GOVERNMENT OF INDIA

OUTCOME BUDGET

OF

MINISTRY OF POWER
2011 – 2012

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EXECUTIVE SUMMARY

The Plan Out lay of the Ministry of Power for the year 2011-12 is ₹ 66382.73 crore which includes Internal Extra Budgetary Resources (IEBR) of CPSUs amounting to ₹ 56740.73 crore and Gross Budgetary Support (GBS) of ₹ 9642.00 crore. The Non Plan outlay of the Ministry of Power for the year 2011-12 is ₹ 137.68 crore.

The salient features of the performance during 2010-11 and projected Outcomes of 2011-12 are as under.

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) : 11419 villages were electrified and connections were given to 39,73,327 BPL households during the year 2010-11 (upto December, 2010). The cumulative figures are electrification of 89,675 villages and release of electric connections to 1,40,70,353 BPL households. The targets for the year 2011-12 is electrification of 15,500 un-electrified villages and offering electricity connections to around 47 lakh BPL households. The outlay for 2011-12 is ₹ 6000 crore

Re-structured-Accelerated Power Development Reforms Programme R-APDRP : Cabinet Committee on Economic Affairs (CCEA) approved the "Re-structured APDRP" for XI Plan as a Central Sector Scheme on 31.07.2008. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction. Projects under the scheme would 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). 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 to be taken up in Two Parts. Part-A shall include the projects for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centres. Part-B shall include regular distribution strengthening projects. Initially, funds for the projects under both the parts are to be provided through loan (100% for Part A and 25% for Part-B except special category and North-Eastern States for which under Part-B 90% loan will be provided) which will be converted into grant on fulfillment of conversion conditionalities. 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.

Under Part-A of R-APDRP 1401 projects with ₹ 5177 crore to cover almost all the eligible towns in the country have been sanctioned. Additional 18 nos. SCADA Projects worth ₹ 471.58 crore are also approved under Part-A. Under Part-B, 775 projects worth ₹14854.43 crore for strengthening of sub-transmission distribution system, against 1100 eligible towns in the country have also been sanctioned till 21.02.2011. ₹ 3528.25 crore have been released to PFC as loan, under the programme till 21.02.2011. The outlay for 2011-12 is ₹ 2034 crore.

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 installed capacity of NTPC and its subsidiaries/joint ventures as on 01.04.2010 was 31704 MW. During 2010-11 till December 2010, NTPC has added 1490 MW of thermal generation capacity comprising of 490 MW at NCTPP – Dadri, 500 MW at Jhajjar and 500 MW at Korba. The outlay of ` 26400 crore (IEBR) during 2011-12 would result in commissioning of 4870 MW i.e 2870 MW from NTPC's own capacity (1320 MW from Sipat I, 500 MW from Simhadri II, 250 MW from Bongaigaon and 800 MW from Koldam) and 2000 MW from Joint ventures (1000 MW from IGSTPP, Jhajjar and 1000 MW from Vallur). The outlay will also result in substantial physical progress of the projects scheduled to be commissioned during the XII Plan period.

II. NHPC Ltd

The installed capacity of NHPC and its subsidiaries/joint ventures as on 01.04.2010 was 5175 MW. During 2010-11 till 31.12.2010, the Company added 120 MW of Sewa II Project. Further, NHPC is endeavored to commission six projects namely Chamera-III (231 MW), Nimmo Bazgo (45 MW), Uri-II (240 MW), Chutak (44 MW), Teesta LDP-III (132 MW) and Parbati-III (520 MW) during the year 2011-12.

Total plan outlay of ₹ 5090 crore (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, IB & II and Dibang projects. In addition, provision is also kept for survey & investigation woks at future schemes and residual works/payments at completed schemes (Dulhasti and Sewa-II).

III. NEEPCO

The installed capacity of NEEPCO and its subsidiaries/joint ventures as on 01.04.2010 was 1130 MW. The installed capacity has been maintained at the same level as on 31.12.2010.

