(NRSS-XVIII)	System Strengthening	102.9	171	2	Decě12	Decě12	Implementation affected due to delay in land acquisition.
30	Northen Region System Strengthening-XIX(NRSS-XIX)	System Strengthening	102.8	84	1	Decě12	Decě12	Implementation affected due to delay in land acquisition.
31	Northen Region System Strengthening-XX(NRSS-XX)	System Strengthening	93.6			Marí13	Janí13	Implementation affected due to delay in land acquisition. Out lay kept for preparatory and supply activites.
32	Northen Region System Strengthening-XXI(NRSS-XXI)	System Strengthening	519.3	200		Marí13	Aprě13	
33	Northern Region System Strengthening XXII (NRSS XXII)	System Strengthening	58.7			Marí13	Augí13	Implementation affected due to delay in land acquisition. Out lay kept for preparatory and supply activites.
34	Northen Region System Strengthening-XXIII(NRSS-XXIII)	System Strengthening	17.4			Decí11	Decí11	Project getting completed by Janí12. Outlay kept for final payments.
35	Northern Region Transmission System Strengthening	System Strengthening	167.9	200	5	Nově12	Nově12	Implementation affected due to delay in land acquisition.

36	NRSS 765kV for NCR and around Part-I	System Strengthening	94.9	168		Febë12	Juní12	
37	NRSS 765kV for NCR and around Part-II	System Strengthening	179.4		2	Marë13	Marë13	Implementation affected due to delay in land acquisition.
38	NRSS 765kV for NCR and around Part-III	System Strengthening	133.9	93	2	Mayë12	Mayë12	Implementation affected due to delay in land acquisition.
39	Supplementary Transmission System associated with DVC & Maithon RB	Power Evacuation	53.4	505		Augë12	Augë12	
40	System Strengthening for Sasan Mundra in Northern region	System Strengthening	171.5	800	2	Augë12	Augë12	
41	Transmission System Associated with Koteswar HEP	Power Evacuation	22.9				Juní11	System completed in Juní11. Outlay kept for final payments
42	Transmission System for Karcham Wangtoo & System Beyond Abdullapur	Power Evacuation	4.0					System completed in Marí11 except JV portion ant. by Janí12. Outlay kept for final payments
43	Transmission System for Parbati-III	Power Evacuation	42.5	137		Marí12	Sepí12	Completion affected due to non-availability of forest clearance. Project ant. to be completed by Decí12.
44	Transmission System for Rampur	Power Evacuation	7.9			Marí13	Marí13	Gen, project delayed.
45	Transmission System for URI-II	Power Evacuation	3.8			Novë11	Decí11	Implementation affected due to Law & order problem. Project getting by Decí11. Outlay kept for final payments.
46	TS for evacuation of CHAMERA-III HEP	Power Evacuation	14.9			Decí11	Juní12	Completion affected due to non-availability of forest clearance. Efforts being made to completed the proj. by Marí12. Outlay kept for final payments.
47	Fibre optic communication system in lieu of existing ULDC microwave links	Telecom	37.9					Outlay kept for supply of eqpt/ materials for laying of OPGW & communication system.
48	Power Grid Equity (Teesta Urja Ltd.)	JV	15.5					Being implemented by JV co. Outlay kept for Powergrid equity contribution.
49	Power Grid Equity (Parbati-II& Koldam)	JV	23.2					Being implemented by JV co. Outlay kept for Powergrid equity contribution.

50	IIND Spare Converter Transformer for Vizag	System Strengthening	0.5					Supply getting by Marí12. Outlay kept for final payments
51	Southern Region System Strengthening-IX (SRSS-IX)	System Strengthening	3.3				Juní11	Project completed in Juní11. Outlay kept for final payments
52	Southern Region System Strengthenig - X (SRSS - X)	System Strengthening	13.1			Marí12	Marí12	Project getting completed by Marí12. Outlay kept for final payments.
53	Southern Region System Strengthenig - XI (SRSS - XI)	System Strengthening	19.4			Febí12	Febí12	Project getting completed by Marí12. Outlay kept for final payments.
54	Southern Region System Strengthening - XII (SRSS-XII) [Yelahanka]	System Strengthening	38.6	7	2	Junë12	Junë12	
55	SR-ICOMPLEX	Infrastructure Development	6.8					Building & township works under implementation.
56	SR-II Complex (RHQ building)	Infrastructure Development	18.1					Building works under implementation.
57	Supplementary Transmission System for Vallur TPS	Power Evacuation	73.9	50		Marí13	Aprë13	
58	Transmission System associated with Chennai NTPC-TNEB JV TPS (North Chennai -LILO OF 400 KV DC Almathi - Sriperumbudur)	Power Evacuation	0.1				Julí11	Project completed in Julí11. Outlay kept for final payments
59	Transmission System Associated with Kaiga 3&4	Power Evacuation	39.4	50		Marí13	Marí13	System completed except 400KV D/C Mysore-Kozhikode line with associated S/S
60	Transmission System associated with Kudankulam Atomic Power Project	Power Evacuation	92.0	50		Decí12	Marí13	System completed except 400KV D/C Edamon - Muvattapuzha -North Trichur line with associated S/Stn.
61	Transmission System Associated with Simhadri-II	Power Evacuation	0.2				Juní11	Project completed in Julí11. Outlay kept for final payments
62	Transmission System for Kalpakkam PFBR	Power Evacuation	10.8			Marí12	Marí12	Project getting completed by Marí12. Outlay kept for final payments.
63	Tuticorin (Powergrid Portion)	Power Evacuation	7.0			Febí12	Febí12	Project getting completed by Janí12. Outlay kept for final payments.

64	Installation of 125 MVAR Bus reactor at 400 kV Rajgarh S/S	System Strengthening	1.2			May12	May12	Project getting completed by Mar12. Outlay kept for final payments.
65	Transmission System Associated with Mundra UMPP	Power Evacuation	641.9	400	1	Oct12	Oct12	
66	Transmission System Associated with Sasan UMPP	Power Evacuation	790.1	500		Dec12	Dec12	
67	Transmission System for Korba -III(500MW)	Power Evacuation	16.4					Project completed in Jun11. Outlay kept for final payments
68	Transmission System for Mauda ATS	Power Evacuation	7.0			Mar12	Mar12	Project getting completed by Mar12. Outlay kept for final payments.
69	Western Region System Strengthening- II (WRSS-II)	System Strengthening	22.6			Mar12	Jun12	Progress affected due to non-availability of forest clearance. Efforts being made to complete the project by Mar12. Outlay kept for final payments.
70	Western Region System Strengthening - V(WRSS-V) (Vapi-New Mumbai)	System Strengthening	67.5			Mar13	Mar13	Severe ROW problem. Efforts being made to complete the project by Mar13. Outlay kept for balance payments.
71	Western Region System Strengthening - VI (WRSS - VI)	System Strengthening	23.6				Dec10	Project completed in Mar11. Outlay kept for final payments
72	Western Region System Strengthening - IX (WRSS - IX)	System Strengthening	7.0				Mar11	Project completed in Mar11. Outlay kept for final payments
73	Western Region System Strengthening - X(WRSS-X)	System Strengthening	42.4			Feb12	Feb12	Project getting completed by Feb12. Outlay kept for final payments.
74	Western Region System Strengthening - XI (WRSS - XI)	System Strengthening	17.6			Feb12	Feb12	Project getting completed by Feb12. Outlay kept for final payments.
75	Transmission System for connectivity of MB Power (M.P.) Limited	Power Evacuation	191.2	50		Mar13	Oct13	
76	Transmission system for Phase I generation Projects in Orissa - Part B	Power Evacuation	871.7	100		Mar13	Dec13	
77	Transmission System For Phase-I Generation Projects in Orissa (Part- C)	Power Evacuation	738.6	100		Mar13	Mar14	

78	Transmission system for transfer of Power from generation Projects in Sikkim to NR/WR- DPR -I Part B	Power Evacuation	461.7	200		Mar13	Nov13	
79	Common system associated with ISGS projects in Krishnapatnam Area of Andhra Pradesh	Power Evacuation	699.3	50		Mar13	Aug14	
80	Common system associated with Coastal Energen Private Limited abd Ind-Barath Power (Madras) Limited LTOA Generation Projects in Tuticorin Area (Part-B)	Power Evacuation	323.5	50		Mar13	Sep14	
81	Transmission System for Krishnapatnam UMPP -PART A	Power Evacuation	517.6	100		Mar13	Aug13	
82	Transmission system for establishment of 400/220kV GIS Substation at Kala in UT DNH	System Strengthening	131.4			Mar13	Jul13	Project getting completed by FY 12-13. Outlay kept for balance payments.
83	Establishment of Pooling Stations at Raigarh (Kotra) and Raipur for IPP Generation Projects in Chhattisgarh (DPR- 1)	Power Evacuation	589.2	100		Mar13	Aug13	
84	Establishment of Pooling Stations at Champa and Raigarh (near Tamnar) for IPP Generation Projects in Chhattisgarh (DPR- 2)	Power Evacuation	560.2	50		Mar13	May14	
85	Integration of Pooling Stations in Chhattisgarh with central part of WR for IPP Generation Projects in Chhattisgarh (DPR-3)	Power Evacuation	256.4	50		Mar13	Dec13	
86	Transmission System for IPP generation projects in Madhya Pradesh & Chhattisgarh	Power Evacuation	448.5	50		Mar13	Dec13	
87	Southern Region System Strengthenig - XIII (SRSS - XIII)	System Strengthening	172.0	25		Mar13	Jun14	
88	POWERGRID Sub-station works associated with Transmission	System Strengthening	51.3			Mar13	Mar13	Out lay kept for infrstructural and preparatory incl. supply activites.

	Scheme for enabling import of NER/ER surplus power by NR							
89	Transmission system for Jharkhand IPP/WBSEDCL Projects - Part A1	Power Evacuation	205.8	50		Mar13	Nov13	
90	Provision of Bus Reactors in NR	System Strengthening	20.3			Aug12	Aug12	Out lay kept for infrstructural and supply activities.
91	Installation of Transformer at 400 KV S/s at Vapi	System Strengthening	16.4					Out lay kept for infrstructural and preparatory incl. supply activities.
92	Northern Region System Strengthening-XXIV (NRSS-XXIV)	System Strengthening	88.7				Nov14	Out lay kept for infrstructural and preparatory incl. supply activities.
93	Fibre Optic Communication System in lieu of existing ULDC Micro wave Links in SR	Telecom	11.5					Outlay kept for supply of eqpt/ materials for laying of OPGW & communication system.
94	Fibre Optic Communication System in lieu of existing ULDC Micro wave Links in ER	Telecom	30.7					Outlay kept for supply of eqpt/ materials for laying of OPGW & communication system.
95	National Transmission Asset Management Centre		75.8					
96	Provision of Spare ICTs for NR	System Strengthening	5.0					Out lay kept for supply activities.
97	Provision of Spare ICTs for ER	System Strengthening	22.9					Out lay kept for supply activities.
98	Spare ICTs in NR	System Strengthening	10.4					Out lay kept for supply activities.
	TOTAL - Ongoing Projects		15420	7000	36			
	B. NEW PROJECTS							
1	Common TS associated with East Coast & NCC Power Projects in Srikakulam Area Part-A	Power Evacuation	13.0					Outlay kept for preliminary/infrastructural works
2	Cross Border Power Transmission Company Limited	JV	5.5					Powergrid equity contribution portion
3	Energy Efficiency Services Limited	JV	2.0					Powergrid equity contribution portion

4	National High Power Test Laboratory Private Limited	JV	8.5					Powergrid equity contribution portion
5	Transformer & Reactor for ER I	System Strengthening	18.0					Outlay kept for preliminary/infrastructural works
6	Transmission System associated with Talliya UMPP	Power Evacuation	54.8					Outlay kept for preliminary/infrastructural works
7	Transmission system for Jharkhand IPP/WBSEDCL Projects - Part A2	Power Evacuation	227.1					Outlay kept for preliminary/infrastructural works
8	Jharkhand WB, Meja & NRSS - XXVIII	Power Evacuation/ System Strengthening	186.0					Outlay kept for preliminary/infrastructural works
9	ER-II Headquarters	Infrastructure Development	10.0					
10	Transmission system for South West Interconnection	Inter-regional	24.8					Outlay kept for preliminary/infrastructural works
11	North East Transmission company Limited	JV	22.0					Powergrid equity contribution portion
12	Transmission System for Barh-II	Power Evacuation	148.4					Outlay kept for preliminary/infrastructural works
13	Transmission System for RAPP 7 & 8	Power Evacuation	1.0					Outlay kept for preliminary/infrastructural works
14	Common Transmission System in other regions associated with IPPs of Southern Region- Scheme-I	Power Evacuation	0.1					Outlay kept for preliminary/infrastructural works
15	Transmission System for Tehri II PSP	Power Evacuation	0.1					Outlay kept for preliminary/infrastructural works
16	POWERGRID ERP Project	Others	61.4					Outlay kept for preliminary/infrastructural works
17	New Telecom	Telecom	141.0					Outlay kept for preliminary/infrastructural works
18	Common system associated with Coastal Energen Private Limited and Ind-Barath Power (Madras) Limited LTOA Generation Projects in Tuticorin Area (Part-A)	Power Evacuation	41.3					Outlay kept for preliminary/infrastructural works
19	Southern Region System Strengthening - XIV (SRSS- XIV)	System Strengthening	57.7					Outlay kept for preliminary/infrastructural works

20	Transmission System for Krishnapatnam UMPP -PART B	Power Evacuation	197.3					Outlay kept for preliminary/infrastructural works
21	Transmission System for Krishnapatnam UMPP -PART C1	Power Evacuation	81.6					Outlay kept for preliminary/infrastructural works
22	Transmission System for Krishnapatnam UMPP -PART C2	Power Evacuation	4.0					Outlay kept for preliminary/infrastructural works
23	400 KV S/S at Daman & Diu	System Strengthening	97.3					Outlay kept for preliminary/infrastructural works
24	TS strength. in western part of WR FOR IPP Generation Projects in Chhattisgarh - DPR 4	Power Evacuation	275.6					Outlay kept for preliminary/infrastructural works
25	NRSS - XXV	System Strengthening	71.5					Outlay kept for preliminary/infrastructural works
26	NRSS - XXVI	System Strengthening	18.4					Outlay kept for preliminary/infrastructural works
27	NRSS - XXVII	System Strengthening	3.8					Outlay kept for preliminary/infrastructural works
28	Nabinagar - II	Power Evacuation	101.3					Outlay kept for preliminary/infrastructural works
29	Common TS associated with IPPs in Nagapattinam/ Cuddalore	Power Evacuation	15.3					Outlay kept for preliminary/infrastructural works
30	System Strengthening in North/ West part of WR for IPP Projects in Chhattisgarh DPR -5	Power Evacuation	101.0					Outlay kept for preliminary/infrastructural works
31	System strengthening in Raipur-Wardha corridor for IPP Projects in Chhattisgarh DPR -6	Power Evacuation	224.4					Outlay kept for preliminary/infrastructural works
32	System strengthening in Wardha-Aurangabad corridor for IPP Projects in Chhattisgarh DPR -7	Power Evacuation	137.1					Outlay kept for preliminary/infrastructural works
33	Common TS associated with East Coast & NCC Power Projects in Srikakulam Area Part-B	Power Evacuation	394.8					Outlay kept for preliminary/infrastructural works
34	Installation of Transformer at 400 KV S/s at Mapusa	System Strengthening	5.0					Outlay kept for preliminary/infrastructural works
35	Essar Power Gujarat	Power Evacuation	159.8					Outlay kept for preliminary/infrastructural works
36	Western Region System Strengthening-XIII (WRSS-XIII)	System Strengthening	21.6					Outlay kept for preliminary/infrastructural works

37	Transmission System associated with Singrauli - III TPS (500 MW)	Power Evacuation	35.8					Outlay kept for preliminary/infrastructural works
38	Mauda II Transmission System	Power Evacuation	27.1					Outlay kept for preliminary/infrastructural works
39	SRSS - XVII	System Strengthening	158.4					Outlay kept for preliminary/infrastructural works
40	ERSS - V	System Strengthening	10.7					Outlay kept for preliminary/infrastructural works
41	Augmentation of transformation capacity in Abdullapur/ Amritsar	System Strengthening	3.0					Outlay kept for preliminary/infrastructural works
42	Common TS associated with IPPs in Vemagiri- Part-A	Power Evacuation	40.9					Outlay kept for preliminary/infrastructural works
43	Common TS associated with IPPs in Vemagiri- Part-B	Power Evacuation	40.9					Outlay kept for preliminary/infrastructural works
44	Interconnection of lines from North Karanpura STPP to Pooling station at Ranchi & Gaya	Power Evacuation	0.1					Outlay kept for preliminary/infrastructural works
45	Sholapur	Power Evacuation	102.8					Outlay kept for preliminary/infrastructural and preparatory works
46	WR-NR HVDC interconnector for IPP Projects in ChhattisgarhDPR -9	Power Evacuation	680.3					Outlay kept for preliminary/infrastructural works
47	Split Bus arrangement in various Sub-stations of ER	System Strengthening	14.0					Outlay kept for preliminary/infrastructural works
48	SRSS - XIX	System Strengthening	20.4					
49	Implementation of AMR in NR	others	2.0					
50	Procurement & Installation of SEMs in NR	others	1.0					Outlay kept for preliminary/infrastructural works
51	Supplementary TS of upcoming IPP in Chhattisgarh	Power Evacuation	27.2					Outlay kept for preliminary/infrastructural works
52	Line Bays & Reactor Provision associated with SS Common for WR	System Strengthening	10.7					Outlay kept for preliminary/infrastructural works
53	Line Bays & Reactor Provision associated with SS Common for WR & NR	System Strengthening	16.8					Outlay kept for preliminary/infrastructural works

54	SRSS - XVIII A	System Strengthening	178.9					Outlay kept for preliminary/infrastructural works
55	SRSS - XVIII B	System Strengthening	51.1					Outlay kept for preliminary/infrastructural works
56	Augmentation of Talcher II Transmission System	System Strengthening	15.0					Powergrid equity contribution portion
57	Power Transmission Company Nepal Limited	JV	3.0					Outlay kept for preliminary/infrastructural works
58	LINE & REACTOR BAY FOR TS UNDER PRIVATE SECTOR	System Strengthening	13.5					Outlay kept for preliminary/infrastructural works
59	AUGMENTATION OF TRANSFORMER AND BAYS IN WR	System Strengthening	2.5					
60	ESTABLISHMENT OF ULDC IN NR	Others	40.9					
61	Other New schemes	Others	20.0					
	Total - New Projects		4449.5	0.0	0.0			Outlay kept for balance payments
	C. Completed Projects							Outlay kept for balance payments
1	System Strengthening in NER (MISSING LINK)	System Strengthening	0.1					Outlay kept for balance payments
2	Northern Region System Strengthening-VII(NRSS-VII)	System Strengthening	0.03					Outlay kept for balance payments
3	Transmission System Associated with Kahalgaon -II ,Phase -I	Power Evacuation	0.01					Outlay kept for balance payments
4	Northern Region System Strengthening Scheme -I (NRSS-I)	System Strengthening	0.02					Outlay kept for balance payments
5	Rihand Dadri convertor transformer	System Strengthening	1.9					Outlay kept for balance payments
6	System Strengthening In Roorkee Area	System Strengthening	0.04					Outlay kept for balance payments
7	System Strengthening Scheme in Uttaranchal	System Strengthening	0.1					Outlay kept for balance payments

8	System Strengthening -VI in NR (Gurgaon S/Stn) (NRSS-VI)	System Strengthening	9.4					Outlay kept for balance payments
9	Transmission System Associated with RAPP 5&6	Power Evacuation	0.1					Outlay kept for balance payments
10	Northern Region System Strengthening-III (NRSS-III)	System Strengthening	0.02					Outlay kept for balance payments
11	Telecom Base Network	Telecom	119.0					Outlay kept for balance payments
12	Southern Region System Strengthening - VIII (SRSS- VIII)	System Strengthening	0.1					Outlay kept for balance payments
13	Transmission System Associated with NLC-II Expansion Project	Power Evacuation	0.1					Outlay kept for balance payments
	Total - Completed Projects		130.7					
	GRAND TOTAL		20000	7000	36			

Bureau of Energy Efficiency Outcome Budget 2012-13

(₹ in Crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13	Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Process/ Timelines	Remarks
1	2	3	4	5	6	7	8
1	Standards & Labeling Programme (S&L)	To reduce end use consumption by applying standards/ labeling for equipments/ appliances - Development of S&L programme for new products - Development of baseline study for new 21 products to be covered in Twelfth Plan.	20.00	<ul style="list-style-type: none"> To set MEPS for about 4 new products Monitoring of fund utilization for lab capacity building project Awareness programmes for various stakeholders Strengthening of Operationalization of existing S&L scheme Capacity building through various training programmes Baseline study for covering new products under S&L programme in XII plan Evaluating usage pattern of Appliances 	o Energy saving of about 3.4 BU in 2012-13	Progressively from April, 2012 to March, 2013	Subject to approval of the Scheme
2	Energy Conservation Building Codes (ECBC) in Commercial Buildings & Energy Efficiency improvements in existing buildings	To reduce energy consumption in commercial buildings.	15.00	<ul style="list-style-type: none"> Framing of rules and regulation on ECBC, amendment of ECBC for 7 States (namely Tamil Nadu, Andhra Pradesh, Maharashtra, Madhya Pradesh, Chhattisgarh, Haryana, West Bengal), modification in Schedule of Rates (SoR) & building bye-laws for states, capacity building of states for compliance checks demo projects for ECBC implementation in states, facilitation of design charrettes, dissemination of case studies, R&D in innovation technology & Development of ECBC Material directory. Development of Test Standards and procedures for labeling of building components & labeling of windows and insulation. Institutionalization of ECBC training modules & ECBC professional certification, conduction of 10 training programme for architects/ engineers / design professionals/Code compliance officials. Mandating IGEAs for states, facilitation of implementation in 200 government buildings, launching of STIL2 project for office building category. Creation of a pool of ESCOs for performance contracting and M&V, finalization & uploading of standard templates 	<ul style="list-style-type: none"> Notification by States for ECBC implementation. Demonstration project to show case study & dissemination of experience for capacity building of stakeholder. Energy performance standards & test procedure of building components. Building up capacities of states to support implementation of ECBC. Mandating IGEAs 	Progressively from April, 2012 to March, 2013	- Subject to approval of the Scheme

				<p>of RfP, performance contract, M&V on BEE web site for stakeholders of state governments.</p> <ul style="list-style-type: none"> • Institutionalization of Star labeling of buildings & its refinement through introduction of incentives for star labeling of buildings. • Development of awareness and outreach strategy for tenants and buildings owners, Creative for print and electronic media. • Impact assessment of savings through Star rating & ECBC implementation buildings. 	<p>in government buildings & national benchmarking for different energy use pattern.</p> <ul style="list-style-type: none"> • Retrofitting in existing building for reduction in energy consumption. • Market pull for energy efficient buildings. • Information sharing & dissemination of knowledge on Star labeling scheme. • Quantified savings & Impact assessment 		
3	Bachat Lamp Yojana ñ (BLY)	To promote energy efficient & high quality CFLs as replacement for incandescent bulbs in households	2.00	<ul style="list-style-type: none"> ➤ To promote energy efficient and high quality CFLs among households. BEE, the Coordinating and Managing Entity (CME) will have to keep a functionary to handle the various documentation and protocols required by the UNFCCC (United Nations framework Convention for Climate Change) and the PoA. Further to facilitate the implementation of BLY projects and CFL distribution, this functionary will have to continuously engage with the State Electricity Distribution Companies and CFL suppliers. The database management of the BLY projects and Capacity building of State Electricity Distribution Companies and CFL suppliers along with BEE functionary will be the key focus areas in 12th Plan. ➤ In 12th Five Year Plan, activities proposed to be undertaken are: strengthen the on-going BLY scheme by continued engagement with the state electricity distribution companies and streamlining and sustaining operations-mainly database management, data security, BLY system audit, PoA updation & re-validation, and CDM Project Activities (CPA). ➤ As a managing entity, BEE will continue to streamline and sustain the operations required under BLY. 	<ul style="list-style-type: none"> ➤ 20 projects will be included in the registered PoA. ➤ 25 lakhs of CFLs will be distributed in 2012-13. 	Progressively from April, 2012 to March, 2013	Subject to approval of the Scheme

4	State Designated Agencies (SDAs)	To empower the SDAs as partners of BEE at state level to implement EC Act and undertaking of various projects and programmes to promote energy efficiency in their respective states.	45.00	<ul style="list-style-type: none"> ➤ Implementation of state wise sector specific energy saving plan by the 32 SDAs as partners of BEE at state level, for the 12th plan period ➤ Continued engagement of SDAs with energy efficiency professionals like energy auditors, energy managers and ESCOs ➤ Implementation of 2 demonstration projects in each SDA (subject to proposal received from the SDAs from time to time) in the states to show case the effectiveness of the most advanced energy efficient technology and pursue State Govts. To replicate the project in other part of the states. ➤ LED village campaign may be implemented in 32 SDAs.(subject to proposal received from the SDAs from time to time) in villages and pursue state Govts. To replicate the project in other part of the states. ➤ publicity /awareness on EE in the states ➤ workshop /training programmes for all the stake holders ➤ The statutory provisions of the act provide inspection and penal action through the SDAs. Active participation of the SDAs for performing these statutory roles during the 12th plan. ➤ International training programme for two personnel of SDAs - 2 training programme/year ➤ 2 National training programmes per year on various EE modules to be conducted for SDAs ➤ Technical consultancy and legal professionals consultancy services to be provided to those SDAs who create separate dedicated Energy Conservation cell/ group within the SDA or new organisation for successful implementation of EC Act in the states. 	<ul style="list-style-type: none"> ○ To empower the SDAs as partners of BEE at state level to implement EC Act at state level. 	Progressively from April, 2012 to March, 2013	Subject to approval of the Scheme
5	Energy Efficiency in Small & Medium Enterprises (SMEs)	<ul style="list-style-type: none"> • Sector Specific Approach for Energy Efficiency and Technology Up-gradation through Replication of DPRs, Innovative Financial Schemes and technical Assistance and Capacity Building • SMEs Product 	6.50	Sector Specific Approach for Energy Efficiency and Technology Up-gradation through Replication of DPRs <ul style="list-style-type: none"> • Impact analysis study of the BEE SME Programme of 11th Five Year Plan • Selection of the high energy intensive Sectors and All India clusters • Preparation of the 100 nos. unit specific DPRs on selected energy efficient technologies for demonstration projects (Minimum 20 DPRs per sector) 	<ul style="list-style-type: none"> • Identification of most adopted technologies identified during the 11th Five Year Plan under BEE SME Programme • Selection of technologies to be consider for 		

		Labeling Promotion Scheme			Innovative Financial Schemes for Adoption of EE Technologies in the SMEs <ul style="list-style-type: none">• Preparation of EE funding scheme with consultancy of SDAs, SIDBI and other nationalized FIs• Selection of Knowledge partner/ consultant for five years project duration Technical Assistance and Capacity Building <ul style="list-style-type: none">• Collaboration with technical institutions and international experts for technical support for demonstration of EE technologies• Dissemination of the selected technologies for the demonstration SMEs Product Labeling Promotion Scheme <ul style="list-style-type: none">• Situation analysis in SMEs clusters for identification and selection of the clusters involved in the production that belongs to the mandatory or voluntary categories of certification of Bureau of Energy Efficiency	demonstration <ul style="list-style-type: none">• 100 unit specific DPRs for demonstration projects• Financing Mechanism for promotion of EE projects• Dissemination of results/case studies• Promotion of star labeling in SME product	Activities is proposed to initiate from April 2012 and likely to be completed by March 2013	-Subject to approval of the Scheme
6	Agriculture DSM Programme (AgDSM) MuDSM Programme	<ul style="list-style-type: none">• To reduce the overall power consumption, improving efficiencies of ground water extraction & reducing the subsidy burden of the statesTo reduce energy cost & improve energy overall incurred by the municipalities	8.60(for Ag.DSM & Mu DSM)	<ul style="list-style-type: none">• Preparation of programme document for Ag-DSM Programme• Facilitation for preparation of draft regulations on imandates the use of star labeled pump sets for new connectioni.• Feasibility study for demonstration projects under Integrated Water and Energy scheme• Selection of retainer consultant for five years project duration• M&V in states where implementation of DPR will take place through DISCOM• Technical assistance and capacity building of various stakeholders in three states• Preparation of Ag-DSM funding scheme with consultancy of SDAs, REC, NABARD and other nationalized FIs➤ 28 Nos. of Investment Grade Energy Audit in ULBs identified as Phase-V group as per situational survey during 11th Plan➤ 15 Nos. of Investment Grade Energy Audit (IGEA) (out of 104 water bodies) in Jal-Nigams➤ Facilitation to ULBs in implementing the DPRs (Presentation of DPRs, preparation of tender documents, linkage through JNNURM etc.)	<ul style="list-style-type: none">• Project Operating Manual for Ag-DSM Scheme• Draft regulation for mandate of use of star labeled pumps in three states• Feasibility study for 100 demonstration projects• Capacity building of various stakeholders in three states/ DISCOMS• Financial Mechanism for Ag-DSM funding SchemeTargeted Electrical Energy Saving of 0.094 B U	Activities is proposed to initiate from April 2012 and likely to be completed by March 2013Activities is proposed to initiate from April 2012 and likely to be completed by March 2013	Subject to approval of the SchemeSubject to approval of the Scheme	

7	State Energy Conservation Fund (SECF)	<ul style="list-style-type: none"> To pursue with SDAs for constitution of SECF in the states and contribution by the BEE to the SECF. Coordinate with SDAs to implement various energy conservation activities and utilization of fund under SECF. 	20.00	<ul style="list-style-type: none"> Financial support of Rs.2.00 crores to 10 SDAs. (subject to proposal received from the SDAs from time to time) as contribution by BEE to SECF of the State Designated Agencies to promote the efficient use of energy and its conservation in the State. 	<ul style="list-style-type: none"> Constitution of SECF in the states and contribution by the BEE to the SECF for the promotion of energy efficiency in the states. 	Progressively from April, 2012 to March, 2013	Subject to approval of the Scheme
8	Super Efficient Equipment Programme (SEEP)	To help accelerated introduction of super efficient Fans, Refrigerator, Lighting Appliances, Agricultural Pumps, TVs and ACs etc.	50.00	<ul style="list-style-type: none"> Finalization of SEEP Program Document. Identification of 6 (six) testing facilities for super efficient equipment. Announcement of the Program under SEEP. Contracting Manufacturers to supply of SEAs Appointment of Incentive Management Institution. Hiring of Measurement & Verification Agency. Outreach Program: by Electronic/Paper/OOH etc. Testing of Prototypes/Samples of SEAs. Sale of 1 (one) Super-Efficient Appliances . Verification of quality of SEAs using samples in market. Start of Monthly Disbursement of incentives to the manufactures.† 	<ul style="list-style-type: none"> Program document Test Reports Super efficient fans in market 	Progressively from April, 2012 to March, 2013	Program will be devised to include LED bulbs and LED tube lights in a phased manner.
9	BEE-GEF-WB Project ñ Financing Energy Efficiency at MSMEs	To increase demand for energy efficiency investment in MSMEs and to build their capacity to access commercial finance	2.60	<ul style="list-style-type: none"> Media outreach activities for Industries in the identified clusters; Training program for Energy managers ; auditors; Vendor Outreach, Enlistment & support Preparation of Investment Grade Detailed Project Reports (with SIDBI) Knowledge Management Creation of Web Portal/Hotline; Documentation of Energy Efficiency measures implemented; case studies; lessons learned, Best Practices and Best Available Technologies; Technology Demonstration Pilots and disbursement of performance linked grants; Establishing M&V framework 	<ul style="list-style-type: none"> Latest information and data availability for units at clusters Enhanced pool and capacity of /for local and regional energy managers/ auditors; Easy information access for industry owners, energy efficiency related service provider; Adoption of Best Practices and Best Available Techs.; 	Progressively from April, 2012 to March, 2013	

					<ul style="list-style-type: none"> ○ Increased investments by MSMEs for energy efficiency interventions and ○ Increased adoption of various financing schemes; ○ Identifying innovative financing mechanisms (with SIDBI) 		
10	Capacity building of DISCOMS	- To undertake activities which can influence consumer demand for smoothing of load curve.	15.00	<ul style="list-style-type: none"> ➤ Information dissemination workshops for utilities/regulatory commissions. ➤ Support to utilities for the setting up of DSM cells. ➤ Support utilities to develop DSM proposal. ➤ Publication of success story. 	<ul style="list-style-type: none"> ††† DSM mechanisms for utilities. - DSM guidelines adopted by states. 	Progressively from April, 2012 to March, 2013	Subject to approval of the Scheme
11	Energy Efficiency Research Centre for Energy Consuming Sectors	For new & innovative technologies (Research & Development)	5.00	- Two energy research centre.	† Setting up of Energy Research Centre for selected energy consuming sectors	Progressively from April, 2012 to March, 2013	Subject to approval of the Scheme
12	HRD Programme	- Capacity building of various stakeholders and to enable energy sector professional to undertake various activities related to energy efficiency & energy conservation.	10.30	<ul style="list-style-type: none"> ➤ Student awareness programs. ➤ Training, skill up gradation and refresher training of energy managers and energy auditors. ➤ Training, skill up-gradation and refresher training of operators handling fuel fired furnaces and boilers. ➤ Training of Power plant personnel. 	- Capacity building of various stakeholders and to enable energy sector professional to undertake various activities related to energy efficiency & energy conservation.	Progressively from April, 2012 to March, 2013	Subject to approval of the Scheme
	Total		200.00				

Energy Conservation Schemes of MOP Outcome Budget 2012-13

(₹ in Crores)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2012-13			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Process/ Timelines	Remarks
			4(i)	4(ii)	4(iii)				
1.	Energy Conservation Scheme (i) National Energy Conservation Day/ Awards	To recognize the efforts of industrial consumers to adopt energy conservation measures which may become models for others to emulate	ó	20.00	ó	o National Awards to industry, buildings and other establishments for achieving energy savings.	Enhancement of awareness about energy efficient products and management systems greater proliferation of adoption of energy efficient technologies by industry, buildings and other establishments.	Progressively from April 2011 to March 2012. The Award function is scheduled for 14 th December, 2012.	
	(ii) National Level Painting Competition for School Children	To inculcate in children the relevance of energy efficiency and conservation	ó		ó	o Organization of painting competition for school children on energy conservation all over the country.	Awareness among school children about the need of saving energy.	Organisation of school, state and national level competition in October, November and December, 2012.	
	(iii) Awareness & Publicity	To spread the message of energy conservation and efficiency through the media	ó		ó	o Awareness campaign through print, visual and electronic media.	Enhancement of awareness about energy efficient products, energy saving techniques and tips among the general public.	Progressively from April, 2012 to March, 2013.	
				20.00					
2.	National Mission for Enhanced Energy Efficiency (NMEEE)	NMEEE is one of the 8 missions announced by PM as a part of National Action Plan on Climate Change. The provision is for operationalisation of the NMEEE		180.00		PAT: <ul style="list-style-type: none"> • Submission of Trading Rules to MoP • Trading Platform for ESCert trading • Publication of list of Accredited Energy Auditing firms for Verification and check verification • Target notification for newly identified DCs under existing sectors • Impact analysis on PAT 	<ul style="list-style-type: none"> ➤ Trading Platform will be launched ➤ Filing of data in PAT Net ➤ Report on inclusion new sectors ➤ List of DENA will be available 	Progressively from April, 2012 to March, 2013.	

					<p>expansion by inclusion of new designated consumer sector</p> <ul style="list-style-type: none"> • Publication of success story <p>EEFP:</p> <ul style="list-style-type: none"> • Initiation for development of standard performance contract & M & V protocols • Development of mechanism for expansion of EEFP to small Financial Institutions • Development of guidelines for assessment of projects • Organize information dissemination programmes through various media campaign • Identification of other financial incentive to promote energy efficiency <p>SEEP</p> <p>Announcement of the Fan Program</p> <p>Identification of testing facilities</p> <ul style="list-style-type: none"> • Appointment of Incentive Management Institution • Hiring of M&V agency • Testing of Samples • Sales Verification • Start of Monthly Disbursement of incentives <p>PRGF/VCFEE</p> <ul style="list-style-type: none"> • Launch of PRGF and VCFEE • Promotion of PRGF and VCFEE through various media campaign • Various steering committee meetings • Appraisal of projects received for PRGF and VCFEE • Signing of contracts and disbursement of money, if required for approved projects 	<ul style="list-style-type: none"> ➤ M&V protocols would be firmed up. ➤ Guidelines for expansion of EEFP to small Financial Institutions & for assessment of projects will be available. ➤ Super Efficient ceiling fans in the market ➤ Approval of projects for PRGFEE ➤ Investment for EE projects under VCFEE ➤ SFC proposal will be submitted. 		
--	--	--	--	--	--	---	--	--

						Approval of DSM guidelines by FOR Submit proposal to EFC for approval Information dissemination workshops for utilities/regulatory commissions Support utilities to develop DSM proposals Publication of success story			
	TOTAL			200.00					

Central Power Research Institute Outcome Budget 2012-13

Approved Schemes under XII Plan

(₹ in crore)

Sl. No.	Name of Schemes/ Programme	Objective/ Outcome	Annual Plan 2012-13	Quantifiable Deliverables	Process/ Timeliness	Date of completion of the project	Remarks
1	2	3	4	5	6	7	8
1.	Augmentation of High Voltage, Diagnostic Relay, Vibration, Led test facilities and infrastructure protection. Outlay :Rs. 62.65 Cr.	-	20.00	Completion of Vibration & tower ongoing HV lab augmentation at STDS, Bhopal setting up of EMI/EMC test facility/ LED test facility	April 2012-13	Dec.2012 (likely date)	Extension to be sought in March 2012.
2.	Augmentation of High Power Short Circuit testing facilities by installation of additional 2500 MVA Short circuit Generator (already submitted to MoP) Outlay : Rs. 509.00 Cr.		122.165	Placing order for major equipments , appointing consultant.	-	-	Under approval
3.	Relocation, Augmentation of TRC Outlay : Rs.20.00 Cr.	To relocate the laboratories and office from present campus at Koradi to the New site.	15.00	Acquisition of land and commencement of construction of Labs/Office	Apr.2012- March.2013	3 Years	To be proposed for approval.
4.	Establishment of transmission line tower test station. Out lay :Rs. 90.00 Cr.	To establish Modern tower test facility at UHVRL, Hyderabad.	25.00	Placing of order for construction anchor structure test bed and control room	April. 2012- March.2013	2 Years	To be proposed for approval
5.	Plan R & D Outlay :Rs. 100 Cr.	To implement inhouse R & D projects of CPRI	10.00	Evaluation & Reconsideration of the proposals by committee on Research and approval and initiation of the projects.	April 2012 to March 2013	2-3 Years	Proposals to be placed for evaluation by COR after finalization of the 12 th plan allocation
6.	RSOP project	To manage R & D project to be approved for	5 .00	Evaluation and recommendation by	April 2012 to March 2013	2-3 Years	Ö . . î Ö Ö Ö

	Outlay : Rs. 50.00 Cr.	implementation by other Research academic , Power Utility Organisation		RSoP Executive Committee.Initiation of the project by Implementing agent after entering MoU with them.			
7.	NPP Project Outlay :Rs. 1500 Cr. MoP contribution : Rs.750.00 Cr.	Evaluation & Reconstruction of Projects for implementation Under Industrial areas by implementing organization	10.00	Approval of Projects and initiation of the project by implementing agencies.	April 2012 to March 2013	2-3 Years	To be proposed after finalization of 12 th plan allocation
8.	Augmentation of test facilities like energy Meters, SPV, Energy Efficiency Motor. Outlay :Rs. 33.00 Cr.		10.00	Formulation of Detailed project proposal, approval and initiation of project.	April 2012 to March 2013	2 Years	To be proposed of after the finalization of 12 th plan allocation
9.	Augmentation of battery testing facility Outlay : 4.00 Cr.	To modernize and Augment existing battery laboratory with extended capacity.	4.00	Formulation of the project , approval and initiation of the project	April 2012 to March 2013	1 Year	ÖÖ.îÖÖ..
10.	SC Testing transformer and existing system for existing transformer Outlay : 11 Cr.	To Augment the existing Short Circuit test facility	5.00	Ö..îÖ..	April 2012 to March 2013	1 Year	ÖÖ.îÖÖ
11.	Centre of excellence for NDT evaluation . Outlay : 8.00 Cr.	To establish Centre of excellence for evaluation using NDT technique.	8.00	Formulation of proposal procurement of NDT instruments.	ÖÖîÖ..	2 Years	ÖÖ.îÖÖ
12.	Augmentation of Supplementary test facility for testing power transformer Outlay : 35.00 Cr.	Augment and enhance capacity of Supplementary test facilities for Power Transformers	12.00	Approval and Initiation of project	ÖÖîÖ.	2 Years	ÖÖ.îÖÖ
13.	Grid Tied Inverter Outlay : 16 Cr.	To establish evaluation and test facilities for Inverter	3.00	Approval and Initiation of project.Placing order for equipment	.Ö..îÖÖ	ÖÖîÖÖ	ÖÖ.îÖÖ
14.	Smart Grid Research Laboratory Outlay : 10.00 Cr.	Establishing various facilities for testing and development of smart grid Components	3.00	.ÖÖ.îÖÖÖ..	ÖÖ.îÖÖ.	ÖÖ.îÖÖ.	ÖÖ.îÖÖ
15.	Augmentation & Modernisation of IP test facility	Upgrading of existing IP test facility	2.00	.ÖÖ.îÖÖÖ..	ÖÖ.îÖÖ.	ÖÖ.îÖÖ.	ÖÖ.îÖÖ

16.	Participation of CPRI as 5th equity partner in JV Company, NHPTL	To manage the high power testing as an equity partner	9.125	Balance Payment towards equity	April 2012-13	-	As and when the balance of equity is demanded, payment will be made.
17.	Upgradation of Energy Meter, Impulse Generator at Bangalore and setting up of type test facility for Instrument Transformers at UHVRL, Hyderabad	Upgradation of Energy Meter Test facility, Modernisation of control system for Impulse Generator and setting up type test facility for Instrument Transformer	1.71	Establishment of upgraded test facility and test facility for Instrument Transformer	April 2012-13	-	Under approval
		Total :	265.00				

NATIONAL POWER TRAINING INSTITUTE (NPTI)
Outcome Budget 2012 -13

(₹ in crore)

Sl. No.	Name of the Scheme / Programmes	Objective / Outcome	Outlay 2012-13			Quantifiable Deliverable	Projected Outcome	Process / Timelines	Remarks/Risk Factors
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
1	Modernization & Up gradation of Training Facilities at Corporate office Faridabad			5.00	N.A	Revenue of Rs.4.774 crore per year will be generated after completion of the year 2013-14.	Scheme is yet to be sanctioned by MOP	2012-13	The work is in progress and other processing of procurement will be carried out during this year.
	Setting up of National Power Training Institute at Alappuzha Kerala.			0.09					The scheme submitted to MOP for approval.
	Non-Plan		6.40						Agumatation of pension Fund
	Total		6.40	5.09					

**Central Electricity Authority
Outcome Budget 2012-13**

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) CEBR				
1.	All India Load Survey Scheme	To assess demand of Power over a period of time	2.25	-	-	Collection of Annual Power Survey Data from about 185 power utilities and about 5000 HV/EHV industries having electricity demand of one MW and above.	Data base created is an essential input for formulation of National Electricity Plan & its Reviews.	<p>Continuous process for bringing out Electric Power Survey Report once in 5 years.</p> <p>Continuous process for collection of data on captive generation and installed capacity from industries.</p> <p>Continuous process for bringing out Annual General Review and Growth of Electricity Sector in India from 1947 onwards.</p>	<p>18th Electric Power Survey Committee was constituted by CEA with consultation of MoP in Feb., 2010. 2nd & 3rd meeting of 18th EPSC were held in March, 2011 and June, 2011 respectively. Report of 18th EPS (Vol.I) has been approved by CEA Authority in the meeting held in December 2011. Electricity Demand Forecast of Mega Cities (Vol.II) is expected to be completed by end of February 2012 and Forecast of NCR, Delhi (Vol. III) by June, 2012 and Forecast by Econometric Model (Vol.IV) is expected to be completed by October 2012. General Review 2011 containing data for the year 2009-10 and Growth of Electricity Sector in India from 1947 to 2011</p>

									are under printing. Collection of data & scrutiny for GR 2012 are in progress.
2.	Renovation & Modernisation (R&M) of Thermal Power Stations (Plan)	To facilitate R&M activities in the country to arrest the deterioration in performance of thermal power stations, technological upgradation, environmental requirement by renovation & modernisation and life extension works.	-	4.75	-	Monitoring of R&M and life extension works carried out by different utilities during 11 th Plan. To prepare an action plan for energy efficient R&M programme for larger size units.	Increased production of electricity with better efficiency with less investment.	The life extension works are taken up based on the result of Residual Life Assessment (RLA) studies. The time of completion depends on the quantum of works to be carried out based on RLA studies, supplies from executing agency etc.	The works are being implemented by central / state power utilities. The completion of work depends upon availability of funds from concerned financing agencies, and shut down of the units for carrying out R &M / LE works. The proposal for extension of the scheme has been sent to MoP for approval.
3.	Standing Committee for selection of sites for Thermal Power Stations	To create a shelf of feasible sites for thermal power stations to meet the power requirement of the country upto the year 2011-12 and beyond. Shelf of potential sites for pit head and coastal thermal projects including Ultra Mega Projects would be available for investment by prospective investors for expeditious thermal capacity addition in the country.	-	0.30	-	Identification and selection of sites for location of coastal and pithead thermal power projects in different states.	Shelf of potential sites for pit head and coastal thermal projects including Ultra Mega Projects would be available for investment by prospective investors for expeditious thermal capacity addition in the country.	Originally approved term was 5 years beginning from the 1st year of the 10th Plan. Revised approval of MoP for the continuation of the plan scheme for another 5 years beginning from the 1st year of 11th Plan is obtained vide MOP order No. 5/8/2007/St. Th. Dated 24.10.07	The proposal for approval of revised cost and continuation of scheme upto 2012-13 had been sent to MoP vide CEA letter dated 14-07-11. Subsequently, as desired by MoP vide their dated 05-09-11 a self content note on the proposal for Revised Cost Estimates of Rs.333 lakhs for the scheme and for the continuation of the scheme upto 2012-13 has been sent to MoP vide CEA letter dated 19-09-11. Approval of MoP is awaited.

4.	Strengthening of Regional Electricity Boards (Now known as Regional Power Committees)	The objective of the proposal is to provide proper infrastructure support in the form of office building / staff quarters for the Secretariats of the SRPC / NERPC resulting in increased & better integrated operation of the regional grid.	-	1.25	-	Civil, Electrical and Horticultural maintenance of SRPC Staff Quarters at Bangalore. Construction of Office building & Staff Quarters for NERPC, Shillong and RIO, Shillong.	Creation of housing infrastructure of SRPC, Bangalore and creation of Office-cum-residential complex for NERPC / RIO, Shillong.	Civil, Electrical & Horticultural maintenance of Staff Quarters. Works identified in Col. 5 are likely to be completed during 12 th Plan period.	A pending court case filed in the city civil court pertaining to land on the western side of SRPC, Bangalore. There is a dispute with army on some portion of land acquired by NERPC and matter is pending with Deputy Commissioner, East Khasi Hills, Shillong since Feb, 2010. Due to the dispute with army, construction of one block of Type IV, type III and Type II quarters could not be taken up.
5.	Technical Control Planning & Monitoring	Review of power sector performance, long-term & short-term planning, assessment of manpower & materials, long-term system planning studies including management studies of RPCs, concurrence to hydro power development schemes, monitoring construction of generation & transmission projects, monitoring of rural electrification and distribution planning, etc.	35.9585	-	-	(i) Monitoring of 50 hydro projects (15065 MW) is in progress. During the year 2012-13, a hydro capacity of 1470 MW is likely to be commissioned. (ii) Thermal capacity addition target for the year 2012-13 not yet finalized. (iii) Data collection & publication of: - a) Daily generation report. b) Monthly review of power sector performance. c) Monthly status reports on construction of	(i) Reduction of gap between demand & supply of power in optimum time. (ii) Availability of statistics for public / inferences for planning and policy / decision making for the Indian Electricity Sector. (iii) Economical cost of generation of electricity. (iv) Accelerated pace of capacity addition to reduce demand	Continuous process	-

						various hydro and thermal projects. d) All India Electricity Statistics: General Review (Annual). e) Growth of Electricity Sector in India (Annual) f) Review of Performance of hydro power stations (Annual). g) Review of Performance of thermal power stations (Annual). (iv) Techno-economic appraisal and concurrence to hydro-electric projects.	and supply of power.		
6.	Design & Consultancy	To provide technical support in Design & Engineering of power projects to power utilities and adoption of state-of-the-art technologies.	21.735	-	-	At present 25 Nos. of consultancy projects are in hand.	It helps in dissemination of technology inputs to power utilities and creation of knowledge source and adoption of state-of-the-art technologies.	Continuous process	-
7.	Studies & Training	To improve performance of Engineers / functionaries.	0.51	-	-	Training of 1200 mandays to CEA employees.	Increase in productivity as a result of enhancement in knowledge and skill of CEA engineers.	Continuous process	-

8.	Electronic Data Processing & Support System	Operation and maintenance of computer systems provided in CEA and its sub-offices. Facility management and maintenance of Information Management System (IMS).	0.65	-	-	Maintenance of IT facilities (non-quantifiable)	Proper data management leading to increased efficiency	Continuous process	-
9.	Departmental Canteen	To provide subsidized canteen facilities to the employees of CEA	0.466	-	-	Welfare measure (not quantifiable)	Employees satisfaction contributing to increased productivity	Continuous process	-
10.	Contribution to International Bodies	Membership of CIGRE for engineers of CEA to keep themselves abreast of global technological developments in power sector.	0.0040	-	-	Continuation of collective membership of CEA with CIGRE	Updating of knowledge of CEA engineers in power system.	Annual event	-
11.	Administration of Electricity Laws	Statutory inspection of HT installations of Central Sector and UTs.	2.365	-	-	Inspection of electrical installations totaling to 2,15,000 equivalent MV*.	Assured safety of electrical installations and personnel.	Continuous process	-
12.	Upgradation of IT facilities in CEA ñ Phase-II	Comprehensive and more intensive IT based system for monitoring of execution of power projects. Setting up of disaster data recovery center	-	2.50	-	Procurement of hardware & software for development of comprehensive IT based system for monitoring of execution of power projects and for creating redundancy	Efficient monitoring of execution of power projects. Development of sound and upto date centralized database	Scheduled to be completed in 12 th Plan period subject to approval from the competent authority.	Project yet to be approved

*Equivalent MV = 3 x (EHV + HV) + MV + 12 x ckm +30 x video

		<p>for second backup of data. Building redundancy in data center for higher availability.</p> <p>Procurement / upgradation of Desktop Computers, Laptops and Multi-Function Devices.</p> <p>Procurement of Planning Model software.</p>				<p>in the existing Data Centre.</p> <p>Procurement of hardware & software for Disaster data Recovery center.</p> <p>Procurement of Personal Computers, Laptops, peripheral devices & software.</p> <p>Procurement of Planning Model software.</p>	<p>system for Power Sector of the country.</p> <p>Higher availability of IT facilities in CEA.</p>		
13.	NationalLoadDespatch Center (NEPSIC)	The scheme is related to operation and maintenance of National Electric Power System Information Centre (NEPSIC) at New Delhi for collecting vital power system operational data from different Regional Power Committees (RPCs) for use in CEA / Ministry of Power.	0.09	-	-	Collection & analysis of power system operational data from different Regional Power Committees (RPCs).	Facilitation of secured & reliable operation of the Integrated Regional Grids.	Continuous process	-
14.	Regional Coordination	The country has been demarcated into five Regions for the purpose of planning and operation of the power system. Regional Power	5.866	-	-	Facilitation of coordinated operation of regional power grids in the country	Facilitation of secured and reliable operation of the Regional Grids.	Continuous process	-

		Committees (RPCs) (erstwhile REBs) have been set up in all the five Regions for facilitating integrated operation of power system in the region for optimal utilization of the available power resources through functioning of various sub-committees such as Technical Coordination Sub-Committee, Operation Coordination Sub-Committee, Commercial Sub-Committee, Protection Sub-Committee and System Studies Sub-Committee, etc. The scheme is meant for funding the operations of the Regional Power Committees (RPCs)							
15.	Regional Load Despatching Centres	The real time operation of all the regional grids is being carried out by RLDCs. Operation planning and coordination functions which facilitate the integrated operation	8.845	-	-	Facilitation of coordinated operation of regional power grids in the country.	Facilitation of secured and reliable operation of the Regional Grids.	Continuous process	-

		of the power system continue to be with the Regional Power Committees (RPCs). RLDCs and RPCs have to operate in close coordination in achieving the benefits associated with integrated operation of the Regional power system.							
16.	Computerization of PTCC process	Computerisation of processing of the PTCC cases for route approval	-	8.78	-	<ol style="list-style-type: none"> 1. Finalization of Award and Contract agreement with the System Integrator (SI). 2. Collection of legacy Data of BSNL, Railways and all Power utilities. 3. Hardware & Software installation by the System Integrator (SI). 4. Preparation & Installation of Customized S/W by System Integrator (SI). 5. Successful Acceptance testing of Capital portion i.e. CAPEX of the scheme. 	<ol style="list-style-type: none"> 1. Issue of Award letter and Signing of Contract Agreement with SI. 2. Collection of Legacy Data. 3. Installation of Hardware & Software. 4. Development of Customized Software. 5. Go live of the scheme. 	<ol style="list-style-type: none"> 1. April 2012 2. Continuous Process 3. October 2012 4. December 2012 5. March 2013 	ó

17.	Technical Assistance by World Bank to support CEA for appointment of Consultants for addressing Barriers to Energy Efficiency R&M of Coal Fired generating units in India	<p>1. Appointment of Implementation Support Consultant (ISC).</p> <p>2. Study on Reduction of barriers for implementation of EER&M projects in TPS in India.</p> <p>3. Study of Developing Markets for implementation of R&M schemes in TPS.</p> <p>4. Review of experience from Pilot R&M projects.</p> <p>5. Review of institutional capacity and Strengthening of Institutional capacity at CEA.</p>	-	1.50	-	<p>1. a) Monthly / Quarterly progress reports.</p> <p>b) Pilot R&M monitoring report</p> <p>c) Procurement of consultants.</p> <p>2. Guidelines for: -</p> <p>a) Risk Identification and Mitigation in R&M Projects.</p> <p>b) Early Identification of Potential Surprises in R&M Projects and Ways of Addressing them.</p> <p>c) Study report on consultancy.</p> <p>3. a) Holding workshop / road show under the consultancy.</p> <p>b) Study report on consultancy.</p> <p>4. Report on Review of Procurement Experience at Pilot R&M Projects.</p> <p>5. a) Report on Assessment of Institutional Capacity of CEA & Customer Expectations.</p> <p>b) Report on comprehensive Capacity Strengthening Plan.</p>	Various reports and guidelines would be helpful in speedy & cost effective implantation of Energy Efficient R&M schemes in Thermal Power Stations in India.	<p>1. ISC tenure will end on 27-10-2012.</p> <p>2. The study expected to be completed by December 2012.</p> <p>3. The study expected to be completed by December 2012.</p> <p>4. The study expected to be completed by November 2014.</p> <p>5. The study expected to be completed by July 2013.</p> <p>It is expected that the scheme will be completed by November 2014.</p>	<p>The progress of the scheme will depend on the following: -</p> <p>1. Appointment of various consultants.</p> <p>2. Timely completion of Pilot R&M projects.</p>
-----	---	---	---	------	---	---	---	--	--

18.	Apprenticeship Training for Engineers	Imparting vocational training to Graduate/ Diploma holders under the Apprenticeship Act, 1961.	0.06	-	-	Training of 10 degree / diploma holders, 35 vocational and 11 Draftsman are to be trained	Availability of trained technical manpower in the country	Continuous process	-
		TOTAL	78.80	19.08	-				

JOINT ELECTRICITY REGULATORY COMMISSION FOR MANIPUR AND MIZORAM
Outcome Budget 2012-13

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) CEBR				
	Joint Electricity Regulatory Commission for Manipur & Mizoram	To fulfill the commitment of the Government of India for assisting the States of North Eastern Region for the initial 5 years in setting up of the Joint Commission. It would help in regulating tariff for supply of electricity in the States of Manipur and Mizoram.	ó	2.46	ó	1) To pursue the State Governments for corporatization and unbundling of Generation, Transmission and Distribution Sectors. 2) Issue Retail Tariff Orders for Mizoram and Manipur for the year 2012-13. 3) Fixation of Transmission Tariff and Other charges for the States of Manipur and Mizoram. 4) To frame new Regulations and to amend old regulations. 5) Conduct of quarterly meetings of State Advisory	1) Improvement of the operation and management in Power Supply. 2) Promotion in Development of Power Market. 3) Regulation of Transmission Tariff and other Charges. 4) Strengthening manpower for better establishment and administration. 5) Enhancing the efficiency and knowledge in management of Power Supply.	Govt. of India will meet the expenditure during the initial 5 years from the date of constitution and thereafter the Govt. of the two participating States will share the cost.	Slow progress of important reforms like Corporatization, Unbundling Franchising, Independent SLDC etc.

						Committee and State Coordination for Manipur and Mizoram 8) Organize four public hearings and State Level Workshops on various important issues			
--	--	--	--	--	--	--	--	--	--

**Assistance to Forum of Regulators for Capacity Building
OUTCOME BUDGET 2012-13**

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Budgetary Resources				
	Assistance to Forum of Regulators for Capacity Building and Consultancy	Capacity building by way of training / re-orientation of personnel of Regulatory Commission and Consultancy studies to evolve best regulatory practices.		2.00		<ul style="list-style-type: none"> Regulatory Commissions will have trained personnel. Study reports will be finalized for suitable actions by the Regulatory Commissions 	<ul style="list-style-type: none"> 100 officers / staff of electricity regulatory commissions will be trained in a year. Studies will serve as inputs for decision making for the Regulatory Commissions 	Based on the action plan, the funds will be utilized during 2012-13 for the desired objective.	ñ

Comprehensive Award Scheme OUTCOME BUDGET 2012-13

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable/ Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Budgetary Resources				
	Comprehensive Award Scheme for power sector	To inculcate competitive spirit and to motivate higher level of efficient and economic operation in the field of construction operation and maintenance of thermal/hydro/ transmission projects, implementation of distribution reforms, rural distribution franchisees, environment performance, community development and safety records. However, the expected returns cannot be quantified.	-	0.90	-	Improvement in performance of generation, transmission distribution and environment management	To contribute in achieving reliable affordable and quality power supply to all by 2012		

**MOP Secretariat
Outcome Budget 2012-13**

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable/ Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Budgetary Resources				
(a)	MOP Secretariat and Office of Controller of Accounts, Ministry of Power:- Salary, wages and other establishment expenditure including over-time allowance, medical treatment, domestic travel expenses, foreign travel expenses, publications, other administrative expenditure, advertising and publicity profession services and subsidies.	To meet the salary wages and other incidental expenses for support services.	21.84	ó -	Ö Ö	(a) The expenditure is incurred on salary and other support services and hence outputs are not measurable in quantitative/qualitative terms.		a) Under these provisions, salary, wages and other establishment expenses are met for all the officials of M/o Power. These are basically support services to facilitate personnel involved in framing overall policies and their implementation. Through various publications and publicity campaigns, the programmes, policy initiatives of the Ministry are disseminated to the general public in an effective manner.	Ö.