During the year 2011-12, the approved outlay is ₹ 1037.27 crore (excluding grant of ₹ 100 crore for DONER) comprising GBS of ₹ 87.50 crore and IEBR of ₹ 949.77 crore which is proposed inter-alia for the ongoing Kameng HEP (600 MW), Pare HEP (110 MW), Turial HEP (60 MW) and Tripura Gas Based Power Project (100 + 20% MW).

IV. THDC India Ltd

The installed capacity of THDC India Ltd and its subsidiaries/joint ventures as on 01.04.2010 was 1000 MW. The installed capacity has been maintained at the same level as on 31.12.2010.

The outlay of ₹ 389.85 crore has been made comprising of IEBR in 2011-12. Efforts would be made to commission all the four units of Koteshwar HEP (400 MW) during 2011-12. For Tehri PSP

(100 MW) and Vishnugad Pipalkoti HEP (444 MW) award of major work is in progress and construction of major work shall be taken up after award of contracts during 2011-12.

V. SJVN Ltd

The SJVN Limited was incorporated on May 24, 1988 as a joint venture of the Government of India (GOI) and the Government of Himachal Pradesh (GOHP).

It has the country's largest 1500 MW Nathpa Jhakri Hydro Electric Project. Since then, the Corporation has expanded its base from a single project to a multi project and thereafter from its presence in a single State to a pan-Indian Corporation and finally as an international organization by undertaking projects in Nepal and preparation of Detailed Project Report for two projects in Bhutan.

A cumulative energy generation of 42460.212 MUs has been achieved till December 31, 2010. The outlay of ₹1133.13 crore has been made in the IEBR 2011-12.

VI. DVC

The installed capacity of DVC and its subsidiaries/joint ventures as on 01.04.2010 was 3299.70 MW. The installed capacity has been maintained at the same level as on 31.12.2010.

A Plan outlay of ₹5890.59 crore has been made during 2011-12 which would result in commercial operation of Mejia Unit 5 & 6 (2 X 250 MW). Two Units of 500MW each both in Durgapur Steel Thermal Power Station (DSTPS) & Kodarma Thermal Power Station (KTPS) are expected to be commissioned within 2011-12. Raghunathpur Thermal Power Station (RTPS) Phase-I (2X 600 MW), Bokaro Thermal Power Station (BTPS) - A are in progress but likely to be commissioned in XII Plan. The outlay will also result in commissioning of 400 KV network of DSTPS-RTPS, 220KV Dhanbad - Giridih Line, 220KV Mejia_Gola-Ramgarh Line and commissioning of Giridih Sub-station.

The Outlay for the Joint venture project through Maithon Power Limited (MPL) at Maithon Right Bank Thermal Power Station will result in commissioning of Unit # 2 (1 X525 MW) during 2011-12.

Transmission

During FY 2010-11 (upto 31.12.2010), POWERGRID has commissioned/ completed about 3,607-circuit km. of transmission line and achieved about 2,775 MVA of transformation capacity addition. The overall outcome in the year 2011-12 with an outlay of ₹17,700 crore for POWERGRID would be to commission/ complete 7,500-circuit km. of transmission lines involving 16425 MVA of transformation capacity.

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.

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

MINISTRY OF POWER
Chapter - 1
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. The Ministry of Power 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 Central Electricity Authority, Central Electricity Regulatory Commission and Appellate Tribunal for Electricity;
- 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. North Eastern Electric Power Corporation Limited (NEEPCO);

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

h. Power Finance Corporation Limited (PFC);

i. THDC India Limited;

j. SJVN Limited;

k. Central Power Research Institute (CPRI);

l. National Power Training Institute (NPTI);

m. Bureau of Energy Efficiency (BEE);

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 Bharatsinh Solanki was the Minister of State for Power from 1 June, 2009 to 19 January, 2011.

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 Special Secretary, one Additional Secretary and five Joint Secretaries, including the Financial Adviser.

Shri Gireesh B. Pradhan, assumed charge as Special Secretary and he oversees the work relating to Policy & Planning; Power Projects Monitoring Panel; Operation Monitoring; Planning & Policy; Hydro Power Projects; Bhakra Beas Management Board; Environment Management for Hydro Project; RTI Cell; Transmission; PGCIL; Information Technology; Training & Research and Public Grievances.