(b)	MOP Secretariat and Office of Controller of Accounts, Ministry of Power: Office Expenses	To meet the requirement of office expenses i.e. i. Payment of telephone bills ii. maintenance of IT related and office automation items iii. Purchase of stationary items. iv. Requirements of Central Registry Section v. Variation consumable. vi. Maintenance and purchase of petrol for staff cars. etc. vii. Maintenance and purchase of computer and peripherals. etc.	4.00			(a) To meet the requirement of office expenses i.e. Payment of telephone bills, stationary items, Maintenance of office equipment, petrol for staff car and other electric items, maintenance and purchase of computer and peripherals. etc.	Smooth functioning of office.		
-----	--	---	------	--	--	---	-------------------------------	--	--

Notes:

1. Items in Column 2 shall ;be as per Statement of Budget Estimate(SBE) included in Expenditure Budget Vol.II. Major programmes listed in the SBE must be shown separately, while smaller items of SBE may be conveniently clubbed. An exercise to weed out schemes with sub-critical financial outlays or merge them appropriately into major programmes is separately being undertaken.
2. Figures in Column 4(i) and 4(ii) as per Statement of Budget Estimate (SBE) included in Expenditure Budget Vol.II with Plan Budget figure including the amount allocable for NE out of lump sum allocation.
3. Figures in Column 4(iii) complementary extra-budgetary resources means expenditures committed for the purpose by entities other than the Central Government. Typically, it would include matching share from the State Government for Centrally sponsored schemes or resources contribution by public sector undertakings or resources contributed by private parties in the case of public private partnership projects. Thus, it will include the IEPR figure in respect of CPSEs as per Statement of Budget Estimate included in Expenditure Budget Vol.II, which may be explained through a footnote.

(c)	Office Expenses (Plan)	A Plan scheme with duration of 5 years (2007-08 to 2011-12) was initiated to upgrade data, collection, sharing and dissemination of information through computerization, renovation & modernization of offices in the Secretariat of the Ministry. This is basically intended to enable quick and prompt decision making.(including O/o Controller of Accounts, Ministry of Power)		0.10		(a) To meet the requirement of office expenses i.e. Payment of telephone bills, stationary items, Maintenance of office equipment, petrol for staff car and other electric items , maintenance and purchase of computer and peripherals. etc.	Smooth functioning of office	Following are the major benefits when the scheme is fully implemented. Replacement of computer and other peripherals i.e. Printer, UPS and various software. Renovation, Modernization of office premises and replacement of office equipment. Procurement of new IT related items and software. Proposed annual Scheme will be completed by 31.3.2012	
-----	------------------------	--	--	------	--	---	------------------------------	--	--

Funds for Evaluation Studies Outcome Budget 2012-13

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable/ Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Budgetary Resources				
	Funds for evaluation studies & consultancy	Evaluation of the projects sanctioned under Restructured Accelerated Power Development and Reforms Programme and other schemes/ programmes of Ministry of Power	-	2.00		The evaluation of R-APDRP/other schemes and programmes will bring out whether the programme is being implemented properly, desired results being achieved or not and suggesting changes in the programme for achieving the desired results.		The R-APDRP scheme has been restructured for implementation during XI plan. Evaluation of other schemes/programmes will be completed on need basis.	

**Funds for Evaluation Studies
Outcome Budget 2012-13**

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable/ Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Budgetary Resources				
	Funds for evaluation studies & consultancy	Evaluation of the projects sanctioned under Restructured Accelerated Power Development and Reforms Programme and other schemes/ programmes of Ministry of Power	-	2.00		The evaluation of R-APDRP/other schemes and programmes will bring out whether the programme is being implemented properly, desired results being achieved or not and suggesting changes in the programme for achieving the desired results.		The R-APDRP scheme has been restructured for implementation during XI plan. Evaluation of other schemes/programmes will be completed on need basis.	

Joint Electricity Regulatory Commission (JRRC) for the State of Goa & UTs except Delhi
Outcome Budget 2012-13

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable/ Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Budgetary Resources				
	Joint Electricity Regulatory Commission for State of Goa & UTS	To meet the statutory requirement for setting up Joint Electricity Regulatory Commission	4.00	NIL	NIL	The Commission would regulate Tariff for supply of electricity in the state of Goa & UTS except Delhi resulting in efficiency improvements.	This will be a permanent institution	Joint Electricity Regulatory Commission is fully operational	

Appellate Tribunal for Electricity Outcome Budget 2012-13

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2012-13			Quantifiable/ Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Budgetary Resources				
	Appellate Tribunal for Electricity	To facilitate expeditious resolution of disputes in the power sector at the appellate level Further, the Tribunal will also function as Appellate authority for under Petroleum and Natural Gas Regulatory Board Act.	8.78	0.00	0.00	Total number of appeals pending for final disposals as on 1 st January, 2012 is 210. Apart from this, 515 IAs/ Petitions etc are also pending for disposal/ admission. These are likely to be disposed off along with fresh appeals being filed during 2012-13. The above details are inclusive of cases under the Petroleum and Natural Gas Regulatory Board Act.	N.A.	Spread throughout the year	Some cases are pending due to the complexities and lengthy nature of issues etc.

Chapter-III

Major Initiatives/Reforms & Policy Measures

Government of India has taken a number of policy initiatives which are expected to increase investment in power sector and attract private investors as well. Some of the major initiatives are given below: -

A) Power Generation Sector

1) Accelerated capacity Addition Programme:

The Government is consistently working towards fulfilling the commitment made in the Nation Electricity Policy to meet the demand for power and eliminating both peaking and energy shortages by 2012. During XI Plan an ambitious capacity addition target of 78,700 MW was fixed, however at the time of mid-term appraisal carried out by the Planning Commission, the XI Plan target has been revised to 62,374 MW.

As against the midterm appraisal target of 62374 MW, a capacity of 42039.43 MW has already been commissioned till 31.01.2012 and a capacity aggregating to 7545 MW is under construction for commissioning during XI plan. Capacity addition of 13924.7 MW in the year 2011-12 (upto Feb 12) exceeds the highest capacity addition even achieved in a single year.

2) Manufacturing of Power equipment

Country was largely dependent on BHEL or Chinese equipments for power projects till now. 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. Ministry has 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.

3) Fuel Security :

Following steps have been taken for fuel security for the thermal power generation

- a. Allocation of more coal for power sector from Coal India
- b. FSA to be signed by Coal India for assured fuel supply
- c. No Go area mines to be de-notified and allocated to the power sector
- d. Promotion of imported coal in the Country.
- e. Coal transportation through Inland Water ways

4) Ultra Mega Power Projects

The Government of India had launched an initiative for the development of coal-based Ultra Mega Power Projects (UMPPs), each with a capacity of 4,000 MW. The objective

behind the initiative is to ensure cheaper tariffs utilizing economies of scale, catering to the need of a number of States and to mitigate the risk relating to tie up of land, fuel, water and other statutory clearances etc. The projects are awarded to the successful developers on the basis of tariff based competitive bidding route employing Super Critical Technology. To tie-up for necessary inputs and clearances such as provision of site, fuel through captive mining blocks, water and in- principle environment and forest clearances, project-specific shell companies (SPVs) are set up as wholly owned subsidiaries of the Power Finance Corporation (PFC) Ltd – the nodal agency for these projects. These SPVs, along with the various clearances etc. are subsequently transferred to the successful developer. Originally, nine sites were identified by CEA in various States for the proposed UMPPs. These included four pithead sites in the States of Chhattisgarh, Jharkhand, Madhya Pradesh and Orissa and five coastal sites in the States of Andhra Pradesh, Gujarat, Karnataka, Maharashtra and Tamil Nadu. Some states have also requested for second UMPPs.

Subsequently, some more States like Jharkhand, Tamil Nadu, Gujarat, Orissa and Andhra Pradesh etc. also requested for setting up of additional UMPPs in the respective States.

Four Ultra Mega Power Projects i.e. Sasan in Madhya Pradesh, Mundra in Gujarat, Krishnapatnam in Andhra Pradesh and Tilaiya in Jharkhand have already been transferred to the identified developers and these projects are at different stage of developments.

One unit of 800 MW of Mundra UMPP is expected to come up in the 11th Plan. The remaining units of Mundra and other awarded UMPPs are expected in 12th Plan (except last unit of Tilaiya UMPP, which is likely to come in 13th Plan.)

Request for Qualification (RfQ) for two UMPPs namely in Sarguja District of Chhattisgarh and in Sundergarh District of Orissa have been issued on 15.03.2010 and 11.06.2010 respectively. RfQ bids for Orissa UMPP was opened on 1st August, 2011 and are under evaluation.

A site at Cheyyur in Kancheepuram district, Tamil Nadu and another site at Nayunipalli village in Prakasham district, Andhra Pradesh have been identified and pre-RfQ activities are being carried out. Efforts are being made to bring them to the bidding stage at the earliest.

Efforts are being made for selection of sites for remaining UMPPs.

5) Mega Power Policy

Mega Power Policy was introduced in November 1995 for providing impetus to development of large size (mega) power projects in the country and derive benefit from economies of scale. These guidelines were modified in 1998, 2002, 2006 and 2009 to rationalise the procedure for grant of mega certificate and facilitate quicker capacity addition. Based on the suggestions received from the industry for delays in signing of Power Purchase Agreements (PPAs) by the Discoms, which is a mandatory condition for grant of mega power status, following provisions have been added in the mega

power policy guidelines by GOI in Aug 2011 to further facilitate implementation of mega power policy.

- (i) A provisional mega power status certificate may be considered where the developer has signed contract(s) with manufacturer(s) for supply of main plant equipment required for the proposed mega power project and paid not less than ten per cent advance. The developer would submit attested copies of the relevant contract(s) and receipt(s) along with tentative schedule for deliveries.
- (ii) The developer of the project granted provisional mega power status will be required to furnish security in the form of a Fixed Deposit Receipt from any Scheduled Bank for a term of thirty six months or more in the name of the President of India for an amount equal to the duty of customs / Central Excise Duty payable on such imports but for this exemption, as and when the goods arrive.
- (iii) The developer shall commence taking delivery of the main plant equipment (indigenous/imported) within nine months from the date of the provisional mega power certificate. The developer may submit attested copies of PPA(s) at the earliest but not later than 36 months of the date of provisional mega certificate to the Ministry of Power. After considering the PPAs so submitted, final mega power status would be issued for availing mega power benefits.

6) New Hydro policy

India has an estimated hydro generating potential of about 1,50,000 MW of which about 37,367.4 MW has been developed till 31.12.2010. Government has taken several initiatives to promote development of hydro power. In order to realize the full hydro potential, Government on 31.03.2008 has approved a new Hydro Power Policy. The new policy seeks to provide a level playing field for public and private sectors, and also to balance the competing demands of various stake holders involved in the development of hydro power project. It seeks to extend the same dispensation to private sector hydro projects as is available to PSUs under the Tariff Policy of 2006 till January, 2011, that is, the tariff of these projects would be fixed by the regulator in the same manner as for PSU Projects under Section 62 of the Electricity Act 2003. In order to enable the project developers to recover such costs, the developer will be allowed 40% of the saleable energy through merchant sales.

Both Central Electricity Regulatory Commission (CERC) and Central Electricity Authority (CEA) have recommended continuation of cost plus based tariff regime beyond the year 2011. Accordingly, based on the aforesaid recommendations, the Ministry of Power in July 2011 issued order for continuation of exemption from tariff based competitive bidding for public as well as private sector hydro-electric projects for another five years beyond January, 2011.

B) Transmission Sector

1) National Grid

Generation capacities and demand points are unevenly distributed across the country due to various natural and historical factors. Furthermore, demand for power, (and to

some extent, even its supply), is characterized by intra-day and seasonal variations. An integrated power transmission grid helps in evening out supply-demand mismatches. In addition, mechanisms for trading and exchange and open access facility into the grid could help in making the market for electricity more competitive and cost effective. The existing inter-regional transmission capacity of about 23,800 MW that connects the Northern, Western, Eastern and North Eastern regions in a synchronous mode (at the same frequency) and the Southern region asynchronously has enabled inter-regional energy exchange of about 56.7 Billion kWh (2010-11). It is expected that the inter-regional capacity of about 28,000 MW would be achieved by the end of the Eleventh Plan. Proposals are underway to have synchronous integration of Southern region with rest of the regions forming an all-India synchronous grid during XII plan.

2) Private sector participation in Transmission

Promotion of competition in the electricity industry in India is one of the key components of the Electricity Act, 2003. Ministry of Power (MoP) had issued Guidelines for Encouraging Competition in Development of Transmission Projects and Tariff Based Competitive Bidding Guidelines for Transmission Services in 2006. Both these guidelines aim at laying down a transparent procedure for facilitating competition in the transmission sector through wide participation in providing transmission services and tariff determination through a process of tariff based competitive bidding.

As envisaged in the Guidelines, Ministry of Power had constituted an Empowered Committee under the chairmanship of Member, CERC with representatives from Ministry of Power, CEA, POWERGRID Planning Commission and experts in power sector for development of inter-state transmission lines by the Private Sector on tariff based competitive bidding route.

The Ministry of Power also issued Standard Bidding Documents (SBDs), viz. Request for Qualification (RfQ), Request for Proposal (RfP) and Transmission Service Agreement (TSA).

The Ministry of Power appointed Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) as the Bid Process Coordinators (BPC).

C) Investment in Distribution Sector

1) National Electricity Fund (Interest Subsidy) Scheme

Cabinet Committee on Economic Affairs (CCEA) has approved the setting up of National Electricity Fund (Interest Subsidy) Scheme in its meeting held on 13 December, 2011 to provide interest subsidy aggregating to ₹ 8466 crore on loan disbursement amounting to ₹ 25,000 crore to the State Power Utilities, to improve the distribution network. The preconditions for eligibility are linked to certain reform measures taken by the States and the amount of interest subsidy is linked to the progress achieved in reforms linked parameters. Rural Electrification Corporation (REC), would be the Nodal Agency to operationalize the programme under the guidance of Steering Committee constituted for the scheme.

2) R-APDRP :

The Restructured APDRP (R-APDRP) was launched by MoP, GoI in July 2008 as a central sector scheme for XI plan. The scheme comprises of two parts-Part-A & Part-B, Part-A of the scheme being dedicated to establishment of IT enabled system for achieving reliable & verifiable baseline data system in all towns with population greater than 30,000 as per 2001 census (10,000 for Special Category States).

R-APDRP also has provision for Capacity Building of Utility personnel and development of franchises through Part-C of the scheme. Few pilot projects adopting innovations are also envisaged under Part-C.

Under Part-A (IT) of the scheme, projects worth ₹ 5196.50 crore covering all the eligible towns (1402 Nos) in 29 states/UTs and under Part –A (SCADA) projects worth ₹ 1385.87 crore covering all the eligible towns (60 Nos) in 13 states and under Part-B, 1039 projects worth ₹ 23658.18 crore in 19 States have been sanctioned under R-APDRP.

3) RGGVY:

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) was launched by GOI in April-05 to strengthen the rural distribution network in the country. Under the programme 90% grant is provided by Govt. of India and 10% as loan by REC to the State Governments.

Upto 31.12.2011, a total of 578 projects in 546 districts at the cost of ₹ 26517.42 crore have been sanctioned in the country for execution. These 578 projects target to electrify 1,10,416 un/de-electrified villages, intensive electrification of 3,48,539 already electrified villages and release of free electricity connections to 230.13 Lakh BPL households. In addition to above 42 projects in 30 districts covering 378 un-electrified villages, 25179 already electrified villages and 9.22 lakh BPL households with total estimated cost of ₹ 1982.21 crore have been sanctioned under Phase-II of RGGVY.

D) Distribution Sector Reform

1) APTEL Judgment:

APTEL in a suo-moto petition based on reference by Ministry of Power for issuing directions to the State Electricity Regulatory Commission for revision of power tariff in the states held that:

- Every SERC has to ensure that APR, true-up of past expenses, ARR , tariff determination in conducted year to year basis as per the time schedule specified in the regulations.
- It should be the endeavour of the SERC to ensure the tariff for the FY is decided before 1st April of the tariff year.
- In event of default in filing of ARR, truing up of expenses, SERCs to initiate suo-moto proceedings for tariff determination u/s 64 of Electricity Act 2003.
- Revenue gaps not to be left and regulatory assets should not be created as a matter of course.

- Truing up to be carried out regularly and preferably every year.
- Mechanism for pass through of fuel and power purchase cost in tariff on monthly basis.
- APTEL is also directed to the State Commissions to follow the above directions scrupulously and send periodical reports by 1st June of the relevant financial year above the compliance of these directions to the secret form of regulators who in turn will send the status report to the tribunal of APTEL and also placed it on its website.

It is expected that the compliance of these directions by the State Regulators would bring about certain discipline in the distribution sector and would also bring about procedural simplicity apart from improving the revenue and liquidity position of the distribution utilities.

2) Model Tariff Regulations:

At the instance of Ministry of Power, the Forum of Regulators (FOR) issued the model tariff regulations for Distribution Tariff in the country, which provide that Multi-Year tariff model be adopted by the states and SERC to stipulate a trajectory for Operation & Maintenance expense norms, distribution losses and collection efficiency while approving the Business Plan having regard to the reorganization, restructuring and development of the electricity industry in the State. According to the regulations, licensees need to file tariff petition by November 30 every year with the SERC. The SERC would issue a tariff order within 120 days of seeking clarification and receiving response from the licensee. Moreover, they would issue suo motu tariff order in case of delay or non submission of tariff application or non receipt of additional information. FOR believes the model tariff regulations are expected to address issues related to timeliness of tariff determination process, disallowance of legitimate costs, fuel purchase adjustment and untreated gap and regulatory assets.

3) B K Chaturvedi Committee for financial health of State Discoms.

The borrowings from the commercial banking sector with no commensurate increase in efficiency, has led to deterioration in the financial health of the distribution utilities which apart from adverse consequences on the functioning of the power sector would also impact the financial sector in India. In order to look into these issues and to suggest a strategy for the turnaround of the distribution sector, Planning Commission vide OM Dated 18.10.2011 constituted an Expert Group under the chairmanship of Sh. B K Chaturvedi, Member (Energy).

The terms of reference of the group are given below:

- a) To make an assessment of the cumulative losses of the Distribution Utilities (Discoms) of Uttar Pradesh, Rajasthan, Andhra Pradesh, Haryana, Madhya Pradesh, Punjab and Tamil Nadu.
- b) To suggest a strategy for Capital restructuring of these power Discoms include Capital restructuring of loans and other measures which will include commitment

by other stakeholders including State Govt. and utilities to make the Discoms Financially viable on a Long term basis.

- c) To suggest a roadmap and monitoring mechanism for implementation of the above restructuring and turnaround programme.

The Expert Group held its first meeting on 01.12.2011 during which it decided to constitute a Sub Group under the chairmanship of Sh. Ashok Lavasa, Additional Secretary, Ministry of Power to consider the financial restructuring plans (FRP) submitted by the focus states and make recommendations regarding the way forward keeping in view the terms of reference of the Expert Group.

Sub group after a series of meetings with the representative of focus states submitted report for the consideration of to the Expert group. Expert Group in its meeting dated 08.02.2012 adopted the report with some modifications.

E) Energy Efficiency Sector

(a) Bureau of Energy Efficiency

Ministry of Power through Bureau of Energy Efficiency, has initiated a number of energy efficiency initiatives to reduce the electricity consumption. Few steps taken by the MoP are given below:

- i. Bachat Lamp Yojana Scheme
- ii. Standards and Labeling programme
- iii. Energy conservation building codes
- iv. Agricultural and Municipal DSM (Demand Side Management) Scheme
- v. Strengthening Institutional capacity of SDA (State Designated Agencies)
- vi. Contribution to State Energy Conservation Fund
- vii. National Energy Conservation Awards
- viii. Painting competition on energy conservation
- ix. National Certification examination for energy managers and energy auditors.

(b) National Mission for Enhanced Energy Efficiency

National Mission for Enhanced Energy Efficiency is one of the eight national missions under the National Action Plan on Climate Change. The Mission seeks to create a conducive regulatory and policy regime to foster innovative and sustainable business models to unlock the energy efficiency market. As a result of NMEE it is estimated that 19000 MW of avoidable capacity addition will be achieved. Following activities are included in NMEE:

- I. Perform , Achieve and Trade (PAT Mechanism) to facilitate trade of energy saving certificates
- II. Market Transformation for Energy Efficiency for development of energy efficient appliances
- III. Energy Efficiency financing platform for financing of Demand side management program.
- IV. Framework for Energy Efficient Economic Development (FEEED). It includes creation of Partial Risk Guarantee Fund and Venture Capital Fund for Energy Efficiency.

F) Open Access for Electricity in Transmission & Distribution

Open access is one of the key features of the Electricity Act, 2003. Open access in inter-state transmission is fully operational. As regards implementation of Open Access in Distribution Sector the SERCs are implementing Open Access in phased manner. To give a fresh impetus to implementation of open access over transmission lines of State utilities and over the distribution networks, a Power Ministers' Conference was held on 28.4.2010 in which it was resolved that non-discriminatory open access in intra-State transmission and distribution system would be provided in letter and spirit as per the provisions of the Electricity Act and the National Policies. This was followed by a Working Session on Open Access in distribution sector of electricity held on 16.7.2010. The issue of open access was also emphasized in the Group of Ministers on Power Sector Issues in its meeting held on 29.10.2010 under the chairmanship of Minister of Power.

The Ministry of Power in consultation with Ministry of Law & Justice/ Ld. Attorney General of India has issued clarification vide letter dated 30.11.2011 that "all 1MW and above consumers are deemed to be open access consumers and that the regulator has no jurisdiction over fixing the energy charges for them". All concerned have been requested to take necessary steps for implementing the provisions relating to open access in the Electricity Act, 2003 in light of the said opinion.

The 2nd Task Force on measures for operationalizing open access in power sector constituted under the chairmanship of Member (Energy), Planning Commission has deliberated on the issues has submitted its Report. All concerned have been requested for necessary action on the actionable points of the Report. The other points are being examined separately.

G) Short Term Power Trading and Power Exchange

a) Electricity Transacted through Trading Licensees

The Central Electricity Regulatory Commission (CERC) has powers to grant Inter-state Trading Licences. The Commission has so far granted 55 inter-state trading licences, of which 43 are in existence as on November 30, 2011. The volume, price and trading margin of the electricity traded by these licensed inter-state traders are as under:

Volume, Price and Trading Margin of Electricity Transacted by Trading Licensees

Period	Volume (Billion Units)	Weighted Average Purchase Price (₹/kWh)	Weighted Average Sale Price (₹ /kWh)	Trading Margin (₹ /kWh)
2005-06	14.19	3.14	3.23	0.09
2006-07	15.02	4.47	4.51	0.04
2007-08	20.96	4.48	4.52	0.04
2008-09	21.92	7.25	7.29	0.04
2009-10	26.72	5.22	5.26	0.04
2010-11	27.70	4.74	4.79	0.05
2011-12 (Apr-Nov 11)	25.11	4.09	4.14	0.05
Note: As per the CERC Inter-State Trading Margin Regulations 2010, the ceiling of trading margin is 4 Paise per unit in case the sale price of electricity is less than or equal to ₹ 3 per unit and the trading margin ceiling is 7 Paise per unit in case the sale price of electricity exceeds ₹ 3 per unit. Trading licensees have charged the trading margin as per the trading margin regulations 2010.				

b) Electricity Transacted through Power Exchanges

There are two power exchanges operating in the country namely the Indian Energy Exchange Ltd. (IEX), New Delhi and Power Exchange India Ltd. (PXIL), Mumbai. These are electronic platforms where prices discovery happen through anonymous competitive bidding. The power prices in this platform reflect the demand and supply in the short term. The various products traded in the exchanges are day ahead contracts, weekly contracts, intra-day contracts and day ahead contingency contracts. Power exchanges have also provided an impetus to open access. More than 1000 open access consumers are using the power exchange for purchase of power regularly now.

Volume and Price of Electricity Transacted through Power Exchanges (IEX & PXIL)		
Year	Volume of Electricity (Billion Units)	Weighted Average Price of Electricity (₹/kWh)
2008-09	2.77	7.49
2009-10	7.19	4.96
2010-11	15.52	3.47
2011-12 (up to Nov. 2011)	10.81	3.57
Note: Volume and Price of electricity transacted through power exchanges i.e. for both Day Ahead Market and Term Ahead Market.		

Renewable Energy Certificates are also being traded on power exchanges from March, 2011 and their liquidity has been increasing over the months.

H) Other steps

Other steps taken by the MOP for development of power sector are given below:-

- a. Rating of the State Power Utilities
- b. The tariff Policy was amended vide Resolution dated 8.7.2011 granting further exemption to Hydro projects and certain transmission projects from tariff based competitive bidding.

Chapter-IV

Review of Performance & Highlights of Schemes & Projects

This Chapter gives the review and highlights of the various projects and schemes of the Ministry of Power under the following headings:-

- (1) Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)
- (2) Restructured Accelerated Power Development & Reforms Programme (R-APDRP)
- (3) Generation & capacity addition
- (4) Transmission
- (5) Energy Conservation & Energy Efficiency
- (6) Other schemes

The performance of the schemes and projects implemented by CPRI, NPTI, BEE and DVC are given in Chapter-VI. Salient features and performance highlights of the main schemes are as under:-

(1) Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

This scheme of rural electricity infrastructure and household electrification has been introduced in April, 2005 for providing access to electricity to all households. Improvement of rural electricity infrastructure is essential to empower rural India and unleash its full growth potential. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under the scheme, projects can be financed with 90% capital subsidy for provision of Rural Electricity Distribution Backbone (REDB), creation of Village Electrification Infrastructure (VEI) and Decentralized Distributed Generation (DDG) and Supply. REDB, VEI and DDG would also indirectly facilitate power requirement of agriculture and other activities including irrigation pumpsets, small and medium industries, khadi and village industries, cold chains, health care, education and IT. Under this scheme Below Poverty Line (BPL) households will be provided free electricity connections. The rate of reimbursement for providing free connection to BPL households will be ₹ 2,200/- per household. The achievements vis-à-vis coverage is as under:-

	Coverage of RGGVY under X and XI Plan	Bharat Nirman targets under RGGVY by March 2012	Cumulative Achievement Till 31.12.2011	Achievement during 2011-12 upto quarter ending 31.12.2011
Total villages to be electrified	110416	100000	100917	4355
BPL households covered	230.13 lakh	175 lakh	179.41 lakh	19.61 lakh

Bharat Nirman targets for RGGVY have been achieved by 31st December, 2011 as against target date of March, 2012.

The details are at **Annexure-I**

(2) Re-structured Accelerated Power Development and Reforms Programme (R-APDRP)

The focus of the Re-structured APDRP, approved in July, 2008 for XI Plan is on actual, demonstrable performance in terms of sustained loss reduction. The objective of the programmes is to facilitate State Power Utilities to reduce the level of AT&C losses 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. The programme size is ₹ 51,577 crore. The outlay for Part-A (IT enabled system and SCADA) is ₹ 10,000 crore and for Part-B is ₹ 40,000 crore. The achievements up to December, 2011 is given in the **Annexure-II**.

Under Part-A (IT) of the R-APDRP, 1402 projects worth ₹ 5196.50 crore, to cover all the eligible towns in the country have been sanctioned. Additional, 60 nos. of SCADA projects worth ₹ 1385.87 crore are also approved under Part-A. Under Part-B, 1039 projects worth ₹ 23658.18 crore for strengthening of sub-transmission distribution system, against 1100 eligible towns in the country have also been sanctioned till 31 December, 2011.

(3) Generation & capacity addition :

3.1 XI-Plan Targets and Achievements

Sector –wise Details

Type	Mid-term appraisal target	Commissioned (Upto 31.01.2012) (MW)	Under Construction
Central	21222	13370	2805
State	21355	14589.4	2685
Private	19797	18900.5	2055
Total	62374	46859.9	7545

3.2 The generation upto 31.12.2011 and capacity addition as on 31 January, 2012 of the following CPSUs are as under:-

Sl.N.	CPSU	Generation upto 31.12.2011	Capacity addition as on 31.01.2012
1.	NTPC Ltd.	161888.79 MU	34442.23 MW
2.	NHPC Ltd.	16262.50 MU	3767.20 MW
3.	NEEPCO	3992.32 MU	1130.00 MW
4.	SJVN Ltd.	6974.85 MU	1500.00 MW
5.	THDC India Ltd.	3617.13 MU	1200.00 MW

The progress of work/outcome upto December, 2011 vis-à-vis outlay for 2011-12 in respect of **NTPC Ltd., NHPC Ltd., NEEPCO, THDC India Ltd. and SJVN Ltd. are given at Annexure-III, IV, V, VI and VII respectively.**

(4) **Transmission**

POWERGRID, during FY 2011-12 (upto 31 December, 2011), has commissioned/completed about 6165 circuit km. of transmission line and about 7140 MVA of transformation capacity addition. Against the stringing 9500 ckm and transformer erection 35 numbers target during FY 2011-12, POWERGRID has achieved stringing of 4191 ckm and 23 numbers transformer erection upto 31 December, 2011

The details are at **Annexure-VIII.**

5.0 Energy Conservation & Energy Efficiency

5.1 Energy Conservation Awards 2011

One of the voluntary innovative schemes, initiated by the Government of India, Ministry of Power, to promote energy conservation has been the Energy Conservation Awards. BEE coordinates the Energy Conservation Award scheme of the Ministry of Power.

These annual awards recognize innovation and achievements in energy conservation by the Industries, buildings, hotels, hospitals, railways, state designated agencies, aviation, manufacturers of BEE star labeled appliances, municipalities and thermal power station and also raise awareness that energy conservation plays a big part in India's response to reducing global warming through energy savings. The Awards were given away for the first time in December 14, 1991, which is celebrated as 'National Energy Conservation Day' throughout the country.

The responses among the industrial and commercial units have become very encouraging as is evident from the increasing participation level (from 123 in 1999 to 644 in 2011).

The participating units of EC Award 2011 have collectively invested ₹ 2201 crore in energy Conservation measures, and achieved a monetary savings of ₹ 2390 crore last year, implying

a payback period of 11 Months only. The participating units have also saved electrical energy of 3421 Million kWh, which is equivalent to the energy generated from a 504 MW thermal power station at a PLF of 0.775.

5.2 Painting Competition on Energy Conservation 2011

Ministry of Power and Bureau of Energy Efficiency have undertaken National Campaign on Energy Conservation, 2011. Under this campaign, Painting Competition on Energy Conservation at School, State and National level was executed. In 2011, across the country 58855 schools and 20.72 lakhs children participated in the Competition as compared to 47153 schools and 15.63 lakh children in 2010.

5.3 National Mission for Enhanced Energy Efficiency (NMEEE)

The Cabinet approved NMEEE with a financial outlay of ₹ 235.35 crore and creation of 16 new posts in BEE in May, 2010.