Shri Ashok Lavasa, Additional Secretary, oversees the work relating to Reforms & Restructuring (including the state Boards restructuring), International Cooperation and climate Change, Coordination, Administration, Parliament and Official Language, Nodal Officer for open Access in Transmission and Distribution including Franchising, Accelerated Power Development and Reforms Programme, PFC, Rural Electrification; Rajiv Gandhi Gramin Vidyutikaran Yojana; REC; Energy Conservation & Efficiency; Demand Side Management; BEE; Ultra Mega Power Project; Thermal; NTPC Limited; DVC; Independent Power Producers and Fuel Supply.

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

i) Transmission; PGCIL; Information Technology; Training & Research and Public Grievances.

ii) Ultra Mega Power Project; Thermal; NTPC Ltd.; DVC; Independent Power Producers and Fuel Supply.

iii) Accelerated Power Development and Reforms Programme, PFC, Rural Electrification; Rajiv Gandhi Gramin Vidyutikaran Yojana; REC; Energy Conservation & Efficiency; Demand Side Management; BEE and Vigilance & Security.

iv) Operation Monitoring; Planning & Policy; Hydro Power Projects; BBMB; Environment Management for Hydro Project and RTI Cell.

v) Internal Finance; Budgetary Control.

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 Director (Admn.), who is also the Liaison Officer for SC/ST and Director (T&R) is the Liaison officer for OBCs.

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 originally 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.

Bureau of Energy Efficiency (BEE)

The BEE was established on 1 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.

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 (6) 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.

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.

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. At present, Damodar Valley Corporation is supplying power within the covered area of 24,235 sq. k. m. known as the DVC Command Area and also exporting power to other States beyond the Damodar Valley. The present installed operating Capacity is 2936.50 MW comprising of Thermals 2710 MW, Hydel 144 MW and GT 82.5 MW.

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 01.10.1967. 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 15.5.1976. 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 waters 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 Corporation has grown rapidly to become the largest thermal generating company in India. However, in addition to attaining large size, the operations of the company have also become diverse and are now not limited to thermal power only. 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 31.12.2010 the authorized share capital of NTPC is ₹10,000 crore and paid up capital is ₹8,245.50 crore. The corporation 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 has as on 31.12.2010 had installed capacity of 33,194 MW.

Power Grid Corporation of India Limited (PGCIL)

Power Grid Corporation of India Limited (PGCIL) 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 31.03.2010 is ₹ 4,208.84 crore. The mission of the Corporation is "Establishment and Operation of Regional and National Power Grids to facilitate transfer of power within and across the regions with reliability, security and economy on sound commercial principles". As on March 31, 2010, POWERGRID is operating about 75,290 circuit km. of transmission lines and 124 sub-stations having transformation capacity of about 83,400 MVA. The current inter-regional transmission

capacity of PGCIL is 22,400 MW. The transmission system availability is maintained consistently at more than 99% by deploying 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 schedule "A" Enterprise of the Government of India with an authorized share capital of ₹15,000 crore and paid up capital as on 31.03.2010 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 2 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 & commissioning of power generation projects, which in turn would effectively promote the development of the North Eastern Region. It has 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 Region. The main objectives of Corporation are to add to the power generating capacity in the North Eastern Region by ensuring optimum utilization of commissioned generation projects, to generate adequate internal resources ensuring justifiable return on investment, to continue sustained efforts to obtain the receivables from State Electricity Boards/Departments, to execute and commission power projects, both hydro and thermal, within prescribed time frames, and to undertake long term feasibility studies for optimum development of hydro and thermal power resources of the 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 31.12.2010 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, has 18 nos. of Project Offices spread all over the country.

Power Finance Corporation (PFC)

Power Finance Corporation Limited (PFC), is a Non-Banking Financial Company, which was incorporated on July 16, 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 and 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. It has an authorized share capital of ₹4000 crore.

With the successful commissioning of the prestigious Tehri Dam & HPP (4x250 MW) involving huge Rehabilitation & Resettlement and other technical complexities, THDCIL has acquired sufficient expertise and state of art technology for planning and executing Hydro Power Projects.

THDC India Ltd is having Installed capacity of 1000 MW which meets the considerable peak energy demand of various northern states of the country. THDCIL is entrusted with new projects for execution/preparation/ updation of DPR for hydro power projects, Pump Storage Schemes in India and abroad.

SJVN LIMITED

SJVN Limited is a joint venture Company of Govt. of India and Govt. of Himachal Pradesh and has authorized capital of ₹7000 crore and paid up capital of ₹4136.63 crore as on 31.12.2010. It was incorporated as a Limited Company under the Companies Act 1956 on 24 May, 1988. SJVN is constructing the 412 MW Rampur Hydro Electric Project in the state of Himachal Pradesh which is scheduled to be commissioned by September, 2013. SJVN is also implementing three hydro projects (252 MW Devsari, 59 MW Naitwar Mori and 45 MW Jakhol Sankri) in the state of Uttarakhand Further, SJVN has also been allocated Luhri Hydro Electric Project (775 MW) and Dhaulasidh HEP (40 MW) in the state of Himachal Pradesh for preparation of Detailed Project Report and subsequent execution. Further, SJVN is entering into a Joint Venture for the implementation of 1500 MW Tipaimukh HE Project in Manipur with a equity participation to the extent of 26%.

e) AUTONOMOUS BODIES:

National Power Training Institute (NPTI)

National Power Training Institute (NPTI) has been set up by the Ministry of Power, Govt. of India, to function as the National Apex Body for Human Resource Development of Power Sector for the past four decades. NPTI with its Corporate Centre at Faridabad operates on an all India basis through its five Regional Institutes located at Neyveli (Tamil Nadu), Durgapur (West Bengal), Badarpur (New Delhi), Nagpur (Maharashtra) and Guwahati (Assam) and specialized Centres viz., Power Systems Training Institute (PSTI) & Hot Line Training Centre (HLTC) at Bangalore, a Centre for Advanced Management and Power Studies (CAMPS) at Faridabad (Haryana). NPTI (NE-R) is functioning from its new camps at Kahilipara, Guwahati and a scheme for Setting up of Hydro Power Training Centre at Nangal is functioning from its camps.

Since its inception NPTI has shared its engineering and technology expertise with more than 1,51,000 Power Professionals at various levels across 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 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, under various schemes.

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.

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.

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

5. **Joint Electricity Regulatory Commission (JERC) for Manipur and Mizoram:** Pursuant to a Memorandum of Agreement 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 has also 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.

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

7. **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. As per census 2001, 44% of the rural households had electricity. Improvement of rural electricity infrastructure is essential to empower rural India and unleash its full growth potential. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under the scheme, projects 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 ₹28,000 Crore. To increase the coverage of small habitations, Government allowed electrification of habitations upto 100 population instead of earlier limit of 300.

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

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

10. **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.

11. **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.

12. **Energy Conservation:** The funds would be utilized for carrying out the Energy Conservation related activities i.e. National level awareness campaign, National Energy Conservation Awards and National level Painting Competition for children. National Action Plan on Climate Change contains 8 (eight) 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. This is being pursued by MoP and Bureau of Energy Efficiency (BEE).

National Mission for Enhanced Energy Efficiency (NMEEE)

To enhance energy efficiency, four new initiatives have been introduced in the NMEEE. These are:

- A market based mechanism to enhance cost effectiveness of improvements in energy efficiency in energy-intensive large industries and facilities, through certification of energy savings that could be traded.
- Accelerating the shift to energy efficient appliances in designated sectors through innovative measures to make the products more affordable.
- Creation of mechanisms that would help finance demand side management programmes in all sectors by capturing future energy savings.
- Developing fiscal instruments to promote energy efficiency