- Perform, Achieve and Trade (PAT)
- Market Transformation for Energy Efficiency (MTEE)
- Energy Efficiency Financing Platform (EEFP)
- Framework for Energy Efficient Economic Development (FEEED)

Achievements:

- Targets for 477 DC's has been finalized which is under notification process
- Around 50 number of workshop have been completed for PAT awareness in all over India
- Baseline Audit of around 390 DCs has already been completed.
- MOU between BEE and Tata Capital has been signed to enhance EEFP.

Energy saving achieved have increased from 1612.3 MU equivalents to 236 MW of avoided electricity generation in the year 2007-08 to 2451 MW in the year 2010-11 equivalent to 357 MW of avoided electricity generation at a Compound Annual Growth Rate (CAGR) of 15% p.a.

5.4 Bureau of Energy Efficiency

5.4.1 Bachat Lamp Yojana:

The "CFL Lighting Scheme- Bachat Lamp Yojana" Programme of Activities (PoA) was registered with UNFCCC on 29th April, 2010. 23 CFL Manufactures/ Investors have agreed to participate in PoA. 16 States have commenced project preparation. Other states in the process. Estimated 6.5 crore CFLs to be distributed.

42 CDM Project Activities (CPAs) have already been included and 23 CPAs are under validation (Total CPAs=65). Overall 245 lakh CFLs distributed till Dec, 2011. 17 states have already initiated the BLY and are at different stages of project preparation.

5.4.2 Standards & Labeling Scheme:

The S&L Program was quite successful during the 11th Plan period and has contributed to energy savings of 4898 MW of avoided capacity upto 31st March 2011 and end of the 11th Plan, total avoided capacity addition of the plan would be 7315 MW.

5.4.3 Strengthening Institutional Capacity of State Designated Agencies (SDAs)

The SDAs have reported savings of energy equivalent to avoided capacity addition of over 1274 MW during the years 2007-08, 2008-09, 2009-10 and 2010-11.

5.4.4 Agricultural and Municipal DSMs (Ag & MuDSM)

AgDSM

Under the 11th Plan, BEE has intervened in 8 States (Maharashtra, Gujarat, Haryana, Punjab, Rajasthan, Madhya Pradesh, Andhra Pradesh and Karnataka) and prepared a shelf of bankable DPRs for implementation through Public Private Partnership mode.

The estimated saving potential in the States in which BEE has taken initiatives under 11th Plan in agriculture sector shows the saving potential of 97 million units (MU) with an investment of ₹ 72 crore for 20,885 pumps sets which is 40% of the electricity consumption in the agriculture sector.

MuDSM

In municipalities, DPRs in 143 ULBs have been prepared and in 5 ULBs these are under various stages of completion. 28 more municipalities are being taken up in phase-V.

5.4.5 Energy Efficiency in Small and Medium Enterprises (SMEs) and Designated Consumers

During the year energy use and technology gap assessment studies in more than 1250 small and medium enterprises was undertaken, followed by awareness workshops for disseminations of results and preparation of 325 no Detailed Project Report (DPR). The reported saving in SMEs is 9900 toe which is about 45% of the targeted saving during the last year of the 11th five year plan.

5.4.6 Energy Conservation Building Codes (ECBC)

Energy Performance Index (EPI) values developed by BEE for different categories of buildings under ECBC have been adopted under Green Rating for Integrated Habitat Assessment (GRIHA). Therefore all buildings rated under the GRIHA rating system would be compliant to ECBC also. The LEED rating system of the Indian Green Building Council also requires that buildings meet the ECBC requirements. The present estimated commercial space compliant to ECBC is about 10 million sq mtrs leading to potential avoided capacity of 484 MW and the actual savings achieved so far for entire plan period is under review by National Productivity Council .

5.4.7 Impact Assessment - Energy Savings Achieved

The year-wise details of energy savings achieved are given below:-

Details of Energy Saved	2007-08		2008-09		2009-10		2010-11	
Details	MU	Eq. MW	MU	Eq. MW	MU	Eq. MW	MU	Eq. MW
S & L Scheme	1425.87	260.40	2106.16	599.44	4350.92	2180.00	3718.22	2162.00
Other Schemes	0.00	127.00	2788.84	666.53	1874.25	304.60	954.16	181.40
National Energy Conservation Award Scheme	1612.30	236.00	1633.25	239.00	2054.60	358.60	2085.10	317.36

(6) Other Schemes

6.1 Capacity Building & Programmes Assessment:

The schemes/programmes/projects indicating the outlay for 2011-12, the quantifiable deliverable/physical outputs and the achievements for the quarter ending December, 2011 in respect of Ministry of power Secretariat and the Central Electricity Authority are indicated at **Annexure-IX** and **Annexure - X** respectively.

6.2 Comprehensive Award Scheme

Details in respect of Comprehensive Award Scheme are provided in **Annexure-XI**.

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)
Achievements upto 31.12.2011

(₹ in crore)

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs (2011-12)	Processes/ Timelines	Projected Outcomes	Remarks/risk Factors	Achievements for the quarter ending December, 2011
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources					
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8	9
1	Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)	Electrifying all villages and providing access to electricity to all rural house-			₹ 6000 crore	Electrification of 15,500 un-electrified Villages and offering electricity connections to around 47 lakhs BPL households	The cumulative Bharat Nirman targets upto March 2012 is to electrify 1.00 lakh un-electrified villages and provide free connections to 1.75 crore rural households. Against this upto December, 2010, the cumulative achievement is electrification of 89,675 villages and release of connections to 1,40,70,353 BPL households.	Will facilitate overall rural development, employment generation and poverty alleviation	Total 573 (235 for X Plan and 338 for XI Plan) projects have been sanctioned for execution. These projects cover electrification of 1.18 lakh un-electrified villages and providing free connections to 2.46 crore BPL households. The projects are being implemented throughout the country and unexpected events, natural calamities can cause delay.	The budget of ₹6000 crore has been reduced to ₹3544 crore at RE stage. The physical targets have also been revised by Planning Commission from 15,500 un-electrified villages to 14,500 and 47 Lakh BPL households to 52 Lakhs. 578 projects targeting to electrify 1.10 lakh un-electrified villages and to release electricity connections to 2.30 crore BPL households are under implementation. During 2011-12 (Up to December, 2011, 4,355 un-electrified villages were electrified and electricity connections to 19,61,414 lakh BPL households were released and ₹1717.68 crore subsidy has been released up to December, 2011.

**RESTRUCTURED ACCELERATED POWER DEVELOPMENT AND
REFORMS PROGRAMME (R-APDRP IN XI PLAN)
Achievement up to 31.12.2011**

(₹ in crore)

Sr. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs (2011-12)	Projected Outcomes	Processes/ Timelines	Remarks/risk Factors	Achievements upto 31.12.2011
			Non- Plan Budget	Plan Budget	Comple- mentary Extra- Budgetary Resources					
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8	9
1	R-APDRP	Attainment of Reliable and verifiable baseline data of energy & revenue and AT&C Loss reduction on sustained basis	NIL	₹ 2034 crore (₹ 1959 crore as Loan to PFC for APDRP ₹ 1755.6 Crore for Other States (Sl. No. 20 of Demand Of Grants, MoP) & ₹ 203.40 Crore for NE states (Sl. No. 25.02 of Demand Of Grants, MoP)) Apart from above,	NIL	R-APDRP Part-A(IT) Completion Of Part-A (IT) Projects in 1402 towns & verification by TPIEA R-APDRP Part-A (SCADA) Completion Of Part-A(SCADA) Projects in 67 envisaged towns & verification by TPIEA-IT	Establishment of IT System for acquisition of baseline data of revenue & energy in 1402 towns Establishment of SCADA System in 60 envisaged towns for reliability of power supply	3 Years from date of sanction for Part-A (IT) 3 Years from date of sanction for Part-A (SCADA)	The success of the scheme will depend on smooth & timely implementation of the projects under Part-A & Part-B by State Utilities in accordance with R-APDRP guidelines for reduction in AT&C losses on sustainable basis.	Financial [FY 11-12]: ₹ 1350 crore of ₹ 1959 crore already utilized under the category 'Loan to PFC for APDRP' of budget allocation of ₹ 75 crore under Part-C, ₹ 26 crore have been released to PFC. Details [FY 11-12] Part-A (SCADA)- 32 Schemes sanctioned for ₹ 717 crore/Disb- ₹ 122 crore [Target 18 Schemes for ₹ 471.58 crore & Disb-296 crore] Part-B Sanctioned for 216 Schemes worth ₹ 7684 crore & Disb- ₹ 1162 crore. [Target 154 Sc. For ₹ 2868 crore & Disb-

				₹ 75 Crore is allocated under Part-C {Sl. No. 17 of Demand Of Grants, MoP}}		R-APDRP Part-B Completion of Part-B Projects in 1100 envisaged towns & AT&C Loss reduction to less than 15% level in these towns as verified by TPIEA-EA	Improvement in Sub-Transmission & distribution Network in 1100 envisaged towns flowed by reduction in AT&C Losses	3years completion period from date of sanction. Five years of AT&C loss monitoring by TPIEA-EA with first year starting an year after establishment of Part-A(IT) system		₹734 crore] Part-A(IT) sanctioned for 1 Town-19.51 crore & disb-66 crore [Target for Disb-929 crore.]Fin. & Physical [Cum]: Part-A(IT) sanctioned in all 1402eligible towns. Cum. Sanctions: ₹ 5196 croreCum Disb.: ₹1578 croreExecution in progress in 28/29 states. Part-A(SCADA) sanctioned in 60 of 67 envisaged towns.Cum. Sanctions: ₹ 1386 croreCum. Disb.: ₹276 crore Execution started in 20 towns. Part-B sanctioned in 1039 of 1100 envisaged towns.Cu. Sanctions: ₹ 23658 croreCum. Disb.: ₹ 3398 crore Execution started in 279 towns
--	--	--	--	---	--	--	---	--	--	--

NTPC LIMITED
Achievements upto 31.12.2011

(₹ in crore)

Sl. No.	Name of Scheme / Programme/ Project	Objective Outcome	Outlay 2011-12	Act Exp Upto Dec'11	Quantifiable Deliverables/ Physical Milestones	Processes/ Timelines	Remarks / Ant.	Achievements wrt col (5)
1	2	3	4(i)	4(ii)	5	6	7	8
i	Ongoing Schemes							
1	Sipat-I	Additon of 1980 MW of generation Capacity	741.49	505.91	U#2, Synchronisation on coal U#3, Boiler Light Up U#3, Steam blowing & SVF U#3, TG Box up U#3, Oil flushing completion U#3, Synchronisation	Jul'11 Sep'11 Oct'11 Aug'11 Sep'11 Jan'12	Work in progress ant in Jan'12 Work in progress ant in Feb'12	12/11(A) 08/11(A) 08/11(A) 10/11(A)
2	Barh-I	Addition of 1980 MW of generation Capacity	1590.96	743.29	U#3 CW Pump readiness. U#3 Boiler erection start U#3 Cooling Tower readiness U#2 Boiler erection start	Nov'11 Jan'12 Dec'11 Jul'11	Ant In Jan'12	Oct'11 (A) Nov'11(A) Jul'11 (A)
3	Barh-II	Additon of 1320 MW of generation Capacity	1986.06	1141.39	U#5 Boiler. Start of pressure parts erection. U#4, Boiler Hydro Test U#5, TG Deck completion. U#5, Start of condenser erection.	Apr'11 Oct'11 Aug'11 Oct'11		Jun'11 (A) Nov'11(A) Aug'11 (A) Sep'11 (A)
4	Simhadri II	Addition of 1000 MW of generation Capacity	709.88	476.33	U#4 TG Oil Flushing Compln U#4 CHP Readiness U#4 AHP Readiness U#4 Synchronization	Apr'11 May'11 Jun'11 May'11	Work in progress ant in Jan'12 Work in progress ant in Feb'12 Work in progress ant in Feb'12 Work in progress ant in Mar'12	
5	Mauda -I	Additon of 1000 MW of generation Capacity	1868.53	972.61	Boiler Light up U#1 Synchronization U#1 Hydro Test U#2 Commissioning of CHP U#1	Oct'11 Feb'12 Aug'11 Feb'12	Work in progress ant in Mar'12 Work in progress ant in Feb'12	Nov'11(A) Nov'11(A)

6	Bongaigaon	Additon of 750 MW of generation Capacity	1701.08	716.09	U#1 Chimney shell with flue compln U#1 Erection compln of bottom ash hopper U#1 cooling tower fan trial U#1 BLU Readiness of 1st CW PUMP	Aug11 Sep11 Oct11 Dec11 Sep11	Work in progress likely in Feb12 Work in progress likely in Jan12 Work in progress likely in Jan12 Work in progress ant in July12	Dec11 (A)
7	Rihand III	Additon of 1000 MW of generation Capacity	1668.89	836.26	Completion of Chimney for BLU Hydro Test U#5 Turbine Box up U#5 Turbine Erection U#6	Dec11 Jul11 Feb12 Jun11	Work in progress ant in Jan12	11/11(A) 06/11(A) 07/11(A)
8	Vindhyachal IV	Additon of 1000 MW of generation Capacity	1728.62	869.50	Boiler Hydro Test U#11 Boiler Light up U#11 TG Box up U#11 TG Oil Flushing U#11 Steam Blowing compln U#11 Condensor Erection U#12 TG Erection start U#12 Boiler Hydro Test u#12	Jun11 Jan12 Jan12 Mar12 Mar12 Jun11 Jul12 Dec11	Work in progress ant in Jan12 Work in progress ant in Feb12 Work in progress ant in Feb12 Work in progress ant in Jan11	06/11(A) Dec11 (A) 06/11(A) 07/11(A)
9	Koldam	Addition of 800 MW of generation capacity	640.45	446.98	Completion of half plug casting work in DT-2 Gallery Grouting 160 km(Cumulative) Completion of erection of Bus Ducts of all units Completion of Unit#4 Turbine Box up	Jun11 Jul11 Sep11 Oct11	Completed Completed Completed Completed	04/11 (A) 04/11 (A) 09/11 (A) 09/11 (A)
10	Tapovan-Vishnugad	Addition of 520 MW of generation capacity	643.99	229.18	Completion of 1 km HRT lining excluding invert Commencement of erection of Turbine (U#1) Completion of Machine hall Raft Concrete structure of GT & GIS Floor	Jan12 Jan12 Feb12	Completed Completed	Dec11 (A) 10/11 (A) 07/11 (A)
11	Lohari Nagpala	Addition of 600 MW of generation capacity	245.79	1.96	Work under suspension.As per GOI Orders.			
	Sub Total (i)		13525.74	6939.50				

	New Projects							
1	Singrauli III , U.P	Additon of 500 MW of generation Capacity	124.48		Commencement of foundation U8 Commencement of Boiler erection U8	08/11 03/12	These milestone were linked to issue of Main Plant LOA which is now likely in FY 2012-13 delayed due to Moratorium from MOEF.	
2	Solapur , Maharashtra	Additon of 1320 MW of generation Capacity	459.13	69.71	Commencement of foundation U1 Commencement of Boiler erection U1	06/11 03/12	These milestone were linked to issue of Main Plant LOA. Matter Subjudice. Main Plant LOA now likely in 4th Qtr FY 2011-12	
3	Mauda II , Maharashtra	Additon of 1320 MW of generation Capacity	453.08	20.23	Commencement of foundation U1 Commencement of Boiler erection U1	06/11 03/12	These milestone were linked to issue of Main Plant LOA. Matter Subjudice. Plant LOA now likely in 4th Qtr FY 2011-12	
4	RGCCPP-II Phase -I , Kerala *	Additon of 1050 MW generation Capacity	364.85		Commencemnet of HRSG Foundation TH/CR Civil & Structural works Start Commencemnet of GT/ STG Foundation	01/12 01/12 02/12	These milestones were linked to issue of Main Plant LOA in 1st Quarter 2011-12 which is subject to PPA signing by Beneficiaries, which is further dependent upon domestic gas allocation sought by NTPC and still awaited.	
5	Darlipalli , Orissa	Additon of 1600 MW of generation Capacity	625.03	27.25	Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs and required clearance.	
6	Kudgi , Karnataka	Additon of 2400 MW of generation Capacity	731.35	157.65	Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs and required clearance.	
7	Gajmara , Orissa	Additon of 1600 MW of generation Capacity	625.03		Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs and required clerances.	

8	Lara , Chattisgarh	Additon of 1600 MW of generation Capacity	625.03	41.74	Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs and required clearance.	
9	Tanda II , U.P	Additon of 1320 MW generation Capacity	421.18	0.12	Main Plant Package Award	2011-12	Pending land acquisition, award likely in FY 2012-13.	
10	Vindhyachal V, M.P	Additon of 500 MW generation Capacity	156.22		Main Plant Package Award	2011-12	Award likely in FY 2011-12	
11	Kawas II , Gujarat	Additon of 1300 MW of generation Capacity	416.23		Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs particularly gas linkage	
12	Gandhar II , Gujarat	Additon of 1300MW of generation Capacity	416.23		Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs particularly gas linkage	
13	Badarpur CCPP - III	Additon of 1050 MW of generation Capacity	312.10		Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs and required clearance.	
14	Guledagudda Wind Power Project	Additon of 100 MW of generation Capacity	250.00		Main Plant Package Award	2011-12	FR approved. Forest land involved. Award now likely in 2013-14 after forest clearance	
15	Barethi, Bundlkhand , M.P.	Additon of 3960 MW of generation Capacity	1041.25	69.63	Main Plant Package Award	2011-12	This milestone is linked to aviilability of tie up of all inputs and required clearance. Now anticipated in FY 2012-13	

16	Wind Energy Project & other renewables	Additon of 75 MW of generation Capacity	300.00		Land acquisition and transfer of lease, etc Commencemnet of Civil & Infrastrucral Works Erection of Towers	07/11 08/11 01/12	These milestones were linked to issue of Main Plant LOA in 2010-11, tender however has been annulled.	
	Other New Projects		174.07	51.31				
	Sub-Total (ii)		7495.26	437.64				
iii	Coal Mining		864.38	195.27				
iv	Renovation & Modernization Schemes		646.63	49.83				
v	Other Misc. Schemes		3867.99	1085.96				
	Sub Total (iii+iv+v)		5379.00	1331.06				
	Total	26400.00	8708.20					

NHPC LIMITED

Achievements upto 31.12.2011

(₹ in crore)

1	2	3	4		5		6	7	8 Achievement 3rd Quarter(31.12.2011)		
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Annual Plan 2011-12 Proposed		Quantifiable deliverables / Physical Output Physical Activity	Targets	Projected Outcomes	Process/ Timelines	Remarks/ Risk factors Financial	Physical unit/	Remark
			Sub Debt	IEBR							
A	Commissioned Schemes										
1	Dhauliganga-I			-	Settlement of pending liabilities.	-	Project completed in Oct/Nov,2005	Mar.12	-	-	
2	Dulhasti	Addition of 390 MW capacity		27	Settlement of pending liabilities.	-	Project completed in March 2007	Mar.12	-	2.11 crs.	
3	Teesta-V HE Project			-	Settlement of pending liabilities.	-	Project completed in March 2008	Mar.12	-		
4	Sewa-II	Addition of 120 MW capacity		30			Project completed in Jul 2010	Mar.12		2.04 crs.	
B Scheme Under Construction											
1	Uri-II HE	Addition of 240 MW capacity		251	Erection, testing & commissioning of Radial Gates Erection, testing & commissioning of Surge Shaft Gates Erection, testing & commissioning of Draft Tube Gates	34% 100% 100%	Anticipated project completion date Dec12011 (considering compression programme of HM works)	Juni2011 Aug12011 Aug12011	All out efforts are being made to commission 1st unit by Feb12, unit 2&3 by March12 and unit 4 by	30% 95% 55%	Completed in Jul11 Anticipated completion in Jan12 Anticipated completion in Jan12

					Diversion Tunnel Plugging	100%	with the	Augi2011	April12.	20%	Anticipated completion in Febi12
					Precommissioning, Testing & Commissioning of Unit 1	100%	assumption that	Octi2011		0%	Anticipated completion in Febi12
					Precommissioning, Testing & Commissioning of Unit 2	100%	Law and	Novi2011		0%	Anticipated completion in Marchi12
					Boxing up, Precommissioning, Testing & Commissioning of Unit 3	100%	order situation	Novi2011		80%	Boxing up completed in Augi11. Anticipated completion in Marchi12
					Boxing up, Precommissioning, Testing & Commissioning of Unit 4	100%	in Kashmir Valley will remain normal)	Novi2011		53%	Stator lowered in Mayi11. Boxing up is in progress. Anticipated completion in Apr12
2	Chamera-III	Addition of 231 MW capacity		135	Erection & Commissioning of Radial Gates	12%	Anticipated Commissioning of Project by Aug.i11	Apr.i11	Now Anticipated project completion date Mar12	100%	Radial Gates were made operation in Jun.i11
					Diversion Tunnel Plugging	100%		May.i11		0%	DT gates lowered on 23.06.2011 but due to leakage at DT inlet, plugging could not be started at that time , now in progress. HRT filling was started on 05.12.2011.
					Filling of Water Conductor System	100%		Jul.i11		50%	
					Testing & Commissioning of all three units	100%			Augi11	0%	Pre-Commissioning of all three units completed.
3	Nimoo Bazgo	Addition of 45 MW capacity	121	17	Erection of Intake gates	100%	Anticipated project completion date Septi11	Apr.i11	Now Anticipated project completion date Jan,13	100%	Completed on Nov11.
					Erection of Draft tube gates	100%		Mayi11		100%	Completed .
					Concreting of left side non overflow blocks	100%		Aug.i11		25%	Anticipated by Jun,12
					Construction of roof of control blocks	100%		Jun11		100%	Completed .
					Completion of 2nd stage River diversion	100%		Octi10		100%	Completed in Oct-11
4	Chutak	Addition of 44 MW capacity	166	25	Water availability	100%	Anticipated project completion date	Junei11	1st unit deemed commissioned,	100%	Reservoir filling Completed in Aug, 11 .

					Erection testing commissioning of unit-1	100%	Aug11	15th July11	2nd & 3rd unit by Mar12 and 4th unit in May12.	100%	Synchronised on 06.06.11
					Erection testing commissioning of unit-2	100%		Jul.11		75%	Anticipated by Jan,12
					Erection testing commissioning of unit-3	100%		15th Aug.11		60%	Anticipated by Feb,12
					Erection testing commissioning of unit-4	100%		Aug11		35%	Anticipated by May12
5	TLDP-III	Addition of 132 MW capacity		207.95	Erection, testing and commissioning of Radial gate in Bay no.III	100%	Anticipated project completion date Dec11 Jun.11	Aug.11	Now Anticipated project completion date Sept,12 24804 cum	90%	Structural erection of radial gates completed.
					Concreting of Barrage in Bays I&II including bridge concreting 5510 Cum						
					Erection, testing and commissioning of Radial gate in Bay no.I & II	100%		Oct.11		0 %	
					Concreting of Cellular wall	2667 Cum		Oct.11		230 cum	
					Unit Axis alignment and box up of Unit-IV	100%		Aug.11		81%	
					Concreting of L/B Guide/ Retaining Wall	7940 Cum		Sep.11		3887 cum	
					Commissioning of all four unit	100%		Dec.11		0 %	
6	TLDP-IV	Addition of 160 MW capacity		352.40	2nd Stage river Diversion	100%	Anticipated project completion date Aug12	Dec.11	Now Anticipated project completion date Mar,13	100%	River diverted through spillway on 31.12.2012 and closing of river completed on 03.01.2012.
					Erection of Spiral Case in all units	29.0%		May. 11		52%	

					Rotor Erection of all units at service bay	100.0%		Dec.11		0%	
					Unit Axis Alignment and Box up in all units	65.8%		Jun.12		0%	
					Erection of all Radial Gates in Spillway	40.0%		Oct.11		37%	
					Erection of all Draft Tube Gates	100%		Feb.12		0%	
					Erection of all Intake Gates	100%		Jan. 12		0%	
					Concreting in Power Dam & Intake structure upto top level and concreting around the penstock	25679 Cum		Aug. 11		5332 cum	
					Concreting in RCC Dam	140000 Cum		Mar. 12		0	
					Concreting in PH	31494 Cum		Aug. 11		8049 cum	
7	Parbati-II	Addition of 800 MW capacity		656	Dam and Inatke Concreting	27920 cum	Anticipated project completion date July14	Mar12	Now Anticipated project completion date Feb16	17241 cum	Commissioning schedule may be adversely affected as contractual problem for TBM face of HRT is yet to be resolved
					HRT Excavation Face-4 by TBM	2000 m		Mar12		5 m	
					HRT Overt Lining Face-1	1290 m		Feb12		605 m	
					HRT Overt Lining Face-2	1440 m		Mar12		720 m	
					Surge shaft Lining	75 m		Mar12		67 m	
					Power House Concreting	23590 cum		Mar12		10267 cum	
8	Parbati-III	Addition of 520 MW capacity		505	Erection, testing & commissioning of Spillway Radial Gates, Stoplog Gates etc.	100%	Anticipated project completion date Deci11	Oct11	Now Anticipated project completion date Jan13	90%	Works at all fronts were stopped by the locals from 01.07.11 to 14.07.11 demanding regular employment in NHPC. Due to flash flood on 16th Aug.11, the Adit-2 to HRT got blocked with debris affecting progress of HRT face-3 and cleaning work took 2 months .
					Completion of HRT 2 & 3 Overt Concrete Lining	2145 m		Aug11		1701 m	
					Completion of steel liner	470 m		Oct11		323 m	

					erection in Pressure Shaft-I & II Generator erection, alignment & box up of Unit-1 Turbine erection of Unit-4	100% 100%		Sep11 Oct11		10% 0 %	
9	Subansiri Lower	Addition of 2000 MW capacity		1244	Dam concreting Intake concreting upto EL 210m Head Race Tunnel - Heading Excavation Surge Tunnel - Heading Excavation Concreting of Power House	300000cum 65,000 cum 400m 2000 m 1,00,000 cum	Anticipated Project Completion Aug,14	Dec.11 Dec.11 Aug.11 Feb.12 Jan.12	Now Anticipated project completion date Dec15	118164 63276 617 25312	-
					Erection of 2no. Intake gates unit 7 and 8	100%		Nov11		20%	
10	Kishanganga	Addition of 330 MW capacity	525	279	HRT Intake - Completion of Surface Excavation Pressure Shaft Adit 3 - underground excavation Surge Shaft - Completion of excavation of Pilot Shaft Spillway - Completion of Left Bank Excavation HRT Excavation by DBM method HRT Excavation by TBM method	10500 cum 375 m 112 m 300000 cum 2700 m 3000 m	Anticipated Project completion date Jan 2016	Novi2011 Marchi2012 Febi2012 Novi2011 Marchi2012 Marchi2012	Now Anticipated project completion date Nov,16.	10500 369 14.8 93840 1869 1047	Completed on 30.10.11 Total 386m cum. Achieved Methodology changed to full face excavation, which is in progress. Work affected due to strike by Labour at Dam site, Gurez w.e.f. 19.07.11 to 01.08.11 and slope stabilisation work. Total cum. 180640 cum achieved. MOU Milestone Excavation of HRT-DBM cum. up to 4.30 km achieved. Delayed due to cavities and poor geology.

C.	New Schemes										
1	Kotli Bhel Stage-1A	Addition of 195 MW capacity		37	Part payment for RR plan and to forest department for NPV, CAT plan etc	100%		Mar.i12		All activities subject to CCEA clearance of Project by Mar.i11. Work Plan will be revised after approval and enhancement of Budget allocation.	Permission for diversion of forest land required for construction of Kotli Bhel Stage-1A HE Project may be accorded and prior approval for diversion of forest land required for construction of Kotli Bhel Stage - IB and Kotlibhel Stage II HE Projects may not be accorded. NHPC vide letter dated 12.08.2011, approached MOEF to reconsider its decision w.r.t Kotlibhl - 1B and Kotlibhel - II Projects. NHPC vide letter dated 17.08.2011 requested MOP to take up the case of reconsideration with MoEF. CEA has been requested to extend the validity of occurrence for another one year vide letter dated 08.09.2011.
2	Kotli Bhel Stage- I B	Addition of 320 MW capacity		37	Part payment for RR plan and to forest department for NPV, CAT plan etc	100%		Mar.i12			
3	Kotli Bhel Stage- II	Addition of 530 MW capacity		53	Part payment for RR plan and to forest department for NPV, CAT plan etc	100%		Mar.i12			
3	Dibang	Addition of 3000 MW capacity		74	Construction of New road double lane between Dam to DT outlet at right bank-Formation cutting Construction of New road from Dam site to Dambuk on right bank-Formation cutting Construction of Pathan Camp colony road-Formation cutting Construction of New double lane road from + 19 Km point to confluence of Dibang &	5Km 5Km 5Km 5Km	Enviornment and forest clearance are being persued and as such the project is poised before CCEA for Govt. sanction. All these activities are subject to the	Mar.i12 Mar.i12 Mar.i12 Mar.i12			Forest proposal has been forwarded by State Govt. to MoEF on 18.08.2011. MoEF vide letter dated 14.09.2011 has requested the Regional Office (North Eastern Zone) to carry out site inspection of the project area and to submit a report to MoEF so that the forest proposal can be discussed in FAC meeting of MoEF.Public hearing is still awaited.

					Ashu pani-Formation cutting Final survey and preparation of alignment track on the approach roads from Dambuk to Dam site and + 16 KM to dam site - 60Km	40Km	Environment and Forest clearance at the earliest	Mar.12			
					Maintenance of G and D site and Establishment expenses etc.	100%		Mar.12			
D.	S&I and Other Schemes										
2	Teesta-IV	Addition of 520 MW capacity		79	Provision for kept for complete land acquisition Approach road to Dam & Power House site Construction of field hostel and office building Establishment and other ongoing investigation works	100% 100% 75% 100%	Achievement is subject to Public hearing and CCEA clearance	Mar.12 Mar.12 Mar.12 Mar.12			SPCB has notified 22.07.2011 as the date of Public hearing. However, the same was postponed till further orders due to boycott of Public Hearing by the project affected people. MOEF vide letter dated 29.06.2011 has requested their Shillong Regional Office to carry out site inspection and submit the report to MOEF.
3	Bursar	Addition of 1020 MW capacity		28	Provision has been kept mainly for establishment Expenses, ancillary works and R&M works.	100%	Further investigation works are held up pending sanction of funds by MoWR/ Planning Commission.	Mar,12			Balance investigation works not yet started due to security reason.CWC vide letter dt. 09.12.2011 intimated that NHPC may start the S & I for preparation of DPR form internal resources and same may be adjusted with the funds released by MOWR. However NHPC Board has already taken a decision that S & I shall be started after the release of funds by Government. In view of the above, MOP is being requested to impress upon MOWR for releasing the funds immediate.
4	Tawnag- I	Addition of 600 MW capacity		63	Post DPR drilling/driftng works Establishment & Preliminary works	Mar,12					MOEF has accorded Environment Clearance to Tawang-II (800 MW) HEP and Tawang-I (600 MW) HEP vide letters dated 10.06.11. CEA has accorded concurrence to Tawang-II HEP (800 MW)

											and Tawang I HEP (600 MW) on 22.09.2011 & 10.10.2011 respectively with Mega Power Status. MOEF vide letter dated 28.11.2011 has requested the Regional office (North Eastern Zone) to carry out site inspection of the project areas of Tawang- I & Tawang- II and to submit the reports to MOEF, so that the forest proposals can be discussed in FAC meeting of MOEF.
5	Tawnag-II	Addition of 800 MW capacity		63	Post DPR drilling/driftng works Establishment & Preliminary works						
E.	Other new schemes	Preparation of FR / DPR of new projects		10							
F.	Schemes under Joint Venture										
1	Loktak Downstream	Addition of 66 MW capacity		1	Establishment & Preliminary works						TEC was obtained by NHPC. Now the same is required to be transferred in favour of Loktak D/s Hydroelectric Power Corporation Ltd. (JVC) as the project is now to be implemented by the JVC.
2	Pakal Dul	Addition of 1000 MW capacity		63	Provision kept for building & communication, maintenance of G&D sites, ancillary works and establishment expenses only.	100%		March12		Other major works will be taken up after CCEA approval for JVC.	The M&AOA of the company has been finalized by the JV partners and company has been registered as M/s Chenab Valley Power Projects Private Limited with the Registrar of Companies on 13.06.2011.
3	Kiru	Addition of 600 MW capacity		17	Provision kept mainly for establishment expenses and some ancillary works only.	100%		March12			
4	Kwar	Addition of 520 MW capacity		17	Provision kept mainly for establishment expenses and some ancillary works only.	100%		March12			

G.	R&M of Power House	Rennovation of Loktak PS (105 MW)		2							
H.	R&D works and CDM			6							
	Total		812	4278							

NEEPCO

Achievements upto 31.12.2011

(₹ in crore)

Sl. No.	Name of the Scheme / Programmes	Objective / Outcome	Outlay 2011-12			Quantifiable Deliverable / Physical Outputs	Projected Outcomes	Process / Timelines	Remarks / Risk Factors	Achievements up to 3 rd Qtr (2011-12)
			Non Plan Budget Rs in Crs.	Plan Budget R in Crs.	Complementary Extra Budgetary Resources in Crs.					
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8	9
1	Kameng HEP (600 MW), A.P.	Generation of Hydro Power	0.00	0.00	350.00	BICHOM GATE:				
						Completion of Erection of Diversion Tunnel Gate.	Completion of Diversion Tunnel	Aug-11	1 st stage embedded component have already reached at site. Process of collection of balance material from Kimi is in progress.	Nil
						BICHOM DAM:				
						Completion of balance excavation in Bichom Dam below Bed level (At Block No.6 to 11) (60000 Cum)	Completion of Bichom Dam excavation	Jan -12	Right bank excavation was started w.e.f. 20.05.2011. Right bank slope protection works in u/s of Dam on RB is in progress. Cumulative Progress up to Dec, 2011 = 583774 Cum.	1 st Qtr. Progress = 14505 Cum 2 nd Qtr. Progress = 27363 Cum 3 rd Qtr Progress = 19882 Cum Total Progress = 61750 Cum
						TENGA DAM:				
						Excavation of Tenga Dam : (20000 Cum)	Completion of Tenga Dam excavation	Mar -12	Progress is slow due to heavy rainfall time to time. Cumulative Progress up to Dec, 2011 = 104850 Cum.	1 st Qtr. Progress = 700 Cum. 2 nd Qtr. Progress = 4420 Cum 3 rd Qtr Progress = 5800 Cum Total Progress = 10920 Cum
						Concreting of Tenga Dam : (25000 Cum)	Completion of Tenga Dam Concreting	Jan -12	Progress is slow due to heavy rainfall time to time. Cumulative Progress up to Dec, 2011 = 6130 Cum	1 st Qtr. Progress = 694 Cum. 2 nd Qtr. Progress = 625 Cum 3 rd Qtr. Progress = 744 Cum Total Progress = 2063 Cum

						HRT				
						Excavation of HRT in Face-II (700 m)	Completion of WCS	Dec -11	Boring in heading and benching method is in progress. Cumulative Progress up to Dec,2011 = 1867.5 Rm	1 st Qtr. Progress = 122.75 Rm2 nd Qtr. Progress=137.25 Rm3 rd Qtr Progress = 167.25Rm Total Progress = 427.25 R m
						Boring of HRT Face-III (From Tenga Dam towards Bichom Dam): (700 m)	Completion of WCS	Dec-11	Progress of tunnel boring was slow mainly due very poor geology. Cumulative Progress up to Dec,2011 = 2675.50 Rm	1 st Qtr. Progress = 46.00 Rm2 nd Qtr. Progress=53 Rm3 rd Qtr Progress = 100.50 Rm Total Progress = 199.50 R m
						Boring of HRT Face-VI (From Tenga Dam towards Surge Shaft): (400 m)	Completion of WCS	Dec-11	Work is in progress.Cumulative Progress up to Dec,2011 = 2237.25 Rm	1 st Qtr. Progress = 123.00 Rm2 nd Qtr. Progress=53 Rm3 rd Qtr Progress = 295.25 Rm Total Progress = 471.25 R m
						HIGH PRESSURE TUNNEL:			.	
						U/G excavation of HPT: (300m)	Completion of Surface Penstock	Sept-11	Progress of U/G excavation hampered mainly due to heavy rain and seepage from adjoining area of pit leads to accumulation of water. Cumulative Progress up to Dec,2011 = 1370.21 Cum	1 st Qtr. Progress = 28.25 Rm2 nd Qtr. Progress=45.5 Rm3 rd Qtr Progress = 70.30 Rm Total Progress = 144.05 Rm
						POWER HOUSE:				
						Concreting of Power House: (Total 12000 cum)	Completion of Power House Concreting	Nov-11	Work is in progress. Cumulative Progress up to Dec,2011 = 27122.41 Cum	1 st Qtr. Progress = 2408 cum2 nd Qtr. Progress=1502 Cum3 rd Qtr Progress = 1983.8 Cum Total Progress = 5893.8 Cum
						INSTALLATION OF DT LINERS AND CONES:				
						For Unit I & Unit II	Completion of Power House	May-11	Installation of DT liners and Cones for U-I ñ 100 % Completed. The cumulative progress up to Sept11 of Unit I & Unit II = 50 %	1 st Qtr. Progress = 50%2 nd Qtr. Progress = Nil 3 rd Qtr Progress = Nil Total Progress = 50 %

						ERECTION OF EOT CRANE:				
						For Service Bay	Completion of Service Bay	Dec-11	ó -	Nil
2	Pare H.E. Project (110 MW), AP.	Generation of Hydro Power	0.00	25.50	144.50	DIVERSION TUNNEL:				
						U/G Excavation (265 m Completion)	Completion of Diversion Tunnel Boring	June-11	The boring of diversion Tunnel from outlet in heading has been completed on 10.12.2011 and boring in benching is in progress. Cumulative Progress up to Dec,2011 = 265 Rm	1 st Qtr. Progress = 73.00 Rm 2 nd Qtr. Progress = 7 Rm 3 rd Qtr Progress = 68 Rm Total Progress = 148 Rm
						Lining (270 m Completion)	Completion of Diversion Tunnel Lining	Aug-11	Lining Work will be started after completion of D/T boring.	Nil
						COFFERDAM:				
						U/S and D/S Cofferdams (Completion)	Completion of Cofferdams	Dec-11	The works will be taken up after completion of diversion tunnel works	Nil
						DAM:				
						Excavation (Cumulative 1.40 L Cum)	Completion of Dam Excavation	Jan-12	Dam excavation work in work is in progress. Cumulative Progress up to Dec,2011 = 97100 Cum	1 st Qtr. Progress = 3750Cum 2 nd Qtr. Progress = 41150 Cum 3 rd Qtr Progress = 40200 Cum Total Progress = 85100 Cum
						Concreting (Cumulative - 30000 Cum)	Completion of Dam Concreting	Feb-12	Concreting works will be taken up after attaining the required foundation level	Nil
						HEAD RACE TUNNEL (HRT) BORING:				
						Excavation (Boring) of HRT (Cumulative 1200 m)	Completion of WCS	Nov-11	Due to very poor geology, a cavity has formed on 18.06. 2011, restoration work is in progress. Again collapsed on 27.08.11 and huge loose fall occurred and as a result of which erected ribs in the restored zone has been twisted. As advised by the consultant, restoration work	1 st Qtr. Progress = 214.75Rm 2 nd Qtr. Progress = 203 Rm 3 rd Qtr Progress = 261 Rm Total Progress = 678.75 Rm

									will be done by pipe roofing method. Arrangement for the restoration work is in progress. Cumulative Progress up to Dec,2011 = 1074.50 Rm	
						SURGE SHAFT:				
						Boring of Surge Shaft (Cumulative -58 m Completion)	Completion of Surge Shaft	Jan-12	Boring work has been started on 02.02.2011 and work is in progress. Cumulative Progress up to Dec, 2011 = 40 Rm	1 st Qtr. Progress = 6.50 Rm 2 nd Qtr. Progress = 11.5 Rm 3 rd Qtr. Progress = 17.5 Rm Total Progress = 32.5 Rm
						POWER HOUSE:				
						Service Bay Column Concreting upto EOT	Completion of Power House	Jul-11	Work is in progress	Nil
						Machine Hall Column Concreting upto EOT	Completion of Power House	Oct-11	Work is in progress	Nil
3	Tripura Gas Based Power Project (101 MW)	Generation of Thermal Power	0.00	0.00	288.00	Piling Works - all fronts	Completion of Piling works	Sept-11	Boring and casting of piles are in progress. The cumulative progress is 157 Nos.	1 st Qtr. Progress = 0.002 nd Qtr. Progress = 0.003 rd Qtr. Progress = 157 Nos. Total Progress = 157 Nos
						Foundation Works - Gas Turbine 50% completion	Completion of foundation works	Jan-12	Will be taken up after piling activity	Nil
						Foundation Works - HRSG & Stack (40% completion)	Completion of foundation works	Feb-12	Will be taken up after piling activity	Nil
						Foundation Works - STG (40% completion)	Completion of foundation works	Mar-12	Will be taken up after piling activity	Nil
						Despatch of GT from BHEL Work	Completion of Despatch of GT Work	Mar-12	Manufacturing work is in progress at BHEL shop	Nil
						Despatch of Generator Stator from BHEL	Completion of Despatch of Generator Stator	Feb-12	Manufacturing work is in progress at BHEL shop	Nil
						Award of Raw Water System	Award of Works	May-11	Work has been awarded to M/s Gammon- Technofab Consortium New Delhi on 29.06.2011	1 st Qtr. Progress = 100% 2 nd Qtr. Progress = Nil 3 rd Qtr. Progress = Nil Total Progress = 100 %

4	Tuirial HEP (60 MW), Mizoram	Generation of Hydro Power		62.00	103.00 (This amount does not include the DONER grant amounting to 100 Crs. which has already been sanctioned by the CCEA)	Tunnel Boring (Cumulative - 1550 Rm Completion)	Completion of Tunnel Boring works	Mar-11	Work is in progressThe cumulative progress is 25 Rm	1 st Qtr. Progress = Nil 2 nd Qtr. Progress = Nil 3 rd Qtr. Progress = 12 Rm Total Progress = 12 Rm
5	Agartala Gas Turbine Plant - CC Extension Project (52 MW)	Generation of Thermal Power	0.00	0.00	20.00	Award of EPC contract for main plant equipment	Award of Main Plant works	Mar-12	Detailed Work Order for Consultancy Services for preparation of Technical Specification for Engineering, Procurement and Construction Contract for Main Plant and Equipment Package-I was issued to M/s Development Consultants Pvt. Ltd., Kolkata on 01.06.11	1 st Qtr. Progress = Nil 2 nd Qtr. Progress = Nil 3 rd Qtr. Progress = Nil Total Progress = 100 %
6	Garo Hills Coal Based Power Project (500 MW), Meghalaya	Generation of Thermal Power	0.00	0.00	5.00	Completion of EIA / EMP Studies	Completion of EIA/ EMP studies.	Mar-12	A JVC was proposed with participation by M/S Mineral Exploration Corporation Limited (MECL), Nagpur (a Government of India Undertaking), Meghalaya Mineral Development Corporation (MMDC) Geology & Mining Department, Government of Meghalaya, and NEEPCO regarding the long term Coal Linkage for the project.A series of meetings was held between, MECL, Nagpur, MMDC, and NEEPCO regarding Coal Linkage for the project on Joint Venture mode. However, MECL, Nagpur, vide letter dated May 2011, shown their interest on Detailed Exploration activities only and not on Joint Venture.It is now proposed to float an Expression of Interest (EOI) for Coal Linkage for the Project from prospective party having experiences in Coal Linkage.	Nil

									Necessary Tender Document is under preparation.	
7	West Khasi Hills Coal Based Thermal Power Project (240 MW), Meghalaya	Generation of Thermal Power	0.00	0.00	0.05	Land acquisition survey, preliminary investigation, EIA/EMP studies etc.(40% completion)	Completion of Land acquisition survey, preliminary investigation, EIA/EMP studies etc.	Mar-11	MoA not yet concluded	Nil
8	Survey and Investigation	Preparation of DPR etc.	0.00	0.00	8.50	Survey & Investigation works of the S&I schemes (All associated S & I works including observation of HM data).	All associated S & I works including observation of HM data.	Mar-12	ó -	Nil
						Lungreng HEP (815 MW), Mizoram	Preliminary investigation	Mar-12	MOA signed with the Govt. of Mizoram on 26th Marí 2010. As per the PFR prepared by WAPCOS, Lungreng HE Project is proposed across River Tiau, forming the international boundary between India and Myanmar. As the project involves trans-order issue, NEEPCO requested Ministry of External Affairs, GOI on 24.02.2011 for issue of necessary clearance to take up detail investigation for DPR preparation of the project. No response has so far received.	Nil
						Chhimtuipui HEP (635 MW), Mizoram	Preliminary investigation	Mar-12	Govt. of Mizoram on 26th Marí 2010. As per the PFR prepared by WAPCOS, Chhimtuipui HE Project is proposed across River Chhimtuipui forming the international boundary between India and Myanmar. As the project involves trans-order issue, NEEPCO requested Ministry of External Affairs, GOI on 24.02.2011 for issue of necessary clearance to take up detail investigation for DPR preparation of the project. No response has so far received.	Nil

						Mat HEP (76 MW), Mizoram	Preliminary investigation	Mar-12	MOA signed with the Govt. of Mizoram on 26th Mar 2010. The chief secretary vide letter dated 06.06.2011 requested the chairman, CWC to consider transferring the remaining investigation work along with the balance NECs fund to NEEPCO in order to expedite and hasten the progress in this manner.	Nil
						Mawphu HEP Stage-II (85 MW), Meghalaya	Preparation of PFR	Mar-12	Though the project is finalised to be awarded to NEEPCO upon which MOP, GOI has also accorded approval; the MoA is yet to be concluded.	Nil
9	Renovation & Modernisation of Kopili Power Station	Renovation & Modernisation	0.00	0.00	30.72	Renovation & Modernisation (70%)	Renovation & Modernisation	Mar-12	The order for Turbine & Generator Equipment under Phase-I R&M (Estimated Cost Rsë 35.21 Crs) was placed in Feb 11 and the delivery period of the items is 16 ñ 20 months. As such, no expenditure shall be incurred during the current FY against Phase-I R&M since the equipment are under manufacture. The Phase-II R&M Works have been approved by BOD in its meeting dated 21/06/11 at estimated cost of Rsë 15.01 Crs. In view of above an amount of Rsë 7 Crs is proposed as RE against BE of Rsë 30.72 Crs for the year.	Nil
		Total	0.00	87.5	949.77					
		G. Total	1037.27							

THDC India Ltd.

Achievements upto 31.12.2011

(₹ in crore)

[illegible]

i) Karmoli (140MW)			i) Survey & Investigation works		-	Subject to Wild Life clearance
ii) Bokang Bailing (330MW)			i) Survey & Investigation works		-	Subject to drilling/driftin permission from MOEF
iii) Jadhganga (50MW)			i) Survey & Investigation works		-	Subject to Wild Life clearance
iv) Malari Jhelam (55MW)			i) Preperation of DPR		DPR under preparation	Needs dilution of 1KM free flow stretch between two projects condition imposed by MOEF.
v) Jhelam Tamak (60 MW)			i) Preperation of DPR		DPR completed, TEC under progress.	
vi) Sankosh Multi Purose Project (4060 MW)			i) Updation of DPR	Marchi11	Achieved in Mayi11	
vii) Bunakha HEP (180 MW)			i) Updation of DPR	Marchi11	Achieved in Augi11	
viii) Malshej Ghat PSS (600 MW) & Humbarli PSS (400 MW)			i) updation of DPR of Humbarli		-	Subject to Wild Life clearance
Grand Total*		552.22				

SJVN Limited
Achievements upto 31.12.2011

(₹ in crore)

Sl. No.	Name of Scheme / Programme/ Project	Objective / Outcome	Outlay 2011-12 (Rs in crores)			Quantifiable Deliverables/physical outputs	Projected Outcomes	Process/ Timelines	Achievement upto December 31, 2011/ Comments	Remarks/ Risk Factor
			Non Plan Budget	Plan Budget	Complementary Extra Budget					
1	Nathpa Jhakri Hydro Electric Project	Balance works/ payments of 1500 MW Hydro Power Station (Project commissioned on May 18, 2004)		5.86/1.06 72.52/8.48 0.39/2.80		Major Civil Works (Process primarily comprises following) Balance other works Electro-Mechanical Works Infrastructural Works	Settlement of all pending Claims of NJHPS	March, 2012 March, 2012 March, 2012	Generation of 6910.703 MUs achieved till December 31, 2011 against MOU target 6234 MUs, which is well in line with the set targets. Payments for balance claims are being made as and when claims get settled.	
		Sub-Total		78.77/12.34						
2	Rampur Hydro Electric Project (412 MW)	Construction of RHEP		195/189.29		Major Civil Works (Process primarily comprises following) Overt lining of HRT Kazo U/S (2100 m. Cumm) Overt lining of HRT Kunni D/S and Kasholi U/S (2750 m Cumm) (2100 m. Cumm) Heading Excavation of HRT Kasholi D/S (1125 m Cumm) Heading Excavation of HRT Goshai U/S (1725 m Cumm) Overt lining of HRTGoshai D/S (950 m. Cumm) Completion of Heading Excavation of HRT Bayal U/S Benching Excavation of HRT Bayal U/S (1200 mtr. Cumm) Lining of S/Shaft (90 mtr.)	A total of 73 % expenditure on Rampur Hydro Electric Project against the aproved cost of 2047.03 crores.	March , 2012 March , 2012 March , 2012 March , 2012 March , 2012 January, 2012 March , 2012 March , 2012	1452m complete. 480 m complete. 1094 m complete. 1417m complete. 772m complete. Complete on 21.07.11 1104m complete. Lining work 91.4m completed, furrther work is in progress.	
				127.88/36.12		Electro-Mechanical Packages(Process primarily comprises following) Erection of Draft Tube of 3 rd Unit Erection of Stay Ring & Spiral Casing of 2 nd Unit		March , 2011 August, 2011 February,2012	Complete on 02.04.11 Erection of Spiral Casing	

						Erection of Draft Tube of 4 th Unit Erection of Draft Tube of 5 th Unit Erection of Draft Tube of 6 th Unit		October, 2011 November, 2011 January, 2012	is in progress. Further work held up due to non availability of Mobile crane. Complete on 13.04.11 Complete on 10.07.11 Complete on 29.10.11.	
				32.69/11.38		Infrastructural Works (Process primarily comprises R&R expenses and buildings)		Continuous process	Under process	
				17.26/19.77		Interest During Construction		Continuous process	Continuous process.	
				56.85/78.42		IEDC		Continuous process	Continuous process.	
		Sub-Total		429.68/334.98						
3	Luhri Hydro Electric Project (775 MW)	Construction of LHEP		184.55/1.80		Acquisition of private and forest land	Diversion of forest land and acquisition of private and commencement of preconstruction activities	Running payments upto March, 2012	Regarding diversion of forest land GoHP recommended and forwarded the case to MOEF, GOI on 04.04.11, who directed Regional Office for conducting site inspection. The site was inspected and case has been forwarded to MoEF, Gol on 25.11.11. Out of 27 land acquisition cases in the three districts namely, Shimla, Kullu and Mandi, 26 cases have been notified under Section IX & X. 24 cases sent to District Collector for approval of Market Value out of which for 04 cases Approval of Market value received from District Collector.	
						Construction of various infrastructural works such as approach roads, bridges to various		Running payments	An advance of Rs. 50 lac has been released to	

						Project components and Construction of Residential and non-residential buildings		upto March, 2012	HPPWD on 21.10.11 for initiating the land acquisition process, EIA/EMP and SIA studies.	
				15.63/16.52		IEDC		Continuous process	Continuous process	
		Sub-Total		200.18/18.32						
4	Dhulasidh HEP (66 MW)	Construction of DSHEP		15.67/1.68		Land Acquisition	Land acquisition and development of infrastructure	March, 2012	Notifications under section - IV of Land Acquisition Act prepared and forwarded to Secretary MPP & Power, GoHP on 22.11.11 for publication. Notification under section - IV for 23 villages issued by GoHP on 24.12.11.	
						Development of Infrastructure mainly comprising of approach roads and bridges and Residential and non-residential buildings.		Running payments upto March, 2012	Public notice for land for infrastructure works advertised in the newspapers on 06.07.11. Five bids were received. Bids opened on 30.08.11. Technical evaluation by committee is in progress.	
						Prequalification of bidders for main works		August, 2012	Completed.	
				5.75/4.79		IEDC		Continuous process	Continuous process	
		Sub-Total		21.42/6.47						
5	Devsari HEP (252 MW)	Construction of DHEP		91.18/1.15		Acquisition of private and forest land	Land acquisition and development of infrastructure	Running payments upto February, 2012	Regarding acquisition of private land, all the 16 cases have now been submitted by SLAO to Secretary (Energy), GoUK for Section 6 notification. Additional information on PAFs sought by the energy Deptt. has been forwarded	

		Sub-Total		38.41/4.61						
7	Jakhol Sankari HEP (51MW)	Construction of JSHEP		1.94/0.00		Survey Investigation and DPR preparation	Land acquisition and development of infrastructure	Running payments upto March, 2012	Drilling work completed and drifting work is in progress. The revised DPR submitted to GoUK on 29.12.2011.	
				0.8/0.00		Cost of land to be acquired and other related expenditure		Running payments upto March, 2012	Field work such as details of land verification, type of trees and their value diameter etc. completed.	
				0.85/0.44		Construction of various infrastructural works such as Residential and non-residential buildings, roads and bridges etc.		Running payments upto March, 2012	Shall be taken up after land acquisition.	
				5.71/0.09		IEDC		Continuous process	Continuous process	
		Sub-Total		9.30/0.53						
8	Arun-IIIHEP (900 MW)	Construction of Arun-III HEP		37.83/0.74		Preparation of Detailed Project Report	Development of infrastructure	September, 2011	Final DPR submitted to CA on 31.03.2011. Replies to the observations on the various aspect are being made.	
						Development of Infrastructure mainly comprising of roads and bridges, Residential and non-residential buildings.		Running payments upto March, 2012	Tender for construction of Access roads (approx. 28.69 km) has been invited. Pre bid meeting held on 09.06.11. Bids opened on 26.07.11.	
				7.54/4.67		IEDC		Continuous process	Continuous process	
		Sub-Total		45.37/5.41						
9	Wangchhu HEP (570 MW)	DPR preparation of Wangchu HEP		4.79/4.82		Survey Investigation, DPR preparation and necessary infrastructural development	DPR preparation and necessary	Running payments upto March, 2012	DPR prepared and submitted to CEA and RGoB.	

							infrastructure development			
				1.95/0.00		IEDC		Continuous process	Continuous process	
		Sub Total		6.74/4.82						
10	Kholongchhu HEP (650 MW)	DPR preparation of Kholongchhu HEP		4.3/5.45		Survey Investigation, DPR preparation and necessary infrastructural development	DPR preparation and necessary infrastructure development	Running payments upto March, 2012	Drilling and drifting work is in progress.Final DPR submitted to CEA and RGoB on 30.06.2011. TEC awaited.EIA and EMP studies final report has been forwarded to RoGB on 31.10.11. The Final report of SES/ SIA study works has been submitted by the Consultant on 23.08.11.	
				1.98/0.00		IEDC		Continuous process		
		Sub-Total		6.28/5.45						
11	50 MW Wind Farm Project	Setting up of 50 MW of Wind Farm		200.00		Consultancy, erection and commissioning	Commence-ment of work on wind farm project	Running payments upto March, 2012	Tender documents and specification finalized.	
		Sub-Total		200.00						
12	Tipaimukh HEP (1500 MW)	Construction of Tipaimukh HEP		2.00		Towards Equity contribution of SJVN	Equity contribution	Running payments upto March, 2012	Promoters agreement signed on 22/10/2011.	
		Sub-Total		2.00						
	Grand Total of SJVN			1141.72/397.87						

An expenditure of Rs. 397.87 crores has been incurred till December 31, 2011, against total budget estimate of Rs. 1141.72 crores for 2011-12.
Approved outlay of Rs. 1141.72 is inclusive of Government of H.P. Equity contribution of Rs. 8.59 Crores.

Power Grid Corporation of India Limited
Achievement upto 31.12.2011

(₹ in crore)

Sl. No.	Name of Projects / Schemes	B.E. (11-12)	Objective / Outcomes	Physical Outputs / Quantifiable Deliverables for the year (11-12)		Process/ Timeli-ness	Projected Outcomes	Remarks/ Status/ Risk Factors	Physical Outputs/ Quantifiable Deliverables achieved during 3rd Qtr.		Remarks
				CKM	Trans-former Erection		Date of Compln. of Projects		CKM	Trans-former Erection	
1	2	3	4	5(i)	5(ii)	6(i)	6(ii)	6(iii)	7(i)	7(ii)	8
	A. ONGOING SCHEMES										
1	DVC& Naithin RB- Common scheme for 765kV pooling stations and network for NR (Common for Sasan MPP+NKP+ Maithon/ Koderma/ Mejia / Bokaro/ Raghunathpur/ Durgapur + Import by NR from ER and from NER/ SR/WR via ER) and Common scheme for network for WR (Commo	1161	Power Evacuation	929	8	Mar.12	Aug.12		379	8	400kV D/C Lucknow - Lucknow line (Quad) commissioned in Dec11.
2	Eastern Region System Strengthening-I (ERSS-I)	117	Grid Strengthening	20	0	Jun.11	Jun.11	400 KV D/C Durgapur - Jamshedpur Line:- ECL is not allowing construction on the diverted route, diverted to allow setting up of Andar Airport. Powergrid is making ready a portion (19 Km) to provide connectivity for LILO at Durgapur Steel TPS.	66		Work done during Qtr-I & II includes slippage of previous year. Works continues to be affected due to severe RoW issues in Jharkhand. For Durgapur-Jamshedpur ECL is not allowing construction of line on diverted route due to setting up of Andar airport. POWERGRID is now planning to short-terminate the line at Durgapur Steel TPS (Andar). Completion now expected by Mar12. 400KV D/C Baripada - Mendhasal line commissioned in Aug11.

3	Eastern Region System Strengthening-II (ERSS-II)	12	Grid Strengthening	0		Dec.i10	Dec.i10		6		Completion expected by Jani12.
4	Eastern Region System Strengthening-III (ERSS-III)[LILO of Meramundali - Jeypore at Bolangir]	418	Grid Strengthening	0	0	Mar.12	Nov.12				Preliminary works under progress. Project completion may slip beyond Nov12 due to delay in acquisition of land in Jharkhand (Daltonganj, Chaibasa) & Odisha (Uttara) as a result of which work packages are being re tendered.
5	ER-I RHQ office & township	2	Infrastracure Developments								Work under progress
6	Indian Bangladesh (India Portion)	51	Power Evacuation	0	0	Mar.12	Oct.12	Award placed in Deci10. Land for construction of Bahrapur S/S is yet to be acquired.			Project completion likely to be delayed due to delay in acquisition of land for Bahrapur Switching Station
7	Immediate evacuation system for Nabinagar TPS	29	Power Evacuation	179	0	Mar.12	Jun.12		47		Efforts being made to complete the line earlier to provide startup power to Gen. project.
8	Transmisison system for development of pooling Stations in Northern part of West Bengal and Transfer of power from Bhutan	32	Power Evacuation	0	0	Mar.12	Jan.15				Land acquisition for Aliporduar HVDC Station getting delayed. Outlay for preparatory works considered to be taken up after land acquisition.
9	Transmission System for Farakka Stage-III	12	Power Evacuation	0	0	Jun.11	Jun.11		84		Line completed & test charged in Augi11 (Delayed due to ROW problems.)
10	Transmission system for Phase I generation Projects in Orissa -Part A	483	Power Evacuation	0	0	Mar.12	Mar.i13				Preliminary works under progress.
11	Transmission System for Start up power to DVC & Maithon RB Projects	14	Power Evacuation	0	0	Feb.i11	Feb.i11		7		Project completed in Mayi11 matching with Generation project requirement.
12	Strengthening of East West Transmission Corridor	11	Grid Strengthening	0	0	Dec.i10	Dec.i10		10		Project completed in Juni11. (Delayed due to ROW problem.)
13	Tranmission System for BARH	259	Power Evacuation	0	0	Mar.i11	Mar.i11	Transmision system completed except for Pole-II at Balia & Bhiwadi Converter Station. Barh Gen. ant. by Dec.12			Generation project now anticipated by Deci13. All elements completed except Pole - II. Completion expected by Juni12 (Affected due to supply of converter transformer by BHEL.)