13. **Bureau of Energy Efficiency (BEE):** Funds would be provided to BEE for implementation of its various plan schemes. A number of Demand Side Measures (DSM) have been initiated by the Government to reduce the overall power consumption, improving efficiencies of ground water extraction, to reduce the subsidy burden of the states and energy cost incurred by the municipalities. Government has approved Bachat Lamp Yojana (BLY) scheme that seeks to promote energy efficient and high quality Compact Fluorescent Lamps (CFLs) as replacement of incandescent bulbs in households. A Standard and Labeling programme has been launched to promote to reduce end use consumption by applying standards & labeling for equipments/appliances and mandatory labeling. Further, the Energy Conservation Building Code (ECBC) has been launched to reduce energy consumption in commercial buildings. Government has also approved a scheme for the strengthening of State Designated Agencies (SDAs) for empowering the SDAs as partners of BEE at state level to implement Energy Conservation Act, 2001 (EC Act, 2001). Government has launched schemes for the Designated consumers and Small and Medium Enterprises (SMEs) programme for targeting energy consumption reduction of designated consumers and SMEs, capacity building of Energy Auditors & Managers and Contribution to SECF. The SECF is a statutory requirement and under EC Act. It is also one of the deliverables of SDAs Energy Conservation Action Plan (ECAP).

14. **Re-structured Accelerated Power development Reforms Programme:** Cabinet Committee on Economic Affairs (CCEA) approved the "Re-structured APDRP" for XI Plan as a Central Sector Scheme in its meeting held on 31.07.2008. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction. Projects under the scheme would 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).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 to be taken up in

Two Parts. Part-A shall include the projects for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centres. Part-B shall include regular distribution strengthening projects. Initially, funds for the projects under both the parts are to be provided through loan (100% for Part-A and 25% for Part-B except special category and North-Eastern states for which under Part-B 90% loan will be provided) which will be converted into grant on fulfilment of conversion conditionalties. Besides, there is an enabling component namely, Part-C under which grant will be provided to meet the expenditure for facilitating activities of the programme.

15. **Assistance to Forum of Regulator for Capacity building:** The Government had approved a plan assistance of ₹10.0 crore to Forum of Regulators for capacity building and availing consultancy. The assistance is spread over the 11th Five Year Plan period with a maximum expenditure of ₹2.0 crore in any particular year.

16. **National Electricity Fund (Interest Subsidy Scheme):** In pursuance of the announcement made in the Budget (2008-09) for creation of a National Electricity Fund (NEF) for providing loan to the States for improving their distribution/transmission infrastructure, a Committee under the chairmanship of the Member (Power), Planning Commission was constituted on 29.04.2008. The proposal was revised on the basis of decision taken in the meeting held under Secretary (Planning Commission) to provide interest subsidy on loan by Financial Institutions like PFC, REC and commercial banks for distribution schemes not covered by R-APDRP and RGGVY. The EFC meeting held on 18.10.2010 decided interest subsidy aggregating to ₹9217 crore for loan disbursement amounting to ₹25,000 crore by PFC, REC and commercial banks spread over 2011-12 and 2012-13 for distribution schemes. The scheme may be reviewed thereafter. A CCEA note is under preparation accordingly.

17. **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.

Chapter - II
OUTCOME BUDGET 2011-12

Outcome focused budgeting has been introduced as a tool to improve the quality and accountability of Government's expenditure programmes. Outcome Budget have 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 ₹ 66382.73 crore is the outlay approved by the Planning Commission for the year 2011-12 as per details given below: -