14	Transmission System associated with Rihand-III & Vindhyachal-IV	1652	Power Evacuation	160	0	Mar.12	Nov.12		15	0	Project under progress. Project completion may slip beyond Nov12 due to delay in possession of land due to encroachment.
15	Transmission System for transfer of power from different projects from Sikkim to NR/WR (part-A)	45	Power Evacuation	0	0	Mar.12	Jan.13				Project completion may slip beyond Jan13 due to delay in acquisition of land for Kishenganj S/S.
16	North East - NR/WR Inter-connector (Subansiri & Kameng)	1488	Power Evacuation	795	1	Mar.12	Aug.13	Lower Subansiri Generation projects (NHPC) and Kameng HEP delayed. Lower subansiri ant. by Dec.13. There is no commitment for Kameng HEP by NEEPCO as against earlier commitment of Dec.12. AC Transmission system shall be idle for prolonged period.	78		Completion likely to be delayed due to delay in Generation project & matching with readiness of HVDC terminal station.
17	Substation Works of Transmission system associated with Pallatana & Bongaigaon	410	Power Evacuation	353	2	Mar.12	Dec.12		28		Project under progress.
19	Augmentation of 220/132 kV Transformation Capacity at Raebareli (POWERGRID) by 1*100 MVA Transformer	6	Grid Strengthening	0	1	Feb.12	Feb.12			1	Project completed in Sep11 ahead of schedule.
21	Establishment of 400/220 kV GIS Pooling Station Near CHAMERA-II	44	Power Evacuation	0	0	Mar.11	Mar.11	Generation Projects delayed and now anticipated by Aug11		1	Commissioned in Oct11. (Completion delayed due to matching with Gen. Project)
22	Northern Region System Strengthening-VII(NRSS-VII)	3	Grid Strengthening	0	0	Mar.11	Mar.11				Project completed in Mar.11.
23	Northern Region System Strengthening-IX(NRSS-IX)	19	Grid Strengthening	0	0	Oct.10	Oct.10				Project completed in Oct10.
24	Northern Region System Strengthening-X(NRSS-X)	21	Grid Strengthening	0	0	Oct.10	Oct.10	Completed. Budget kept for balance works & final payment.			Project completed in Oct10.
25	Northern Region System Strengthening-XI(NRSS-XI)	7	Grid Strengthening	0	0	Oct.10	Oct.10	Completed. Budget kept for balance works & final payment.			Project completed in Oct10.
26	Northern Region System Strengthening-XII(NRSS-XII)	18	Grid Strengthening	0	0	Oct.10	Oct.10	Completed. Budget kept for balance works & final payment.			Project completed in Oct10.
27	Northern Region System Strengthening-XIII(NRSS-XIII)	71	Grid Strengthening	38	1	Nov.11	Nov.11		5		Project under progress. Project delayed due to ROW problem encountered in Gurgaon area.

28	Northern Region System Strengthening-XIV(NRSS-XIV)	16	Grid Strengthening	22	2	Aug.11	Aug.11		14	1	Project completed in Aug11. (1 no. transformer & difference in stringing already completed in previous FY 10-11)
29	Northern Region System Strengthening-XV(NRSS-XV)	107	Grid Strengthening	220	1	Nov.11	Nov.11		199	1	Completion delayed beyond Nov11 due to delay in acquisition of land in Kotputli S/S.(Acquired in Nov11.) 400kV D/C Neemarana - Bhiwadi line commissioned in Dec11.
30	Northern Region System Strengthening-XVI(NRSS-XVI)	93	Grid Strengthening	0	0	Mar.12	July.13				Preliminary works under progress.
31	Northern Region System Strengthening-XVII(NRSS-XVII)	43	Grid Strengthening	230	0	Aug.11	Aug.11		222		Completion likely delayed (anticipated Feb12) due to delay in land acquisition of Neemarana S/S.
32	Northern Region System Strengthening-XVIII(NRSS-XVIII)	113	Grid Strengthening	30	0	Nov.11	Nov.11		6		Completion delayed due to delay in land acquisition of Dehradun S/S. Transmission line works slowed down for matching completion.
33	Northern Region System Strengthening-XIX(NRSS-XIX)	120	Grid Strengthening	25	0	Feb.12	Feb.12				Preliminary works under progress. Completion likely to be delayed beyond Feb12 due to delay in acquisition of land at Bagpat S/S.
34	Northern Region System Strengthening-XX(NRSS-XX)	11	Grid Strengthening	0	0	Mar.12	Jan.13				Completion likely delayed due to land acquisition problem at Hamirpur S/S (yet to be acquired.).
35	Northern Region System Strengthening-XXI(NRSS-XXI)	524	Grid Strengthening	20	0	Mar.12	Apr.13				Preliminary works under progress.
36	Northern Region System Strengthening-XXIII(NRSS-XXIII)	36	Grid Strengthening	0	2	Dec.11	Dec.11			1	Completion anticipated by Feb12 (Transformer received in Dec11.)
37	Northern Region Transmission System Strengthening	374	Grid Strengthening	55	1	Mar.12	Nov.12		15		Works under progress.
38	NRSS 765kV for NCR and around Part-I	202	Grid Strengthening	345	0	Feb.12	Feb.12	Transmission lines transversed around the NCR area. Progress slow due to RoW problems & project likely to be delayed.	193		Completion likely delayed due to land acquisition for Agra S/S (acquired in Jun11).

39	NRSS 765kV for NCR and around Part-II	281	Grid Strengthening	0	3	Jan.12	Jan.12				Preliminary works under progress.
40	NRSS 765kV for NCR and around Part-III	409	Grid Strengthening	225	0	Mar.12	May.12		41		Completion likely delayed due to land acquisition problem.
41	Supplementary Transmission System associated with DVC & Maithon RB	266	Power Evacuation	809	2	Mar.12	Aug.12		447	3	400KV D/C Ranchi - Maithon line commissioned in Dec11. Fatehpur sub station with ICTs (2x315) commissioned in Dec11 alongwith associated 400KV & 220KV LILo lines. 1*315MVA transformer at 765/400kV Gaya S/s Ext
42	System Strengthening for Sasan Munda in Northern region	360	Grid Strengthening	200	1	Mar.12	Aug.12		85		Works under progress.
43	Transmission System Associated with Koteswar HEP	31	Power Evacuation	0	0	Feb.11	Feb.11		2		Project (except FSC) completed in Jun11. FSC anticipated by Mar12.
44	Transmission System for Karcham Wangtoo & System Beyond Abdullapur	19	Power Evacuation	0	0	Sept.11	Sept.11				Project (excluding JV portion) completed in Mar11 ahead of schedule.
45	Transmission System for Koldam H.E.P.(Powergrid)	13	Power Evacuation	0	0	Mar.12	Dec.12	Line completed in Mar.10. Transmission system is idle due to delay in Generation project which is now ant. in third quarter of 2011-12.			POWERGRID portion completed.
46	Transmission System for Parbati-III	60	Power Evacuation	19	0	Jun.11	Jun.11	Generation project delayed & now ant. by Dec11.	23		Generation project anticipated by Mar12. Forest case (HP portion) forward to MOEF N. Delhi in Jun10. 09 locations in Mandi Div. are falling under Nargo Wildlife Centuray, case for delimitation of which is pending is Hible Supreme Court since more than 12 months. Matter highly critical as Gen. in expected by Mar12. Hearing done in 5th Aug11 & next hearing awaited. Joint inspection by RMOEF completed in Dec11. Forwarding of case to MOEF New Delhi being expedited.
47	Transmission System for Rampur	29	Power Evacuation	207	0	Nov.11	Nov.11	Generation project delayed & now ant. Sep13.	186		Generation project anticipated in Sep13. All elements except

											immediate evacuation line completed in Sep11.
48	Transmission System for URI-II	17	Power Evacuation	24	0	Oct.11	Oct.11	Generation project delayed & now ant. by Sep.11.	47		Project completed in Dec11 (completion delayed due to ROW problem)
49	TS for evacuation of CHAMERA-III HEP	33	Power Evacuation	0	0	July.11	July.11	Generation project delayed & now ant. by Aug11.	38		All elements except Chamera-Jalandhar completed progressively by Aug11 (awaiting readiness of bays at Chamera end for commissioning) Implementation of Chamera-Jalandhar line.affected due to forest clearance (Stage-I compliance submitted in Mar11 however final clearance still awaited.)
50	Fibre optic communication system in lieu of existing ULDC microwave links	50	Communication	0	0						Project under implementation.
51	Power Grid Equity (Karcham Wangtoo Transmission Project)	5	POWERGRID Equity	0	0						Project under implementation.
52	Power Grid Equity (Teesta Urja Ltd.)	20	POWERGRID Equity	0	0						Project under implementation.
54	Power Grid Equity (Parbati-II& Koldam)	32	POWERGRID Equity	0	0						Project under implementation.
55	II nd Spare Converter Transformer for Talcher Kolar	4	Grid Strengthening	0	0						project completed in Sep11.
56	IIND Spare Converter Transformer for Vizag	1	Grid Strengthening	0	0						Transformer under transit.
57	Southern Region System Strengthening-IX (SRSS-IX)	14	Grid Strengthening	182	0	Feb.12	Feb.12		63		Project completed in Jun11 ahead of schedule.
58	Southern Region System Strengthenig - X (SRSS - X)	78	Grid Strengthening	25	1	Mar.12	Apr.12		12		Project completed.
59	Southern Region System Strengthenig - XI (SRSS - XI)	65	Grid Strengthening	208	1	July.11	July.11		31		Implementation affected due to delay in land acquisition for Chuliar S/S. Completion now anticipated by Mar12.
60	Southern Region System Strengthening - XII (SRSS-XII) [Yelahanka]	91	Grid Strengthening	0	0	Mar.12	Jun.12				Tower package under award.Preceeding construction activities under progressin S/S.

61	SR-ICOMPLEX	18	Infrastructure Developments								Project under implementation.
62	SR-II Complex (RHQ building)	8	Infrastructure Developments								Project under implementation.
63	Supplementary Transmission System for Vallur TPS	27	Power Evacuation	0							Project scheduled to be completed by Apr13. Preceeding construction activities under progress
64	Transmission System associated with Chennai NTPC-TNEB JV TPS (North Chennai -LIL0 OF 400 KV DC Almathi - Sriperumbudur)	3	Power Evacuation	0	0	Mar.11	Mar.11		70		Project completed in Juli11.(delay due to ROW problem.)
65	Transmission System Associated with Kaiga 3&4	61	Power Evacuation	75	0	Mar.12	*	Completion of 400 KV D/C Mysore - Kozhikode Line uncertain as work completely held-up in stretch of 50 Kms since more than 02 year due to severe ROW problem in Karnataka portion of line by Coffee planter & forest clearance in Karnataka. Matter taken up with Karnataka Govt. at the highest level and further being followed up through intervention from MoP.			Work continous to be held up in balance one line (Mysore-Kozhikodde .) Matter being persued at Karnataka Govt level.
66	Transmission System associated with Kudankulam Atomic Power Project	130	Power Evacuation	429	0	Mar.12	Mar.12	Very serious ROW problem in particular stretch of line. However, all out efforts are being made to complete this line by Mar.12.	81		All elements completed except Edamon-Muvattupuzha line. RoW problem continues in Edamon-Muvattupuzha and its completion likely to slip beyond Mar12. Muvattupuzha-North Trichur line commissioned in Nov11.
67	Transmission System Associated with Simhadri-II	3	Power Evacuation	0	0	July.11	July.11		6		Project completed in Juli11.
68	Transmission System for Kalpakkam PFBR	39	Power Evacuation	110	0	Mar.12	Mar.12		215		Gen. project likely to be delayed beyond Mar12.
69	Tuticorin (Powergrid Portion)	22	Power Evacuation	243	0	Feb.12	Feb.12		71		Project completion matching with generation (anticipated in Feb12)
71	Raipur Bus Splitting	7	Grid Strengthening	0	0	Nov.11	Nov.11				Project under implementation.
72	Transmission System Associated with Mundra UMPP	944	Power Evacuation	1879	4	Mar.12	Oct.12	Scope of project likely to be revised.	567	2	A portion namely Mundra-Bachhau-Ranchodpura line &

											Bachau S/S completed in Sep11
73	Transmission System Associated with Sasan UMPP	1396	Power Evacuation	935	0	Mar.12	Dec.12	Commisisoning of Gen. project now ant. Jan.13 onwards	300		Works under progress.
74	Transmission System for Gandhar Stage-II	0	Power Evacuation	0	0	*	*	Project deferred			
75	Transmission System for Korba -III(500MW)	11	Power Evacuation	0	0	Jun.11	Jun.11	Efforts are being made to complete by Mar.11.	91		Project completed in Juni11.
76	Transmission System for Mauda ATS	97	Power Evacuation	250	0	Mar.12	Oct.12		117		Efforts being made to complete the project by Mari12 to match the Generation project.
77	Western Region System Strengthening- II (WRSS-II)	177	Grid Strengthening	177	0	Dec.11	Dec.11		324		Work affected in some parts due to RoW & forest clearance. Part system completed / commisisoned. Balance system is likely to be completed progressively by Mari12
78	Western Region System Strengthening - V(WRSS-V) (Vapi-New Mumbai)	62	Grid Strengthening	50	0	*	*	Completion of 400 KV D/C Vapi - Navi Mumbai Line uncertain as work completely held-up.			Severe ROW problem continues
79	Western Region System Strengthening - VI (WRSS - VI)	41	Grid Strengthening	0	0	Mar.11	Mar.11			3	Project completed in Deci11.
80	Western Region System Strengthenig - IX (WRSS - IX)	17	Grid Strengthening	0	1	Sept.11	Sept.11			1	Project completed in Sepi11.
81	Western Region System Strengthening - X (WRSS-X)	81	Grid Strengthening	12	2	Feb.12	Feb.12				Project under progress
82	Western Region System Strengthening - XI (WRSS - XI)	112	Grid Strengthening	20	1	Feb.12	Feb.12				Project under progress
	TOTAL - Ongoing Projects	13157		9500	35				4191	22	
	B. NEW SCHEMES										
1	Cross Border Power Transmission Company Limited	4	POWERGRID Equity								
2	Energy Efficiency Services Limited	5	POWERGRID Equity								
3	National High Power Test Laboratory Private Limited	6	POWERGRID Equity								
4	Other New Schemes	1	Others								
5	Bays for Pvt Sector Lines-ER-1	2	Grid Strengthening								

6	East Coast Project	149	Power Evacuation								
7	Eastern Region System Strengthening - IV (ERSS - IV)	6	Grid Strengthening								Project approved.
8	Supply of Spare Transformer in ER - II	3	Grid Strengthening								
9	Transformer & Reactor for ER I	3	Grid Strengthening								
10	Transmission System associated with Talliya UMPP	1	Power Evacuation								
11	Transmission system for Jharkhand IPP/WBSEDCL Projects	119	Power Evacuation								Project approved.
12	Transmission system for Phase I generation Projects in Orissa -Part B	694	Power Evacuation								Project approved.
13	Transmission System For Phase-I Generation Projects in Orissa (Part- C)	298	Power Evacuation								Project approved.
14	Transmission system for transfer of Power from generation Projects in Sikkim to NR/WR- DPR -I Part B	287	Power Evacuation								Project approved.
15	ER-II Headquarters	10	Infrastructure Developments								
16	Transmission system for South West Interconnection	156	Grid Strengthening								Project scrapped: Elements included in SRSS - XVII
17	North East Transmission company Limited	31	POWERGRID Equity								
18	Bus Reactors in NR	21	Grid Strengthening								Project approved.
19	Northern Region System Strengthening XXII (NRSS XXII)	31	Grid Strengthening								Project approved.
20	Transmission System for Barh-II	61	Power Evacuation								Project approved.
21	Common Transmission System with other SR IPPs	1	Power Evacuation								
22	Replacement of Porecelain Insulator	10	Grid Strengthening								Project approved.
23	Transmission System for Tehri II PSP	0	Power Evacuation								
24	POWERGRID ERP Project	35	ERP								
25	New Telecom	182	Telecom								

26	Long term Open Access (LTOA) for Krishnapatnam Area	188	Power Evacuation							Project approved.
27	Long term Open Access (LTOA) for Tutucorin Area Part-A	10	Power Evacuation							Project approved.
28	Long term Open Access (LTOA) for Tutucorin Area Part-B	181	Power Evacuation							Project approved.
29	Southern Region System Strengthening - XIV (SRSS- XIV)	15	Grid Strengthening							Project approved.
30	Southern Region System Strengthening - XV (SRSS- XV)	15	Grid Strengthening							
31	Spare ICTs in NR	20	Grid Strengthening							Project approved.
32	Transmission System for Krishnapatnam UMPP -PART B	123	Power Evacuation							
33	Transmission System for Krishnapatnam UMPP -PART C	152	Power Evacuation							
34	Southern Region System Strengthenig - XIII (SRSS - XIII)	114	Grid Strengthening							Project approved.
35	Transmission System for Krishnapatnam UMPP -PART A	176	Power Evacuation							Project approved.
36	400 KV S/S at Dadar Nagar Haveli	104	Grid Strengthening							Project approved.
37	400 KV S/S at Daman & Diu	8	Grid Strengthening							
38	Transmission System for IPPs in Chhattisgarh (PART-A)	447	Power Evacuation							Project approved.
39	Transmission System for IPPs in Chhattisgarh (PART-B)	247	Power Evacuation							Project approved.
40	Transmission System for IPPs in Chhattisgarh (PART-C)	165	Power Evacuation							Project approved.
41	Transmission System for IPPs in Chhattisgarh (PART-D)	355	Power Evacuation							Project approved.
42	Transmission system for Nabhi Nagar, Tillaiya & Barh -II	1	Grid Strengthening							
43	Western Region System Strengthening - XII (WRSS - XII)	15	Grid Strengthening							Project approved.
	Total - New Schemes	4454						0	0	
1	Trans. System for TALA (Powergrid Portion)	5	Power Evacuation					Outlay kept for final payments.		

2	Enterprise Wide Converged I T & Communication Network in Powergrid (EWCIT)	0.5	Communication					Outlay kept for final payments.			
3	Rihand Dadri convertor transformer	2	Grid Strengthening					Outlay kept for final payments.			
4	System Strengthening Scheme in Uttaranchal	5	Grid Strengthening					Outlay kept for final payments.			
5	System Strengthening -VI in NR (Gurgaon S/Stn) (NRSS-VI)	17	Grid Strengthening					Outlay kept for final payments.		1	
6	Transmission System Associated with RAPP 5&6	3	Power Evacuation					Outlay kept for final payments.			
7	System Strengthening-V in NR (NRSS-V)	7	Grid Strengthening					Outlay kept for final payments.			
8	System Strengthening in NR-VIII (NRSS-VIII)	2	Grid Strengthening					Outlay kept for final payments.			
9	Transmission System associated with SEWA-II HEP	2	Power Evacuation					Outlay kept for final payments.			
10	Telecom Base Network	26	Telecom					Outlay kept for final payments.			
11	Southern Region System Strengthening - VIII (SRSS- VIII)	3	Grid Strengthening					Outlay kept for final payments.			
12	System Strengthening-VII of Southern Regional Grid (SRSS-VII)	4	Grid Strengthening					Outlay kept for final payments.			
13	Transmission System Associated with NLC-II Expansion Project	11	Power Evacuation					Outlay kept for final payments.			
14	Western Region System Strengthening -VII (WRSS- VII)	3	Grid Strengthening					Outlay kept for final payments.			
15	Western Region System Strengthening Scheme - I (WRSS-1)	0						Outlay kept for final payments.			
16	WR System Strengthening-III (WRSS-III)	0						Outlay kept for final payments.			
17	WR System Strengthening-IV	0						Outlay kept for final payments.			
18	Vindhyanchal TL -II	0						Outlay kept for final payments.			
	Total - Completed Schemes	89							0	1	
	GRAND TOTAL	17700							4191	23	

MoP Secretariat
Achievement upto 31.12.2011

(₹ in crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12 Non-Plan			Quantifiable Deliverables	Processes/ Timelines	Remarks/Risk Factors	Achievement up to 31st December 2011
1	2	3		4		5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Comple- mentary Extra- Budgetary Resources				
(a)	MOP Secretariat and Office of Controller of Accounts, Ministry of Power :- Salary, wages and other establishment expenditure including over-time allowance, medical treatment, domestic travel expenses, foreign travel expenses, publications, other administrative expenditure, advertising and publicity profession services and subsidies.	a) To meet the salary wages and other incidental expenses for support services.	20.35. (excluding OE)	Ö Ö	Ö Ö	(a) The expenditure is incurred on salary and other support services and hence outputs are not measurable in quantitative/ qualitative terms.		(a) Under these provisions, salary, wages and other establishment expenses are met for all the officials of M/o Power. These are basically support services to facilitate personnel involved in framing overall policies and their implementation. Through various publications and publicity campaigns, the programmes, policy initiatives of the Ministry are disseminated to the general public in an effective manner.	Cumulative expenditure upto 31.12.2011: ₹ 14.12 Cr.
(b)	MOP Secretariat and Office of Controller of Accounts, Ministry of Power	To meet the requirement of office expenses i.e. i. Payment of telephone bills ii. maintenance of IT related and office automation items iii. Purchase of stationary items. iv. Requirements	3.75			(a) To meet the requirement of office expenses i.e. payment of telephone bills, stationary items, maintenance of office equipment, petrol for staff car and other electric items etc.		Smooth functioning of office	Rs. 223.49 Lakh has been incurred till date on payment of telephone bills stationary, petrol, office automation etc.

		of Central Registry Sectionv. Variation consumable. vi. maintenance and purchase of petrol for staff cars. etc.							
(c)	Office Expenses (Plan)	A Plan scheme with duration of 5 years (2007-08 to 2011-12) was initiated to upgrade data collection, sharing and dissemination of computerization, renovation & modernization of offices in the Secretariat of the Ministry. This is basically intended to enable quick and prompt decision making.		1.00 Computer- ization & office Automation			Following are the major benefits when the scheme is fully implemented. Replacement of computer and other peripherals i.e. Printer, UPS software. Renovation, Modernization of office premises and replacement of office equipment. Procurement of new IT related items and software. Proposed annual scheme will be completed by 31.03.2012.	Rs. 85.36 Lakh has been incurred upto 31.12.2011	100% achievement will be made by 31.03.2012

CENTRAL ELECTRICITY AUTHORITY
Achievement upto 31.12.2011

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Scope & Objective	Approved outlay 2011-2012	Physical Targets set during the year 2011-12	Achievement during the year 2011-12 (upto 31 st December 2011)	Reasons for variation	Remarks
1	2	3	4	5	6	7	8
1.	Renovation & Modernisation (R&M) of Thermal Power Stations including Project Maintenance and PAGER Scheme (Plan)	To facilitate R&M activities in the country to arrest the deterioration in performance of thermal power stations, technological upgradation, environmental requirement by renovation & modernisation and life extension works.	4.11	<ul style="list-style-type: none"> Monitoring of R&M and life extension works carried out by different utilities during 11th Plan. To prepare an action plan for energy efficient R&M programme for larger size units. 	<ol style="list-style-type: none"> Intensive monitoring through site visits during implementation phase of the R&M activity. Discussion held with utilities for planning, scheduling and finding technical solutions of R&M programme. Under KfW funded EER&M in 7 units, the final DPRs prepared by M/s Evonik in respect of Unit-3 of Nasik TPS and Unit-1, 2 & 3 of Kolaghat TPS has been accepted by MAHAGENCO and WBPDC respectively. The final DPRs in respect of Unit1, 2 & 3 of Bokaro ěBi TPS have been prepared and sent to DVC for their acceptance. Under KfW funded project for development of tendering procedures and model contract for the R&M of fossil fuel based power plants in India; M/s Lahmeyer International (India) Pvt. Ltd has been selected as consultant through ICB route. The concurrence of M/s Lahmeyer was received on 03-11-2011. The draft Contract Document has been sent to KfW for their approval. Monitoring of coal fired generation rehabilitation project funded by World Bank under which EER&M of Bandel TPS U-5, Koradi TPS U-6 and Panipat TPS U-3 & 4 have been taken up. Three units have been selected for detailed studies for EER&M under Japan-India cooperation. 	There was no variation in achievement with respect to target.	
2.	Standing Committee for selection of sites for Thermal Power Stations (Plan)	To create a shelf of feasible sites for thermal power stations to meet the power requirement of the country upto the year 2011-12 and beyond.	0.41	Completion of study by CMPDI for selection of sites for UMPP in Karnataka and for coal based power stations in the state of Uttar Pradesh by 30-03-2012. The teams of the committee will visit new sites to identify	The study awarded to CMPDI on 27-06-11 for selection of sites for coal based power stations in the states of Karnataka and Uttar Pradesh. Visits were made to new sites identified by MAHAGENCO in the states of Maharashtra and one site of NLC in Tamil Nadu.	—	Draft Report of the study expected to be submitted by CMPDI in January 2012.

		Shelf of potential sites for pit head and coastal thermal projects including Ultra Mega Projects would be available for investment by prospective investors for expeditious thermal capacity addition in the country.		the potential sites.			
3.	Strengthening of Regional Electricity Boards (Now known as Regional Power Committees) (Plan)	The objective of the proposal is to provide proper infrastructure support in the form of office building / staff quarters for the Secretariats of the SRPC / NERPC	3.35	<ol style="list-style-type: none"> 1. Construction of boundary wall on the western side of SRPC staff quarters at Bangalore and maintenance of Staff Quarters of SRPC, Bangalore. 2. Construction of Office building & Staff Quarters for NERPC, Shillong and RIO, Shillong. 	As per CPWD estimates an expenditure of Rs.29.46 lakhs has been incurred upto December 2011 on account of maintenance of Staff Quarters of SRPC, Bangalore. The office building, type VI, V and one block of type IV quarters are in advance stage of completion and likely to be completed by March, 2012.	Due to court case filed in the city civil court pertaining to land on the western side of staff quarter. There is a dispute with army on some portion of land acquired by NERPC and matter is pending with Dy. Commissioner, East Khasi Hills, Shillong since Feb, 2010. Due to the dispute with army, construction of one block of Type IV, type III and Type II quarters could not be taken up.	

4.	Upgradation of IT facilities in CEA (Plan)	To develop Centralized Information Management System (IMS) for all information relating to the power sector.	0.01	Successful operation of the project developed under the scheme for 6 months subsequent to successful acceptance test.	Successful operation for 6 months completed in June 2011.	ó -	—
5.	Upgradation of IT facilities in CEA ñ Phase-II (Plan) (Un-approved)	Comprehensive and more intensive IT based system for monitoring of execution of power projects.Setting up of disaster data recovery center for second backup of data. Building redundancy in data center for higher availability. Procurement / upgradation of Desktop Computers, Laptops and Multi-Function Devices. Procurement of Planning Model software.	5.14	Send proposal / SFC Memo based on the report of the consultant for the Plan Scheme ñUpgradation of IT facilities in CEA - Phase-IIí, to MoP for approval and allocation of necessary funds for the scheme.Purchase of partial equipment subsequent to approval / sanction of funds by the MoP.	Draft SFC Memo has been prepared and it will be sent to MoP after finalization shortly.	—	The scheme is yet to be approved by MoP.
6.	Computerization of PTCC process	Computerisation of processing of the PTCC cases for route approval	1.10	Appointment of the consultant for the scheme. Preparation and finalization of the project report indicating methodology to be adopted along with cost estimates for the scheme. Preparation of Request for Proposal (RFP) for selection of System Integrator (SI) / Developer for the scheme	M/s Capgemini India Limited has been appointed as the Consultant for the scheme.Project Report submitted and approved by Chairperson, CEA. Payment has been made to Consultant in this regard.Draft RFP documents for SI has been submitted by the Consultant on 08-11-2011. This document is being reviewed by CEC.	As such no significant variation of timeline has been observed.	ó -
7.	Optimisation of National Grid Programme	Development of Plan wise transmission system based on	0.10	—	—	ó -	The scheme has been dropped.

		capacity addition, demand growth projection and corresponding transmission needs for next 3 Five Year Plans taking the services of international experts in the field of transmission planning					
8.	Technical Assistance by World Bank to support CEA for appointment of Consultants for addressing Barriers to Energy Efficiency R&M of Coal Fired generating units in India	1. Appointment of Implementation Support Consultant (ISC). 2. Reduction of barriers for implementation of EER&M projects in TPS in India. 3. Developing Markets for implementation of R&M schemes in TPS. 4. Review of experience from Pilot R&M projects. 5. Review of institutional capacity and Strengthening of Institutional capacity at CEA.	2.01	Preparation of draft ToR / RfP document for the selection of consultant to carry out the studies at Sl.No.2,3,4 & 5 under Column (3). Appointment of consultant to carry out the studies at Sl.No.2 & 3 under column (3). Monthly / Quarterly reports.	ToR for the consultants at Sl.No.3,4 & 5 have been prepared. Short-listing of Consultants for studies at Sl.No.2,3 & 4 under column (3) completed. RfP documents for the studies Sl.No.2, 3 & 4 under column (3) issued to shortlisted consultants. Proposals received for the studies Sl.No.2 & 3 under column (3) from the shortlisted consultants. Evaluation of Technical Proposals for study at Sl.No.2 under column (3) has been done and sent to World Bank for 'No Objection'. The Monthly / Quarterly reports were received from ISC.	- Nil -	ó
9.	All India Load Survey Scheme (Non-Plan)	To assess demand of Power over a period of time	2.28	To bring out 18 th Electric Power Survey of India in following volumes: - 1. Electric Power Survey of India by PEUM - Vol. 1. 3. Electric Power Survey of Mega Cities - Vol.II. Preparation of Annual	<ul style="list-style-type: none"> The Report on 'All India Electricity Statistics - General Review 2011' is under printing. The Report on 'Growth of Electricity Sector in India from 1947-2011' is under printing. 2nd & 3rd meeting of 18th EPSC were held in March 2011 & June 2011. Report of 18th EPS (Vol.I) has been approved in December 2011. Work of Electricity Power Survey of Mega Cities 	NIL NIL	Continuous process

				Report titled 'All India Electricity Statistics General Review 2011'. Preparation of Annual Report titled 'Growth of Electricity Sector in India from 1947-2011'.	(Vol. II) is in process and the meeting is scheduled to be held on 4 th January 2012.		
10.	Technical Control Planning & Monitoring (Non-Plan)	Review of power sector performance, long-term & short-term planning, assessment of manpower & materials, long-term system planning studies including management studies of RPCs, concurrence to hydro power development schemes, monitoring construction of generation & transmission projects, monitoring of rural electrification and distribution planning, etc.	36.96	<ul style="list-style-type: none"> (i) A Hydro capacity of 2080 MW was programmed. (ii) Monitoring of 30 thermal units aggregating to 13611 MW (iii) Data collection & publication of: - <ul style="list-style-type: none"> a) Daily generation report. b) Monthly review of power sector performance. c) Monthly status reports on construction of various hydro and thermal projects. d) All India Electricity Statistics: General Review (Annual). e) Growth of Electricity Sector in India (Annual) f) Review of Performance of hydro power stations (Annual). g) Review of Performance of thermal power stations (Annual). (iv) Techno-economic appraisal and concurrence to hydro-electric projects. 	<p>A Hydro capacity of 1181 MW is commissioned upto 31-12-2011.</p> <p>30 thermal units (13611 MW) were monitored, out of which 28 units aggregating to 10321.70 MW were commissioned.</p> <p>Data collected & published: -</p> <ol style="list-style-type: none"> 1. Daily generation report. 2. Monthly review of power sector performance. 3. Monthly status reports on construction of various hydro and thermal projects. 4. All India Electricity Statistics: General Review (Annual). 5. Growth of Electricity Sector in India (Annual) 6. Review of Performance of hydro power stations (Annual). <p>Review of Performance of thermal power stations (Annual).</p>	Due to change in definition of commissioning of the unit. Slow progress at site, delay in supplies and shortage of manpower.	Continuous process
11.	Design & Consultancy (Non-Plan)	To provide technical support in Design & Engineering of power projects to power utilities and adoption of state-of-the-art technologies.	19.65	At present 23 Nos. of consultancy projects are in hand.	Consultancy services provided to 23 projects in and outside India.	ó ó ó	Continuous process

12.	Studies & Training (Non-Plan)	To improve performance of Engineers / functionaries.	0.91	Training of 1000 mandays to CEA employees.	Training of 306 mandays provided to 136 employees.	ó ó ó -	Continuous process
13.	Electronic Data Processing & Support System (Non-Plan)	Operation and maintenance of computer systems provided in CEA and its sub-offices. Facility management and maintenance of Information Management System (IMS).	0.65	Operation and maintenance of computer systems provided in CEA and its sub-offices involving anticipated expenditure of ₹55 Lakh. First year of facility management and maintenance of IMS started in January 2011 after completion of IMS Project.	Maintenance / procurement of Computer systems / softwares / peripheral devices provided in CEA and its sub-offices was carried out and procurement of consumables for their continuous operation was done involving total expenditure of ₹37 Lakh. Facility management and maintenance of IMS is a continuous process since January 2011.	Bills of AMC of computers / peripherals for 2 quarters and those towards facility management and maintenance of IMS were not raised by the concerned contractors. A few procurement actions initiated in time for completion before December 2011 could not be completed due to factors beyond control.	—
14.	Administration of Electricity Laws (Non-Plan)	Statutory inspection of Electrical Installations of Central Sector and UTs.	2.27	Inspection of Electrical Installations totaling to 2,00,500 Equivalent MV*	Inspection of Electrical Installations totaling to 1,52,279 Equivalent MV*.	ó ó	Continuous process
15.	National Load Despatch Center (NEPSIC) (Non-Plan)	The scheme is related to operation and maintenance of National Electric Power System Information Centre (NEPSIC) at New Delhi for collection of vital power system operational data from different Regional	0.14	Operation and maintenance of computer systems under the NEPSIC scheme in CEA and its sub-offices involving anticipated expenditure of ₹9 Lakhs.	Maintenance / procurement of Computer systems / peripheral devices provided in CEA and its sub-offices was carried out and procurement of consumables for their continuous operation was done involving total expenditure of ₹6 Lakhs, which is about 67% of anticipated annual expenditure.	No major variation.	Continuous process

*Equivalent MV = 3 x (EHV + HV) + MV + 12 x ckm + 30 x video

		Power Committees (RPCs) for use in CEA / Ministry of Power.					
16.	Regional Coordination (Non-Plan)	The country has been demarcated into five Regions for the purpose of planning and operation of the power system. Regional Power Committees (RPCs) (Erstwhile REBs) have been set up in all the five Regions for facilitating integrated operation of power system in that region for the optimal utilization of the available power resources through functioning of various sub-committees such as Technical Coordination Sub-Committee, Operation Coordination Sub-Committee, Commercial Sub-committee, Protection Sub-Committee and System Studies Sub-Committee etc. The scheme is meant for funding the operations of the Regional Power Committees (RPCs).	5.50	Facilitation of coordinated operation of regional power grids in the country	Facilitation of secured and reliable operation of the Regional Grids.	ó	Continuous process
17.	Regional Load Despatching Centres(Non-Plan)	The real time operation of the regional grids is being carried out by the					

		respective RLDCs. Operation planning and coordination functions which facilitate the integrated operation of the power system continue to be with the Regional Power Committees (RPCs). RLDCs and RPCs have to operate in close coordination in achieving the benefits associated with integrated operation of the Regional Power System.	8.17	Facilitation of coordinated operation of regional power grids in the country	Facilitation of secured and reliable operation of the Regional Grids.	ó	Continuous process
18.	Apprenticeship Training for Engineers (Non-Plan)	Imparting vocational training to Graduate / Diploma holders under the Apprenticeship Act, 1961.	0.06	Training of 10 degree / diploma holders, 35 Vocational and 11 D/Man	Training provided to 12 Vocational, 6 Graduates, 3 Diploma holders and 9 D/Man.	ó ó -	Continuous process
19.	Contribution to International Bodies (Non-Plan)	Membership of CIGRE for engineers of CEA to keep themselves abreast of global technological developments in power sector.	0.0040	Continuation of collective Membership of engineers of CEA.	Collective Membership of engineers of CEA for calendar year 2012 is due in January 2012.	ó ó ó	Continuous process
20.	Departmental Canteen (Non-Plan)	To provide subsidized canteen facilities to the employees of CEA	0.43	Welfare measure	The canteen is functioning as a welfare measure to the staff.	ó	Continuous process

Comprehensive Award Scheme Achievement upto 31.12.2011

(₹ in crore)

Sl. No.	Name of Scheme/ Programme	Objective/Outcome	Outlay 2011-12 Non-Plan			Quantifiable/ Physical Outputs	Projected Outcomes	Process/Timeless	Remarks/ achievement upto December, 2011
			4(i) Non-Plan Budget	4 Plan Budget	4(iii) Comple-mentary Extra-Budgetary Resources				
1	2	3		4		5	6	7	8
	Comprehensive Awards Scheme for power sector	To inculcate competiive spirit and to motivate higher level of efficient and economic operation in the field of contruction operaiton and maintenance of thermal/hydro/transmission projects, implementation of distribution reforms, rural distribution franchisees, environment performance, community development and safety records. However, the expected returns cannot be quantified.	-	0.82	-	Improvement in performance of	To contribute in achieving	The awards for 2009-10 and 2010-11 are to be	The award Districtuion Function for the year

Chapter-V

Financial Review

Overall picture of Ministry of Power with reference to XIth Plan

The Planning Commission assessed an Outlay of ₹ 3,09,231.38 crore during the XIth Plan period for the Central Sector comprising of ₹ 2,78,779.47 crore of Internal & Extra Budgetary Resources (IEBR), to be raised by the CPSUs themselves and ₹ 30,451.91 crore of Gross Budgetary Support (GBS), (including RGGVY ₹ 26500.00 crore). The actual utilization during the first four years & RE 2011-12 of the XIth Plan period is ₹ 2,09,364.16 crore including ₹ 1,77,754.28 crore as IEBR and ₹ 31,609.88 as GBS. The CPSU-wise and scheme -wise break-up is as under:-

(₹ In crore)

SI No.	Activity/ Organization		IEBR	GBS	Total
A	Investment in PSUs				
1	NTPC Ltd	Estimates	162701.34	0.00	162701.34
		Achievements	71661.17	0.00	71661.17
2	NHPC	Estimates	28230.93	1000.00	29230.93
		Achievements	17034.37	1398.44	18432.81
3	POWERGRID	Estimates	39999.00	0.00	39999.00
		Achievements	55145.91	0.00	55145.91
4	DVC	Estimates	20550.00	0.00	20550.00
		Achievements	26336.57	0.00	26336.57
5	THDC India Ltd	Estimates	4360.34	500.00	4860.34
		Achievements	2808.30	116.15	2924.45
6	SJVNL	Estimates	10209.70	0.00	10209.70
		Achievements	2888.28	0.00	2888.28
7	NEEPCO	Estimates	12728.16	1500.00	14228.16
		Achievements	1879.68	445.98	2325.66
	Total (A)	Estimates	278779.47	3000.00	281779.47
		Achievements	177754.28	1960.57	179714.85

(₹ In crore)

SI No.	Activity/ Organization		GBS
B	MoP Schemes		
1	AG&SP	Estimates	2.00
		Achievement	26.84
2	Rural Electification Scheme	Estimates	26500.00
		Achievement	22957.45
3	NPTI(Training & Human Resource)	Estimates	80.00
		Achievement	67.80
4	CPRI(Research & Testing)	Estimates	320.00
		Achievement	274.93
5	Programme & Infrastructure improvement of CEA	Estimates	75.00
		Achievement	28.15
6	Other MoP Schemes	Estimates	474.91
		Achievement	6294.14
	Total(B)	Estimates	28951.91
		Achievement	29649.31
		Estimates*	30451.91
	Total GBS (A) + (B)	Achievement	31609.88

*The estimates do not include the amount under R-APDRP (₹ 7466.00 crore), NMEEE (₹ 265.35 crore) and NEF-Interest Subsidy Scheme(₹ 249.57 crore)

A. Reasons for shortfall during XI Plan

CPSUs

1. NTPC Limited :

The main reasons for shortfall are:

- Delay in Barh and Sipat due to issues with Russian vendors;
- Loharinag Pala shelved and North Karanpura deferred as per Government directive;
- Permission for Hydro projects viz. Hutong, Kalai withdrawn by Arunachal Pradesh and other Hydro which could not be taken up;
- Non-availability of gas for Gandhar-II, Kawas-II and Kayamkulam-II;
- Due to non-availability of land and water confirmation from State Government integrated projects viz. Lara, Darlipalli-Khasiyabara on account of non-availability of MoEF clearance; Badarpur expansions & TTPS-II could not be taken up;
- on account of coal mining & LNG;
- Delay in R&M and renewable project.

2. NHPC Limited :

The main reasons for shortfall are rescheduling of commissioning of Parbati-II, Subansiri Lower Project, Teesta Low Dam-III & IV as these projects shifted to XII-Plan. Slow progress in J&K projects and because of KotliBhel Projects, Dibang, Teesta-IV, PakalDul etc. not come up under construction stage. LakhwarVyasi, Subansiri Middle & Upper Projects having been allotted to other projects namely ChungarChal, GarbaTawaghat and KharmoliLumtiTulli Projects.

3. THDC (India) Limited :-

The main reasons for short fall are delay in award of contract for Tehri PSP, litigation by the bidders and approval of Revised Cost Estimate required from the Govt.

For Civil & HM works under VPHEP, MOEF revised the environment clearance changing minimum flow requirement from 3 cumecs to 15.65 cumecs in June'2011. World Bank has approved the loan in June 2011 the contract is anticipated to be awarded by end March 2012.

In new projects the survey & Investigation works could not be taken up in Karmoli (140MW), Jadhganga (50MW), Bokang Bailing (330MW) and Humbarli PSS (400MW) Projects falling in Reserve Forest Area / Wild Life Sanctuary. Environment clearance is pending for MalariJhelam (114MW) and JhelamTamak (126MW).

4. SJVN Limited :-

The main reasons for shortfall are:

- Khab HEP project was withdrawn by Govt. of Himachal Pradesh;
- Jangithopan HEP & Thopan Powari HEP projects were not allotted to SJVN;
- Approvals/clearances in respect of Luhri HEP project yet to be received;
- Devsari HEP project is under various stages of clearances;
- Jakhol Sankri HEP: project is under various stages of clearances;
- Naitwar Mori HEP: project is under various stages of clearances;
- Rampur HEP: Project got delayed due to extreme adverse geography.

5. NEEPCO:-

The main reasons for shortfall are:

- Major design changes of different civil structures of 600 MW Kameng HEP;
- Pare HEP (110 MW) Project now scheduled in August, 2013 due to delay in award of Package II & Package III;
- In respect of Turial HEP, the Project activities suffered due to heavy rainfall during monsoon and bad road conditions;
- Expected expenditure could not be sought for R&M of Kopili Power Station;
- Non- approval of competent authority of Agartala Gas Turbine Power Plant Extension Project;
- Ranganadi Stage-II HEP (130 MW), could not progress further as the Govt. of Arunachal Pradesh conveyed that in view of award of Panyor HEP located just at upstream on the same river to IPP, NEEPCO's proposed project would not be technically feasible.

B. MoP Schemes:

1. RGGVY :

The main reasons for shortfall are:

- The 2011-12 being the terminal year of XI Plan and last year of Phase-I project, implementing agencies are hard pressed to resolve pending issues with contracting agencies and other stakeholders to complete all the balance conditionalities including deployment of franchisee in RGGVY areas resulting in lesser expenditure;
- Most of the left out works are in North Eastern Region, far flung/inaccessible areas and also in Naxal affected areas thereby causing delay in implementation;

- Forest clearances, Railway clearances, Right of way problems etc., are also hindering the progress and in turn release of funds. The last 10% of villages to be covered in Phase-I project are the most difficult to electrify in view of aforementioned reasons.

2. **NPTI**

The main reasons for shortfall are due to non issuance of NOC from HUDA for civil works for modernization and up gradation of training facilities at corporate office, Faridabad. The slow progress of setting up of Super Critical Training Simulator in NPTI.

3. **CPRI**

The main reason for shortfall is on account of pending project approvals.

4. **Central Electricity Authority**

The main reasons for shortfall are:

- Due to abolition of posts in various grades, less expenditure on OTA, Medical Treatment, etc., R&M of TPS including Project Maintenance & PAGER Scheme;
- Low pace of construction of Office Building & Staff Quarters of NERPC, Shillong due to dispute with Army authorities and litigation on construction of boundary wall of Staff Quarters of SRPC, Bangalore in strengthening of REBs;
- Due to less expenditure on Service Tax and digital scanning of documents etc. than anticipated in Upgradation of Information Technology facilities in CEA;
- Surrender of funds due to a similar scheme is being taken up by PGCIL (CTU) in respect of Optimisation of National Grid Programme;
- Non-approval of the scheme of upgradation of Information Technology facilities in CEA (Phase-II) during 11th Plan period;
- Delay in appointment of consultants in the scheme of computerisation of PTCC Process;
- Surrender of funds due to delay in appointment of consultants in Technical Assistance by World Bank to support CEA

5. **Energy Conservation & Bureau of Energy Efficiency:-**

The main reasons for shortfall are:

- 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 conduction 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).

The actual expenditure vis-à-vis Budget Estimates/Revised Estimate in XIth Plan in respect of PSUs under the administrative control of Ministry of Power:-

(₹ In crore)

SI No	Schemes/ Organiztions		2007-08	2008-09	2009-10	2010-11	2011-12*
	A. Investment in PSUs						
1	NTPC	BE	12792.00	13588.00	17700.00	22350.00	26400.00
		RE	11618.00	12670.00	14760.00	15820.00	26400.00
		Actuals	8751.92	13224.51	10467.13	12817.61	9709.72
2	NHPC	BE	2501.95	4385.19	4667.99	4889.34	5090.00
		RE	2769.07	3450.00	3762.74	4088.00	4675.83
		Actuals	2568.01	3711.85	3708.25	3768.87	2598.22
3	Power Grid	BE	6500.00	8040.00	11510.00	12900.00	17700.00
		RE	6504.00	7624.00	10500.00	11900.00	17700.00
		Actuals	6655.84	8167.23	10617.45	12005.39	10008.00
4	DVC	BE	4271.38	6612.65	8313.34	8539.78	5890.59
		RE	4288.21	5120.69	8109.45	4311.49	5890.59
		Actuals	2754.14	5149.21	7289.32	5253.31	2350.50
5	THDC	BE	420.99	804.92	535.18	856.83	389.85
		RE	736.21	554.26	629.89	615.56	434.85
		Actuals	656.95	616.89	610.51	605.25	411.14
6	SJVN	BE	642.80	556.84	580.06	525.17	1133.13
		RE	399.87	417.76	466.85	545.45	1133.13
		Actuals	219.23	561.87	407.16	566.89	435.54
7	NEEPCO	BE	1258.70	772.50	824.70	886.30	1037.27
		RE	260.29	447.58	446.67	488.31	1138.40
		Actuals	206.88	227.40	293.96	459.02	487.86
8	Total-A	BE	28387.82	34760.10	44131.27	50947.42	57640.84
		RE	26575.65	30284.29	38675.60	37768.81	57372.80
		Actuals**	21812.97	31624.96	33208.78	35476.34	26000.98

*These figures include GBS upto 17th February, 2012 and IEBR for RE is same as BE.

Other than PSUs:-

(₹ In crore)

S.N.	Schemes/ Organizations		2007-08	2008-09	2009-10	2010-11	2011-12*
	B. MOP Schemes						
1	AG&SP	BE	0.00	0.01	0.00	26.84	0.00
		RE	0.00	0.01	0.00	26.84	0.00
		Actuals	0.00	0.00	0.00	26.84	0.00
2	Rural Electrification Schemes	BE	3983.00	5500.00	7000.00	5500.00	6000.00
		RE	3944.56	5500.00	5000.00	5000.00	3544.00
		Actuals	3913.45	5500.00	5000.00	5000.00	1729.83
3	NPTI(Training & HR)	BE	28.13	20.00	20.00	20.00	16.89
		RE	14.40	18.75	20.00	17.00	2.09
		Actuals	8.71	20.00	20.00	17.00	1.80
4	CPRI (Research & Testing)	BE	67.81	50.00	55.00	78.18	163.40
		RE	40.00	30.00	41.50	61.52	75.00
		Actuals	67.81	29.11	41.50	61.51	34.38
5	Programme & Infrastructure Improvement of CEA	BE	78.65	15.00	15.00	15.00	16.23
		RE	10.11	15.44	11.37	8.43	8.44
		Actuals	6.22	3.74	5.48	4.27	2.19
6	Other MOP Schemes	BE	607.94	114.99	1905.00	4163.98	2545.37
		RE	105.66	457.98	1521.13	2785.43	1789.40
		Actuals	78.39	444.19	1423.47	2558.69	1469.42
	Total-B	BE	4765.53	5700.00	8995.00	9804.00	8741.89
		RE	4114.73	6022.18	6594.00	7899.22	5418.93
		Actuals	4074.66	5997.04	6490.45	7668.31	3237.62

***Actuals in respect of 2011-12 upto 17 February, 2012**

Reasons for Reduction in RE 2011-12 over BE 2011-12 of schemes under Ministry of Power:-

- (i) **Rajiv Gandhi GrameenVidyutikaranYojna:-**Against the BE of ₹6000.00 crore a provision of ₹3544.00 crore has been kept in RE 2011-12. This reduction is mainly due to following:-
- (a). Closure proposals have just started coming from the implementing agencies, the conditionalities particularly deployment of franchisee and submission of audited accounts attached with the closure of the projects, are not being fulfilled by the implementing agencies. Consequently, there are delays in submission of closure proposals.
 - (b). Delay in submission of Revised Cost Estimate proposals after field survey.
 - (c). Sanction of new projects under Phase-II is delayed because of late submission of acceptance of condition of “No cost escalation” and certificate that DPRs have been prepared as per field survey by States.
- (ii) **National Power Training Institute:-** Against the BE of ₹16.89crore a provision of ₹2.09 crore has been kept in RE 2011-12. This reduction is because of less requirement in the scheme Modernization &upgradation of Training facilities at corporate office Faridabad.
- (iii) **Central Power Research Institute:-**Against the BE of ₹163.40 crore a provision of ₹75.00crore has been kept in RE 2011-12. This reduction is mainly due to reduction in following schemes:
- (a). Centre of excellence for Life Cycle Management and condition Assessment of High voltage substation and Power Plant Electrical Equipment.
 - (b). Plan R&D funding.
 - (c). Research Scheme of Power.
 - (d). National Perspective Plan.
 - (e). Establishment of Second SC alternator for HPL.
- (iv) **Central Electricity Authority: -** Against the BE of ₹16.23 crore a provision of ₹8.44 crore has been kept in RE 2011-12. This reduction is mainly due to nil provision under new (un-approved) scheme “Upgradation of IT facilities in CEA (Ph-2)” & discontinuation of the scheme “Optimization of National Grid Programme”. Also due to less provision under the scheme “Technical Assistance by world bank to Support CEA for appointment of consultants for addressing barriers to energy efficiency R&M of coal fired generating units in India. Therefore a surrender of ₹1.00 crore under the scheme “Strengthening of REBs-Plan-capital”.
- (v). **Other MoP Schemes:-**For the other MoP scheme the reduction in RE over BE is mainly due to following three schemes:-
- (a). **R-APDRP:-** Against the BE of ₹2034.00crore a provision of ₹1668.00crore has been kept in RE 2011-12. This was reduced as per the trend of expenditure.

- (b). **NHPC:-**Against the BE of ₹812.61crore a provision of ₹398.44crore has been kept in RE 2011-12. This decreaseis due to decrease requirement in the NimooBazgo (45 MW) &Kishanganga Projects under NHPC Ltd.
- (c). **National Electricity Fund:** -Against the BE of ₹249.57crore a 'Nil' provision has been kept in RE 2011-12. As the scheme was approved by the CCEA in December, 2011 and six months are required for operationalization of the scheme, therefore, a 'NIL' provision has been kept in RE 2011-12.

Details of Annual Plan outlay 2012-13 :

An amount of ₹ 62424.50 crore is the approved outlay by the Planning Commission for the year 2012-13 comprising of ₹ 52782.50 crore as IEBR and ₹ 9642.00 crore as GBS. The details are as under :-

(₹ In crore)

SL. NO.	ORGANISATION/ SCHEMES	INTERNAL RESOURCES	BONDS/ DEBENTURES	ECB/ SUPPLIER CREDIT	OTHERS	TOTAL (IEBR)	TOTAL (GBS)	TOTAL PLAN OUTLAY
1	2	4	5	6	7	8	9	10
A.	CENTRAL PLAN							
1	NTPC Ltd.	8219.00	10511.00	2265.00	0.00	20995.00	0.00	20995.00
2	NHPC Ltd.	-499.12	3594.38	0.00	731.37	3826.63	270.37	4097.00
3	Power Grid Corporation of India Ltd.	3482.00	13471.00	3047.00	0.00	20000.00	0.00	20000.00
4	D.V.C.	1622.37	2600.00	0.00	1349.32	5571.69	0.00	5571.69
5	THDC (India) Ltd.	189.33	0.00	154.25	111.81	455.39	110.00	565.39
6	SJVN Ltd.	437.66	0.00	358.34	0.00	796.00	0.00	796.00
7	NEEPCO	344.29	100.00	126.00	567.50	1137.79	134.00	1271.79
	TOTAL (A)	13795.53	30276.38	5950.59	2760.00	52782.50	514.37	53296.87
B.	MOP Schemes							
1	Rural Electrification Schemes	0.00	0.00	0.00	0.00	0.00	4900.00	4900.00
2	R-APDRP	0.00	0.00	0.00	0.00	0.00	3114.00	3114.00
3	NPTI(Training & HR)	0.00	0.00	0.00	0.00	0.00	5.09	5.09
4	CPRI(Research & Testing)	0.00	0.00	0.00	0.00	0.00	265.00	265.00
5	Programmes & Infrastructure Improvement of CEA	0.00	0.00	0.00	0.00	0.00	19.08	19.08
6	Bureau of Energy Efficiency	0.00	0.00	0.00	0.00	0.00	200.00	200.00
6	MOP other schemes	0.00	0.00	0.00	0.00	0.00	624.46	624.46
	Total (B)	0.00	0.00	0.00	0.00	0.00	9127.63	9127.63
	Total (A+B)	13795.53	30276.38	5950.59	2760.00	52782.50	9642.00	62424.50

Chapter-VI

Review of Performance of Statutory and Autonomous Bodies under the administrative Control of the Ministry of Power

The following autonomous bodies and statutory bodies are under the administrative control of the Ministry of Power:-

Autonomous Bodies	Central Power Research Institute (CPRI)	
	National Power Training Institute (NPTI)	
Statutory Bodies	Non-Commercial	Commercial
	Appellate Tribunal for Electricity (APTEL)	Damodar Valley Corporation (DVC)
	Central Electricity Regulatory Commission (CERC)	Bhakra Beas Management Board (BBMB)
	Bureau of Energy Efficiency (BEE)	

Salient performance highlights of the above mentioned organizations are as follows:-

1. Central Power Research Institute (CPRI) :

CPRI has been rendering testing and quality assurance services to the Indian Power utilities and Electrical Industries. The Institute is also offering field engineering services and consultancy assistance at the customer sites such as substations and power plants across the country. Their performance and contribution to the power sector is as under:

(a) Research and Development

- During the last five years, the Institute has completed over 60 R&D projects and has been awarded 08 patents. Many of them have been commercialized on a non-exclusive basis.
- Institute has published over 650 technical and research papers in national & international forums.
- The Institute has also established Centre for Collaborative & Advanced Research and entered into MoU with IITs, Universities in India & abroad.
- The Institute is serving as a Nodal agency on behalf of Ministry of Power, Govt. of India for implementing national Perspective Plan (NPP) projects. Five projects

taken up in collaboration with M/s. EMCO. CDAC, NML, BHEL etc have been completed and 6 projects are under implementation at IIT-Roorke, Crompton Greaves, CDAC, CPRI. The outcome of the projects is jointly patented.

- CPRI is also managing Research Scheme on Power with the financial support of Ministry of Power. Sixteen projects were completed under RSoP scheme and thirteen projects are under implementation.
- 22 R&D projects were completed and currently 17 projects with an outlay of ₹ 6.48 crore are under implementation.
- Diagnostics of power equipments design evaluation of towers, seismic qualification and evaluation of 800/1200kV rated equipment. CPRI entered into tripartite agreement between, Manufacturers and Powergrid for establishment of 1200kV test Station at Bina, Madhya Pradesh and evaluation of 1200kV rated equipment

(b) New R&D and Testing facilities setup under Capital schemes (XI five year plan)

- Establishment of Regional Testing Laboratory at Kolkata and Guwahati
- Establishment of air conditioner and refrigerator test facility and power capacitors lab
- Augmentation of Real Time Digital Simulator
- Motorless drive for short circuit generator at Bhopal and Bangalore
- Mobile field testing van for CT / PT
- Modernisation of Tower testing facility
- 50 MVA short circuit generator
- Quality accreditations for CPRI test facilities.

(c) Consultancy services: CPRI has been providing consultancy services to various organizations in India and abroad.

(d) Capacity building

- CPRI has been conducting Annual Training Programmes for engineers from India and abroad ,covering various aspect of power generation, transmission, distribution and maintenance activities.
- CPRI conducted 30 training programmes for around 900 utility engineers under US aid programme – DRUM.

The details of achievement upto 31.12.2011 in respect of major schemes is given in **Annexure-I.**

2. National Power Training Institute (NPTI) :

NPTI is a ISO 9001 & ISO 14001 organisation is an Apex body at the national level for development of the human resources for the power and energy sector. Several Long term and short term training programmes in the area of thermal, hydro, Transmission and Distribution and Management etc are being conducted in the various institutes of NPTI. NPTI also conducts industry interfaced academic programs with the objective to create a pool of committed and competent professionals equipped with appropriate technical skills to steer the Indian Power Sector. Since its inception 1,96,024 personnel (upto Dec 2011) of various levels from different organizations were imparted training by the training Institute of NPTI . Targets and achievement for the year 2011-12 of NPTI are given below:

Sl.No. PerformanceParameters	2011-12	
	Target for Excellent Rating – MOU With Ministry of Power	Actually Achieved UP TO Dec,2011
1 No. of Trainees in Regular Programs	16,225	13,534
2 No. of Trainee Weeks (T-W)	1,32,000	1,01,310
3 Revenue Earnings (₹ in Lacs.)	4666.00	3830.89
4. Non-Plan Expenditure (₹ in lacs)	4666.00	2627.21

The details for NPTI are at **Annexure-II**.

3. Appellate Tribunal for Electricity (APTEL)

The Appellate Tribunal for Electricity established by the Central Government under Section 110 of the Electricity Act, 2003 has been made operational w.e.f. 21st July, 2005. As on 31.12.2011, 1437 number of Appeals (205 in the year 2005; 278 in the year 2006; 160 in the year 2007; 185 in the year 2008; 202 in the year 2009. 206 in the year 2010 and 201 in the year 2011) have been registered. Of which, 1227 have already been disposed of by the Tribunal. Apart from the above appeals, 1899 other IAs, Petitions etc. have been received in the Tribunal, out of which 1384 have been disposed of by the Tribunal.

4. Central Electricity Regulatory Commission (CERC)

CERC is a statutory authority for regulation of power sector under the provisions of Electricity Act 2003 in India. Main functions of CERC are issuing of tariff regulations, grant of Inter-state Transmission Licenses and Electricity Trading licenses, issue of tariff orders for CPSUs and interstate power plants etc.

During the year 2011-12 (upto Dec 2011) 189 petitions were disposed of by CERC. CERC issued the following regulations / amendments during the year 2011-12:

- a) CERC (Sharing of inter-State Transmission Charges and Losses)(First Amendment) Regulations, 2011 notified on 24.11.2011.

The Commission had notified on 7.6.2010 the Central Electricity Regulatory Commission (Sharing of inter-State Transmission Charges and Losses) Regulations, 2010 which come into force from 1.7.2011. Based on the suggestions received from the implementing agency and state utilities regulations were amended w.e.f. 24.11.2011. The main highlight of the amendment is that the long-term customers for whom the transmission lines have been built under the CERC (Open Access) Regulations, 2004 without identified beneficiaries to the target region, have to pay the lowest demand Point of Connection (PoC) charge in the target region along with the PoC injection charge.