(₹ 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	10250.00	13699.38	2450.62	0.00	**26400.00**	0.00	**26400.00**
2	N.H.P.C.	1350.21	2078.67	0.00	848.51	**4277.39**	812.61	**5090.00**
3	POWERGRID	3927.00	12073.00	1700.00	0.00	**17700.00**	0.00	**17700.00**
4	D.V.C.	486.59	1000.00	0.00	4404.00	**5890.59**	0.00	**5890.59**
5	T.H.D.C.	164.85	0.00	0.00	225.00	**389.85**	0.00	**389.85**
6	S.J.V.N.	810.25	0.00	0.00	322.88	**1133.13**	0.00	**1133.13**
7	NEEPCO	150.67	0.00	144.50	654.60	**949.77**	87.50	**1037.27**
	TOTAL (A)	**17139.57**	**28851.05**	**4295.12**	**6454.99**	**56740.73**	900.11	**57640.84**
B.	**MOP Schemes**							
1	Rural Electrification Schemes	0.00	0.00	0.00	0.00	0.00	6000.00	6000.00
2	R-APDRP	0.00	0.00	0.00	0.00	0.00	2034.00	2034.00
3	NPTI(Training & HR)	0.00	0.00	0.00	0.00	0.00	16.89	16.89
4	CPRI(Research &Testing)	0.00	0.00	0.00	0.00	0.00	163.40	163.40
5	Programmes & Infrastructure Improvement of CEA	0.00	0.00	0.00	0.00	0.00	16.23	16.23
6	Bureau of Energy Efficiency	0.00	0.00	0.00	0.00	0.00	123.80	123.80
7	MOP other schemes	0.00	0.00	0.00	0.00	0.00	**387.57**	**387.57**
	Total (B)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**8741.89**	**8741.89**
	Total (A+B)	**17139.57**	**28851.05**	**4295.12**	**6454.99**	**56740.73**	**9642.00**	**66382.73**

(₹ in crore)

SL.NO.	ORGANISATION/SCHEMES	NON PLAN BUDGET
1.	MOP Secretariat	24.10
2.	Central Electricity Authority	77.03
3.	CERC Fund	31.48
4.	CERC Fund	-31.48
5.	NPTI	6.40
6.	Appellate Tribunal for Electricity	8.50
7.	Setting up of Joint SERC for UTs & Goa except Delhi	4.00
8	B.T.P.S.	17.65
	Grand Total	**137.68**

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) DVC
- v) SJVN Ltd.
- vi) THDCIL

(d) Transmission Network by POWERGRID.

(e) Energy Efficiency

- (i) Bureau of Energy Efficiency
- (ii) Energy Conservation Scheme of MOP

(f) Research & Testing by CPRI

(g) Training and skill improvement by NPTI

(h) Other Schemes

(i) Central Electricity Schemes

(j) JERC for the State of Manipur & Mizoram

(k) Central Electricity Authority

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 major scheme for creation of rural electricity infrastructure and households electrification. The targets for the year 2011-12 is for electrification of 15,500 un-electrified villages and electricity connections to around 47 lakh BPL households. The details are at **Annexure-I.**

(b) Restructured Accelerated Power Development & Reform Programme (R-APDRP) – "Re-structured APDRP" for XI Plan is a Central Sector Scheme and the focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction. The financial target for the Financial Year 2011-12 are as under:

R-APDRP Scheme	Targets for 2011 -12		
	Sanction of Projects		Disbursement
	Nos.	₹ crore	₹ crore
Part-A			929.00
SCADA*	18	471.58	296.00
Part-B*	154	2868.00	734.00
Total (Loan)		3339.58	1959.00
Part-C (Grant)			75.00
Total (Loan + Grant)		3339.58	2034.00

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 ₹ 26400 crore (IEBR) during 2011-12 would result in commissioning of 4870 MW, out of which 2870 MW is directly by NTPC (Sipat-1 – 1320 MW, Simhadri –II – 500 MW. Bongaigaon -250 MW and Koldam 800 MW) and balance 2000 MW is through Joint Venture Route (Aravali – 1000 MW and Vallur 1000 MW) and substantial physical progress of the projects scheduled to be commissioned in XII Plan. The details are at **Annexure-III.**

(ii) NHPC Limited

The total Plan Outlay for 2011-12 is ₹ 5090 crore including Gross Budgetary Support of ₹.812.61 crore. During 2011-12, 6(six) projects namely Chamera-III (231 MW), Nimmo Bazgo (45 MW), Uri-II (240 MW), Chutak (44 MW), Teesta LDP-III (132 MW) and Parbati-III (520 MW) are likely to be commissioned. The construction activities at Parbati-II, Teesta Low Dam-III and