- b) CERC (Terms and Conditions of Tariff) First and Second Amendment) Regulation, 2011

The Commission in exercise of its power under section 178 (2) (s) of the Electricity Act, 2003 notified the Central Electricity Regulatory Commission (Terms and Condition of Tariff) Regulations, 2009 which came into force with effect from 1.4.2009. During the year regulations were amended two times based on the suggestions of various stakeholders to make provisions for provisional tariff order pending finalization of tariff orders for want of information and reconciliation of various figures. This addressed the cash flow problems of the generating companies and facilitated the recovery of tariff from the consumers by the Distribution companies. The Commission has passed the provisional tariff order in most of the cases pending before it. Moreover due to switchover of Banks from short term prime lending rate to base rate with effect from 1.7.2010, certain provisions in the Regulation were required to be amended. Provision have been made for change of rate of interest on working capital loans from SBI short term prime lending rate to SBI base rate, truing up of un-discharged liabilities for the purpose of determining the opening capital cost as on 1.4.2009, provision for certain additional heads for admitting additional capital expenditure and repealing the existing provisions for sharing of transmission charges in view of the implementation of the Central Electricity Regulatory Commission (Sharing of transmission charges and losses) Regulations, 2010.

5. Bureau of Energy Efficiency

The Bureau of energy efficiency is spearheading the task of improving the energy efficiency in various sectors of the economy through regulatory and promotional mechanism. BEE coordinates with designated consumers, designated agencies and other organizations , recognizes, identifies and utilizes the existing resources and infrastructure in performing the functions assigned to it under the Energy Conservation Act. The major achievements of BEE are highlighted briefly hereunder:

(a) Energy Conservation Schemes

- The Energy Conservation Day and Award function inaugurated by Hon'ble Prime Minister of India successfully held on 14.12.2011 in Delhi to promote energy conservation measures in the country.

- This year 644 participating units collectively invested ₹2201 crore in energy conservation measures & achieved a monetary savings of ₹2390 crore every year, implying a very short payback period of 11 months. These units have avoided the installation of power generating capacity equivalent to 504 MW Thermal Power Station in comparison to 357 MW in 2010.
- Painting competition on energy conservation at School, State & National Level was conducted for the year 2011 to motivate the children towards energy conservation. 20.72 lakh students of 58855 Schools from 4-6th standards of the 35 States & UTs participated in nationwide competition held on energy conservation. The student participation was about 33% higher than in the previous year.

(b) Standard and Labeling Programme

- Labeling for air conditioners, frost free refrigerators, fluorescent tube light, and distribution transformers is being made mandatory and 10 new equipments are added in the Voluntary phase.

(c) Bachat Lamp Yogana

- 25 million CFLs have been distributed and an avoided capacity of 217 MW (Verified) achieved in 2010–11 and 70 MW (unverified) achieved in 2011-12.

(d) State Designated Agencies

- Action Plan of 31 State Designated Agencies (SDAs) prepared. 53 demonstration projects have been undertaken by 26 States and 34 demonstration projects have been completed successfully.
- Out of 26 projects, 21 projects have been commissioned successfully under LED village campaign and the implementation of rest is under progress.

(e) State Energy Conservation Fund (SECF)

- 23 Governments / U.T. Administration have established their State Energy Conservation Fund (SECF) and ₹ 52.00 crore have been disbursed to 21 States.

(f) Energy Conservation Building Code (ECBC)

- Odisha, Rajasthan, UttaraKhand, Karnataka and Uttar Pradesh have amended the building code out of which Rajasthan and Odisha have also notified the code in their state.
- Up to December 2011, 129 commercial buildings have been awarded Star label and 114 ESCOs have been empanelled by BEE after accreditation from CRISIL/ ICRA/CARE through an open invitation and evaluation process.

(g) National Energy Certification Examinations

- BEE has conducted 9 National Certification Examinations till 2009. Till 9th examination, 5328 Energy Managers have been certified out of which 3344 are

qualified Energy Auditors. During the year 4 Guidebooks prepared to assist energy professionals

- 7 Sector specific Task Forces for Aluminium, Cement, Chlor alkali, fertilizer, Pulp & paper, Petrochemical & Refinery and Textile were constituted and regular workshops are being held. 7 Manuals and energy auditing codes for utility equipment have been put in place.

(h) National Mission for Enhanced Energy Efficiency

- Baseline study on SEC in Designated Consumers of 8 industrial sectors initiated for target setting. Platform Energy Efficiency Financing (EEFP) launched. MOU with PTC signed and 6 large Govt. buildings taken up. MOU with SIDBI is under finalization.

(i) Small and Medium Enterprises (SME)

- Energy use and technology gap assessment studies in more than 1250 small and medium enterprises followed by awareness workshops for disseminations of results and preparation of 325 Detailed Project Report (DPR).

6. Damodar Valley Corporation (DVC)

During the year 2011-12 CTPS Unit -7 and 8 (250MW each) and MTPS Unit 7 (500 MW) have been declared commercial operation with an outlay of ₹5890.59 crore. Apart from these units Full Load has been achieved for Koderma TPS Unit -I (500 MW) on 20.7.2011 and Durgapur Steel TPS Unit-1 (500 MW) on 29.7.2011. Unit 2 of KTPS & Unit 2 of DSTPS (500 MW each) are expected to be put on full load during the year 2011-12 and are likely to be commissioned by the end of 2012-13.

First unit of 525 MW of JV company Maithon Power Limited (MPL) has also been declared under commercial operation from 01 September, 2011.

The other details of performance of DVC are given in the **Annexure-III**.

7. Bhakra Beas Management Board (BBMB), Chandigarh

During the year 2011-12 (upto 31.12.2011), the generation from BBMB Power Houses has been 10021 MUs against the target of 8271 MUs. The Power House-wise plant availability of BBMB for the year 2011-12 (upto 31.12.2011) has been, Bhakra Left Bank 99.57%, Bhakra Right Bank 98.14%, Ganguwal 81.70%, Kotla 98.93%, Dehar 84.17% and Pong 99.92%. The overall availability of BBMB Power Houses is 93.41%. The power generated at BBMB Power Houses is being evacuated through BBMB power evacuation system running into 3,705 circuit KM length of 400, 220, 132 and 66 kV transmission lines and 24 substations. The availability of transmission system during the year 2011-12 (upto 31.12.2011) was 99.17%.

8. The achievements with reference to the Plan schemes, JERC (Mizoram & Manipur), Forum of Regulators are given at **Annexures-IV & V** and details of Non-Plan schemes in respect of APTEL and JERC (Goa & UT except Delhi) are at **Annexure VI & VII** respectively.

**Central Power Research Institute
Achievements upto 31.12.2011**

(₹ in crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Annual plan 2011-12	Quantifiable Deliverables	Projected Outcome	Process/ Timelines	Remarks	Achievements upto 31.12.2011
1	2	3	4	5	6	7	8	9
	Major Projects							
1.	Modernisation and augmentation of switchgear at CPRI, Bangalore Outlay :RS.24.60 CR.	Establishment of a) Facility to conduct inductive load switching tests on HV CB b) Facility to conduct capacitor current switching test on 245 kV CBs	2.17	Procurement of balance of equipment justification and commissioning of capacitor current switching and inductive current switching test facility	On completion of the project switchgear testing facility will be augmented to meet the requirements of the electrical industries	Apr. 11 to Sept. 11	Project is extended upto March 2012	* Major equipments have been procured and some equipments like Post insulator, Making device, Air core reactors, Impulse test system are to be delivered. * Civil works for STF building is completed. *project extended up to March 2012. Expenditure upto 31 st March 2011 : Rs. 18.70 Cr. Expenditure during the year 2011-12 (upto 31 st Dec.11) :Rs. 3.03 Cr. Cumulative Expenditure upto 31 st Dec. 2011 : Rs. 21.73 Cr.
2.	Modernisation of short circuit test facilities and Augmentation of power transformer test facilities Outlay : Rs.23.60 Cr.	Establishment of 1) Facility for loss measurement of transformers upto 50 MVA ii) Facility for type test on OLTC iii) Instrument transformer calibration test facility	6.00	Procurement of Power Transformer loss test facility, OLTC test facility, completion of civil works, commissioning of test facilities.	On completion of the project, facility for loss measurement of transformers upto 50 MVA rating & facility for type test on Online tap changers and instrument transformer calibration test facility would be established	Apr.11 to Sept.11	Project would be completed as per schedule	* Procurement of major equipment is completed. No Load test system is being completed. Annexure building for EOT crane & supplementary lab and work is completed. Expenditure upto 31 st March 2011 : Rs. 15.00 Cr. Expenditure during the year

								2011-12 (upto 31st December : Rs.3.50 Cr. Cumulative expenditure upto 31st Dec. 2011: Rs. 18.51 Cr. Committed expenditure: Rs 22.12 Cr.
3.	Augmentation of test facilities for optimization of 800 kV AC and 800 kV DC transmission system Outlay : Rs.38.00 Cr.	To augment test facilities for conducting optimization studies & transmission systems of 800 kV AC & 800 kV DC ratings.	15.2990	Establishing of in-door laboratory by commissioning of DC & AC test facility, material handling etc.		April 10 to Feb.10	The project involves procurement of DC test facility for which order is placed in Oct. 2010 and delivery time is 24 months. Construction of Indoor lab would commence from Mar 2011 AC & DC test facility have to be installed and commissioned	Hydraulic platform, 1200 kV indoor AC test set up, PD analyser received. Civil works pertaining to lab bldg. is completed. Construction of steel structure for indoor laboratory is in progress. PO placed and LC opened for DC test system delivery in 20 months. Project is to be completed Feb.2012. Cumulative Expenditure upto 31 st March 2011 : Rs. 20.50 Cr. Expenditure during the year 2011-12 (Upto 31st Dec.2011): Rs. 2.47 Cr.
4.	Setting up of test facilities for Pre-Qualification test on 400 kV XLPE Cable system Outlay : Rs.14.80 Cr.	To Set up test facility for testing for prequalification test on 400 kV XLPE cable system	4.00	Completion of building work of the PQ laboratory receipt of all equipment and instruments and commissioning of PQ test facility	The facility for study on energy efficiency and energy audit will be augmented into a full pledged centre of excellence.	April-11 to Dec.-11	Project would be completed as per schedule.	600 kV AC test system, 2.4 MV Impulse generator received. Civil works for laboratory building is in progress. Due to delay in completion of the Civil Works extension of project duration from Dec.11 to June 12 is being sought. Cumulative Expenditure upto 31 st March 2011 : Rs. 7.96 Cr. Expenditure during the year 2011-12 (upto 31 st Dec. 2011): Rs.1.47 Cr. Cumulative Expenditure upto 31 st Dec. 2011:Rs.9.43 Cr.

5.	Centre of Excellence for life cycle management and condition assessment of substation & power plant electrical equipment Outlay : Rs.11.98 Cr.	To create adequate R & D infrastructure for functional evaluation simulation, ageing studies & diagnostic monitoring of specimens/models power apparatus insulation	0.00	Procurement of balance equipment/instruments. Preparation for Construction and commencement of laboratory building & electrification	On completion, test facility for testing and conducting optimization studies on transmission system components of 800 KV AC/DC ratings would be in place to facilitate expansion of transmission system to higher rating beyond 400 KV.	Apr.11 to Jan.12	Project would be completed as per schedule.	Purchase Order (PO) placed for EMRF shielded Enclosure, Winding resistance meter etc., Procurement is in progress. The civil works for construction of lab building is nearing completion,. Project is as per schedule. Cumulative Expenditure upto 31 st March 2011 : 9.68 Cr. Expenditure during the year 2011-12 (31 st Dec.2011): Rs.0.31 Cr.
6.	Augmentation of High Voltage, Diagnostic Relay, Vibration, LED test facilities and CPRI infrastructure protection. (Rs. 62.65 lakhs)	Upgradation of High Voltage facilities at Bangalore and Bhopal units and establish EMI/EMC & LED test facilities.	12.55	Upgradation of HV test facilities at HV & STDS, Upgradation of tower & vibration test facility and diagnostic facilities at RTL Noida & Kolkata. Vertical extension of CCAR and strengthening of compound wall and roads at Bangalore, Hyderabad and Bhopal.	Upgradation HV test facilities at STDS, HV, tower & vibration test facilities, Additional space for CCAR. Strengthening of Infrastructure protection	April 2011 to March 2012	Project approved in January 2011, project comprises of 9 such projects and all efforts would be made to complete the project well before march 2012	Major equipment have been ordered and some of the equipments delivered. P.O. placed for EMI/EMC test Facility. All the Civil works planned under the infrastructure protections work is initiated & work is in progress. Cumulative Expenditure upto 31 st March 2011 Rs.10.74 Cr. Expenditure during the year 2011-12 (upto 30 th Sept.) : Rs. 18.89 Cr. Cumulative Expenditure upto 30 th Sept. 2011 : Rs. 29.63 Cr.
7.	Participation of CPRI as fifth equity partner in J.V. Company National High Power Test Laboratory Pvt. Ltd. Total project outlay Rs.298.64 Cr. (Proposed MoP CPRI share	To establish on line test facility for testing power transformer in the range of 100-315 MVA.	14.875	Finalization of project by Technical consultant	Apr.10 to Mar.11			Equity participation of CPRI / MoP to the extent of RS.24 Cr. has been approved. CPRI has paid Rs.14.875 Cr. towards this to NHPTL . Formal inclusion of CPRI in NHPTL is in progress.
8.	Other 7 Capital Projects Total Outlay: Rs.43.29 Crores		20.105					

NATIONAL POWER TRAINING INSTITUTE (NPTI)

Achievements upto 31.12.2011

₹ in crore

SL NO	Name of the Scheme	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Remarks/ Risk Factors
			4(i)	4(ii)	4(iii)			
			Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources			
1	Modernization & Up gradation of Training Facilities at Corporate office Faridabad			16.89	N.A	Revenue of Rs 4.774 crore per year will be generated after completion of the year 2013-14.	2013-14	The work is in progress and other processing of procurement will be carried out during this year.
2	Non-Plan		6.40					Agumantation of
	Total		6.40	16.89				Pension Fund

Damodar Valley Corporation
Achievement upto 31.12.2011

Part I - Major Projects

(₹ in crore)

Sl. No.	Name of Project	Objective/ Outcome	Outlay BE 2011-12 (Rs.Cr)	Expenditure upto 12/11 (Provisional)	Quantifiable Deliverables/ Milestones/Customes (Targets)	Process Timelines	Projected Outcomes	Remarks	Achievement w.r.t. Col (5)
1	2	3	4(i)	(4ii)	5	6	7	8	9
A.	A1] DVC's own Thermal Power Projects								
1	Mejia TPS Extn. * Unit # 5 & 6 (2x 250 MW)	Capacity addition of 500 MW	51.67	3.41	To Complete balance works & Contract Closing	03/2012	Completion of Contract Closing	Completion of balance works & Contract Closing under progress	Work under progress
2	Chandrapura TPS Extn. Unit# 7 & 8 (2x 250 MW)	Capacity addition of 500 MW	113.71	115.27	1] COD of unit-7 & 8	04/2011	Capacity addition of 250 MW and Completion of balance EPC & Non-EPC work	COD achieved during 2011-12	COD achieved during 2011-12
					2] Completion of balance EPC & Non-EPC work	03/2012		Work under progress	Work under progress
3	Mejia TPS Phase-II: Unit1&2 (2x 500 MW)	Capacity addition of 1000 MW	569.34	304.31	1] COD of Unit-2	04/2011	Capacity addition of 500 MW and Completion of balance EPC & Non-EPC work	Preparation for COD under progress. Expecetd in early 02/2012.	Now anticipated in early 02/2012
					2] Completion of balance EPC & Non-EPC works	03/2012		Work under progress at different fronts	Work under progress at different fronts
4	Koderma Stage-I: U# 1 & 2 (2x500 MW)	Capacity addition of 1000 MW	785.46	478.66	Unit-1: 1] Declaration of COD	06/2011	Capacity addition of 1000 MW	Work under progress. COD now anticipated in 05/2012.	Now anticipated in 03/2012.
					Unit-2: 1] Synchroni-sation	06/2011		Work under progress	Now rescheduled in 03/2012.
					2] Full load/ Commissioning	07/2011		Work under progress	Now rescheduled in 03/2012.
					3] COD	12/2011		Work under progress. COD now anticipated in 07/2012.	Now anticipated in 05/2012
					Completion of balance activities for both units	03/2012		Work under progress	Work nder progress at different fronts.

5	Durgapur Steel TPS U# 1&2 (2x500 MW)	Capacity addition of 1000 MW	754.66	405.22	Unit-1: 1] Declaration of COD	06/2011	Capacity addition of 1000 MW	Work under progress. COD now anticipated in 02/2012.	Now anticipated in 02/2012
					Unit-2: 1] Synchronisation	07/2011		Work under progress	Now rescheduled in 03/2012
					2] Full load/Commissioning	08/2011		Work under progress	Now rescheduled in 03/2012
					3] COD	12/2011		Work under progress. COD now anticipated in 05/2012.	Now anticipated in 05/2012
					Completion of balance activities for both units	03/2012		Work under progress	Work under progress at different fronts.
6	Raghuathpur TPS Ph-I: Unit# 1&2 (2x 600 MW)	Capacity addition of 1200 MW	1334.79	588.10	Unit-1: 1] Boiler light up	05/2011	Capacity addition of 1200 MW	All the major milestone has been rescheduled due to slow & Improper erection causing delay for rectification/ modification progress in erection work, Local disturbance, delay in land acquisition etc.	Due to delay in work progress in Main plant including Improper erection causing delay for rectification/ modification etc., BLU now rescheduled in 03/2012.
					2] TG Box-up	05/2011			Now rescheduled in 03/2012
					3] Synchronisation	07/2011			Now rescheduled in 05/2012
					4] Full load/Commissioning	12/2011			Now rescheduled in 06/2012
					Unit-2: 1] BOILER LIGHT UP	07/2011			Now rescheduled in 06/2012
					2] TG Box-up	06/2011			Now rescheduled in 06/2012
					3] Synchronisation	09/2011			Now rescheduled in 08/2012
					4] Full load/Commissioning	03/2012			Now rescheduled in 09/2012
7	Bokaro éÁi TPS: (1x 500 MW)	Capacity addition of 500 MW	834.98	256.25	1] Placement of EPC Orders for CHP & Water Pkg.	06/2011	Achievement of different major milestones towards capacity addition of 500 MW	Work under progress. Expected ordering by 05/2012.	Work under progress. Delay due to change in decision of breaking up of multiple packages. NIT expected in Feb/Mar-2012
					2] TG Erection Start	11/2011		Preparatory work towards TG erection under progress.	Preparatory work towards TG erection under progress.
					3] Boiler Hydro Test	02/2012		Boiler Hydro test now rescheduled in 03/2013.	Boiler Hydro test now rescheduled in 03/2013.

8	Raghunathpur TPS Ph-II: Unit# 1&2 (2x 660 MW)	Capacity addition of 1320 MW during 12th plan	631.00	0.00	1] Order placement for SG & STG package	05/2011	Completion of part pre-project activities and placement of order	SG package not yet finalised by NTPC. Placement of order on BHEL for STG package is under progress.	SG package not yet finalised by NTPC. Placement of order on BHEL for STG package is under progress.
					2] Placement of order for BOP Package	06/2011		Preparation of specification etc. under progress.	Preparation of specification etc. under progress.
	A2] DVC's Joint Venture Power Projects								
9	Maithon RB TPS (1050 MW) <i>[Equity contribution @26% from DVC to MPL, proposed Joint Venture of TPC & DVC], [Estd. project cost= Rs. 4578.08 Crs.]</i>	Capacity addition of 1050 MW	70.00	59.86	Provision kept for providing equity to M/s MPL for construction of the project.	03/2012	Equity contribution to M/s MPL, a joint venture company for capacity addition of 1050 MW	Work under progress by M/s MPL. COD of Unit-1 declared on 1.09.2011 and Full load of Unit-2 expected in 02/2012.	Work under progress by M/s MPL. COD of Unit-1 declared on 1.09.2011 and Full load of Unit-2 expected in 02/2012.
10	A3] Investigation / Feas. Studies / DPR etc. for future projects, if any.		2.00	0.00	Provision for expenditure towards Investigation / Feas. Studies / DPR etc. for new projects, if any.	03/2012	Conducting various pre-project study for capacity addition programme	As per requirement	As per requirement

Part II - Other Projects

C.	T & D schemes								
	TSC Schemes:	T & D		331.52	Commissioning of different 400 KV and 220 KV lines & Substations	by 3/2012		Forest Clearance & Stringing under progress Land & ROA problems	In progress
	R&A of T&D			50.52	R&A of projects within scheduled time frame	by 3/2012		In Progress	In progress
	Total T & D schemes	To facilitate T&D of power	382.04	102.49			To facilitate T&D of power		

D.	Communication schemes		4.42	0.51					
	1) Power Line Carrier Communication (PLCC), Satellite Communication (VSAT), Very High frequency communication (VHF), Unified Load Despatch & Communication scheme (ULDC), carrier protection .	1) Speech and data communication at 400 KV Durgapur Steel TPS, Raghunathpur TPS 2) Establishment of VSAT Stations at upcoming Power House 3) Speech communication at Jamuria, Barjora, Biada, Burnpur sub station 4) Integration of CTPS B (U# 7,8) with SLDC Maithon, DVC HQ Kolkata and RSCC Tollygunge, 5) Establishment of carrier protection of 132 KV S/C DTPS- Jamuria line	4.42	0.51	Erection & Commissioning	By 03/2012	Speech and data Communication	Erection and Commissioning to match with T&D Progress	Procurement of materials completed, Application for Frequency clearance sent to WPC (GOI), CTPS B (U# 7,8) integrated with SLDC Maithon, DVC HQ Kolkata and RSCC Tollygunge., Carrier Protection already commissioned in 1321 KV S/C DTPS- Jamuria line
E.	R&M Schemes								
	PHS U-1, MHS U-1&3, Others	R&M/LE, Improved performance	3.06		Engagement of Consultant for R&M job. Tendering and commencement of R&M works. Balance payment to the consortium of M/s Alstom & M/s BHEL.	03/2012	RMU/LE, Improved performance	NHPC was approached for providing consultancy services in Phase-II: R&M job. In absence of response from NHPC this job could not be taken up. No alternate consultancy could be found. DVC is again persuading NHPC to make them agreeable to provide consultancy service	Phase-I : RLA study completed and DPR for R&M/LE of the Unit has been prepared. Proposals for R&M/LE of MHS Unit 1 & 3 initiated.
F.	Pollution:	For Environmental compliance	91.792		Dry Ash Disposal Sys. for BTPS eBi: Part completion of supply & erection of Dry Ash sys.	03/2012	For Environmental compliance	For unit -1 & 3 commissioning is under progress.	Erection completed. Commissioning of Unit -2 is also completed.
G.	Misc. Spill Over Works								
	[1] Mejia TPS U#1,2 &3,4 (4x 210 MW)		2.44	0.04	For settlement of final bills.	03/2012		Work under Progress.	Work under Progress.

H.	Refurbishment/ Extension/ Improvement	To improve performance of Generating units with improved infra-structural network	206.35	13.66	Procurement & erection of major equipments for existing power stations including Transmission and Distribution for improvement of Generation	03/2012	To improve performance of Generating units with improved infra-structural network.	Balance work under progress.	Procurement of Generator Rotor for BTPS eBi Unit -3 completed.
I.	R&D Centre	To serve the requirement of DVC power stations and Transmission & Distribution system	2.08	0.00	Procurement of consumables and other running expenditure.	03/2012	to serve the requirement of DVC power stations and Transmission & Distribution system.	Identification of problems are under progress.	1). 6 Nos. of laboratories set up partially completed.
J.	SLDC scheme	Equity contribution to SLDC	8.00	0.00	Equity participation in SLDC	03/2012			Agreement under finalisation
K.	Equity participation NHPTL	Equity contribution to NHPTL	12.50	6.58	Equity participation in NHPTL	03/2012			Equity contribution made as per request
L.	Equity participation: MAMC	Equity contribution to MAMC	30.00	0.00	Equity participation in MAMC	03/2012			Equity contribution made as per request
M.	Equity participation: DVTDPL	Equity contribution to DVTDPL	0.30	0.00	Equity participation to DVTDPL	03/2012			Equity contribution made as per request.
	Grand Total in Rs. Cr. : A to M		5890.59	2334.36					

**Joint Electricity Regulatory Commission for Manipur & Mizoram
Achievement upto 31.12.2011**

(₹ in crore)

Sl. No.	Scheme/ Programme/ Projects	Sanctioned Cost/Cumulative expenditure from 1.4.2011 till 31.12.2011	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks/ Risk Factors	Achievements upto 31st December, 2011
1.	2.	3.		4			5.	6.	7.	8.	9.
		3 (i)	3(ii)	4(i)	4(ii)	4 (iii)					
				Non- Plan Budget	Plan Budget	Comple mentary Extra- Budgetary Resources					
	Joint Electricity Regulatory Commission for Manipur & Mizoram	Sanctioned cost : Rs.660.0 lakh Cumulative Expenditure from 1.4.2011 till 31.12.2011: Rs.127.69 lakh	To fulfill the commitment of the Government of India for assisting the States of North-Eastern Region in the initial 5 years in setting up of the Commission. It would help in regulating tariff for supply of electricity in the States of Manipur and Mizoram.	-	2.38	-	The Commission would regulate tariff for supply of electricity in these States resulting in efficiency improvements. It. would carry out other functions mandated in section 86 of the Electricity Act, 2003	This will result in efficiency improvements	Government of India will meet the expenditure during the initial 5 years from the date of constitution on and thereafter the Governments of the two States will share the cost.		i) 18 Regulations were notified by the Joint Commission. ii) Quarterly meetings of State Coordination Forum held. iii) Quarterly meetings of the State Advisory Committee held. iv) Workshop on Electricity Consumer Awareness-cum- Public Hearing held in Manipur and Mizoram. v) Public hearings held for determination of tariff for Manipur and Mizoram.

**Assistance to Forum of Regulators for Capacity Building and Consultancy
Achievement upto 31.12.2011**

(₹ in crore)

Sl. No.	Name of Scheme/ Programme/ Projects	Sanctioned Cost/Cumulative expenditure from beginning till 31.12.2011	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Remarks/ Risk Factors	Achievements upto 31st December, 2011
1.	2.	3.		4			5.	6.	7.	8.
		3 (i)	3(ii)	4 (i)	4 (ii)	4 (iii)				
				Non- Plan Budget	Plan Budget	Comple mentary Extra- Budgetary Resources				
	Assistance to Forum of Regulators for Consultancy and Capacity Building.	Sanctioned Cost: Rs. 1000 lakh Cumulative Expenditure from 1.4.2011 to 31.12.2011 : Rs. 73,28,309/- has been incurred upto 31.12.2011	Capacity building by way of training/ reorientation of personnel of regulatory commissions and availing consultancy.		2.00		<ul style="list-style-type: none"> 100 officers/ staff of electricity regulatory commissions will be trained in a year. Studies will serve as inputs for decision making for the Regulatory Commissions. 	Based on the action plan, the funds will be utilized during 2011-12 for the desired objective		<p>The following three (03) capacity building programmes have been conducted by FOR during the period :</p> <ul style="list-style-type: none"> Orientation Programme for Chairpersons/ Members of Electricity Regulatory Commissions (ERCS). By IIM-A from 3rd-11th June, 2011, 17 Chairpersons/ Members of SERC had attended Orientation Programme. 4th Capacity Building programme for officers of ERC from July, 18-23, 2011 at IIT, Kanpur. Total 12 participants attended the programme.

										<ul style="list-style-type: none">• Training Programme on iDSM and Energy Efficiency on 10-14 October, 2011 at IIT, Roorkee. Total 21 participants attended the training. <p>The following Studies were finalized during this period:</p> <ul style="list-style-type: none">• Evolving measures for the effective implementation of Prepaid Metering in the country• Study on Model Guidelines for Determination of Adequacy of Tariff by SERCs/CERC
--	--	--	--	--	--	--	--	--	--	---

Joint Electricity Regulatory Commission for Goa and Union Territories
Achievement upto 31.12.2011

(₹ in crore)

Sl. No.	Scheme/ Programme/ Projects	Sanctioned Cost/Cumulative expenditure from beginning till 31.12.2011	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Remarks/ Risk Factors	Achievements upto 31.12.2011
1.	2.	3.		4			5.	6.	7.	8.
		3 (i)	3(ii)	4 (i)	4 (ii)	4 (iii)				
				Non- Plan Budget	Plan Budget	Comple mentary Extra- Budgetary Resources				
	Joint Electricity Regulatory Commission (JERC) for the State of Goa and UTs except Delhi	Cumulative Expenditure till 31.12.11 Rs.10.64 Crores.	To meet the Statutory Requirement for setting up Joint Electricity Regulatory Commission	4.00(BE)	NIL	NIL	The Commission would regulate tariff for supply of electricity in the state of Goa and UTs except Delhi resulting in efficiency improvements	This will be a permanent institution	The Joint Electricity Regulatory Commission is fully operational.	The Commission has framed and notified 15 number of regulations & heard 59 petitions out of which 7 relates to tariff against petitions filed by utilities.

Appellate Tribunal for Electricity Achievement upto 31.12.2011

(₹ in crore)

Sl. No.	Name of Scheme/ Programme	Sanctioned Cost/Cumulative expenditure from 1.4.2011 till 31.12.2011	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks/ Risk Factors	Achievements upto 31st December, 2011
1.	2.	3.		4			5.	6.	7.	8.	9.
		3 (i)	3(ii)	4(i)	4(ii)	4 (iii)					
				Non- Plan Budget	Plan Budget	Comple mentary Extra- Budgetary Resources					
	Appellate Tribunal for Electricity	Sanctioned Cost : Not applicable Expenditure from 01.04.2011 to 31.12.2011;	To facilitate expeditious resolution of disputes in the power sector at the appellate level Further, the Tribunal will also function as Appellate Tribunal under Petroleum and Natural Gas Regulatory Board Act.	8.50	0.00	0.00	Total number of appeals pending for final disposals as on 1st January, 2011 is 268 Apart from this, 390 IAs/Petitions are also pending for disposal/ admission. These are likely to be disposed of along with fresh appeals being filed during 2011-12. The above details are inclusive of cases the Petroleum and Natural Gas Regulatory Board Act.	N. A.	Spread through-out the year		Following are disposed of during 1.4.2011 to 31.12.2011 : Appeal n̄ 185; IAs n̄ 131; Others n̄ 73