IV, Subansiri Lower, Uri-II, Chamera-III, Parbati-III, Nimoo Bazgo, Chutak and Kishanganga Project are expected to go in full swing. The details are at **Annexure-IV.**

(iii) North Eastern Electric Power Corporation (NEEPCO)

The Plan outlay for the year 2011-12 is ₹ 1037.27 crore including Budgetary Support of ₹ 87.50 crore. This is to be incurred mainly for the (i) Ongoing Kameng H.E. Project (600 MW), (ii) Pare H.E. Project (110 MW), (iii) Tripura Gas Based Power Project (100±20% MW) and prospective new projects like Garo Hills Coal Based Power Project (500 MW), Meghalaya, Agartala Gas Turbine Plant-CC, Extension Project (52 MW), Tripura's Survey & Investigation Schemes and Renovation & Modernization of Kopili Power Station etc. The details are at A**nnexure-V.**

(iv) THDC India Limited

For the year 2011-12, an outlay of ₹.389.85 crore has been made. An additional capacity of 400 MW is likely to be added during the year. Provision has been made for commencing of Koteshwar Project & execution of various works of Tehri PSP, Vishnugad pipalkoti HEP (444MW) etc. The details are at **Annexure-VI.**

(v) SJVN Limited

A provision of ₹ 1133.13 crore has been made in the IEBR. During the year 2011-12 the construction activities of Rampur HEP (412 MW) and Luhri HEP (775 MW) would achieve considerable progress. Works being carried out at Nathpa Jhakri HEP shall lead to greater availability of NJHPS. The details are at **Annexure-VII.**

(vi) Damodar Valley Corporation (DVC)

A Plan outlay of ₹ 5890.59 crore has been made during 2011-12 which would result in commercial operation of Mejia Unit 5 & 6 (2 X 250 MW). Two Units of 500MW each both in Durgapur Steel Thermal Power Station (DSTPS) & Kodarma Thermal Power Station (KTPS) are expected to be commissioned within 2011-12. Raghunathpur Thermal Power Station (RTPS) Phase-I (2X 600 MW), Bokaro Thermal Power Station (BTPS) - A are in progress but likely to be commissioned in XII Plan. The outlay will also result in commissioning of 400 KV network of DSTPS-RTPS, 220KV Dhanbad - Giridih Line, 220KV Mejia_Gola-Ramgarh Line and commissioning of Giridih Sub-station.

The Outlay for the Joint venture project through Maithon Power Limited (MPL) at Maithon Right Bank Thermal Power Station will result in commissioning of Unit # 2 (1 X525 MW) during 2011-12. The details are at **Annexure-VIII**.

(d) Transmission Network by POWERGRID

The outlay is ₹ 17,700 crore and would result in commissioning/ completion of 7,500 Ckms. of transmission lines involving 5,640 MVA of transformation capacity. The details are at **Annexure-IX.**

(e) Energy Efficiency

(i) Bureau of Energy Efficiency : The Plan Outlay for BEE is ₹ 123.80 crore. In order to enhance the efforts to promote energy efficiency during the XI plan period and to achieve the target of reducing consumption by 5% (equivalent to 10,000 MW of avoided capacity) by 2012, 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, Capacity Building of SDAs. The details are at **Annexure X.**

(ii) **Energy Conservation Scheme of MOP** - The Plan Outlay for Energy Conservation is ₹ 130.80 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 (eight) 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. This is being pursued by MoP through Bureau of Energy Efficiency (BEE). The details are at **Annexure XI.**

(f) 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 ₹ 163.40 crore. The details are at **Annexure XII.**

(g) Training and skill improvement by NPTI :

National Power Training Institute (NPTI) is the National Apex Body for Human Resource Development of Power Sector for the past four decades. NPTI has shares its engineering and technology expertise with more than 1,51,000 Power Professionals at various levels across the country. The Plan Outlay for NPTI is ₹ 16.89 crore. 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. The details are at **Annexure XIII.**

(h) **Other Schemes:**

Central Electricity Authority **-** The Plan Outlay for CEA is ₹ 16.23 crore and Non-Plan Budget estimates ₹ 77.03 crore. 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 – The Plan Outlay for JERC for the State of Manipur & Mizoram is ₹ 2.38 crore. Pursuant to a Memorandum of Agreement 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 has also 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 details are at **Annexure- XV.**

Apart from these, there is a provision of ₹ 2.00 crore under Assistance to Forum of Regulators for Capacity Building (Annexure-XVI), ₹ 0.82 crore under Comprehensive Award Scheme (Annexure-XVII), ₹ 1.00 crore under MoP Sectt. under plan scheme and ₹ 3.75 crore under Non-Plan scheme **(Annexure- XVIII)** and ₹ 1.00 crore under Funds for Evaluation Studies. A provision of ₹ 249.57 crore has been kept for National Electricity Fund (Interest Subsidy) Scheme. An amount of ₹4 crore has been kept under the scheme JERC for Union Territories Goa except Delhi (Non-Plan) and a provision of ₹8.50 crore has also been kept under the scheme APTEL (Non Plan). **(Annexure - XX and XXI)**

Annexure-I

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)
Outcome Budget 2011-12

(₹ 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
			Non-Plan Budget	Plan Budget	Comple-mentary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
1	Rajiv Gandhi Grameen Vidhyutika-ran Yojana (RGGVY)	Electrifying all villages and providing access to electricity to all rural households.		₹ 6,000 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 BPL 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.

Annexure-II

Restructuired Accelerated Power Development And Reforms Programme (R-APDRP) In XI Plan Outcome Budget 2011-12

(₹ in crore)

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2011-12			Quantifiable deliverables / physical outputs	Projected outcomes	Processes/ timeliness	Remarks/ risk factors/
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources				
	Accelerated Power Development and Reforms Programme (APDRP)	To reduce Aggregate Technical and Commercial (AT&C) loss of the State Power Utilities	-	2034.00 Cr. Loan-1959.00 Cr. Grant-75.00 Cr.	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 for energy accounting / auditing & IT based consumer service	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 progarmme, 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 required	Implementation of the projects sanctioned under Part-A and part –B of the progarmme. 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:	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

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2011-12			Quantifiable deliverables / physical outputs	Projected outcomes	Processes/ timeliness	Remarks/ risk factors/
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources				
					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 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		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.	Utilities having AT&C loss above 30%: Reduction by 3% per year Utilities having AT&C loss below 30%: Reduction by 1.5% per year	constraint. Some States are reluctant for Part-B funding as conversion of loan to grant is linked to loss reduction.

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2011-12			Quantifiable deliverables / physical outputs	Projected outcomes	Processes/ timeliness	Remarks/ risk factors/
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources				
					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 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				

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2011-12			Quantifiable deliverables / physical outputs	Projected outcomes	Processes/ timeliness	Remarks/ risk factors/
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources				
					@ 3% per annum for utilities with baseline AT&C loss levels exceeding 30% and @ 1.5% per annum for utilities with baseline AT&C loss levels less than 30% have to be achieved.				

Annexure-III

NTPC Limited
Outcome Budget 2011-12

(₹ in crore)

i	Ongoing Schemes								

4	Simhadri II	Addition of1000 MW of generation Capacity			709.88	TG Oil Flushing Compln	Apr'11	Addition of1000 MW of generation Capacity	

						Boiler Hydro Test u#12	Dec'11		
9	Koldam	Addition of 800 MW of generation capacity			640.45	Completion of half plug casting work in DT-2	Jun'11	Addition of 800 MW of generation capacity	
						Gallery Grouting 160 km(Cumulative)	Jul'11		
						Completion of erection of Bus Ducts of all units	Sep'11		
						Completion of Unit#4 Box up	Oct'11		
10	Tapovan-Vishnugad	Addition of 520 MW of generation capacity			643.99	Completion of 1 km HRT lining excluding invert	Jan'12	Addition of 520 MW of generation capacity	
						Commencement of erection of Turbine (U#1)	Jan'12		
						Completion of transformer hall Concrete structure of GT & GIS Floor	Feb'12		
11	Lohari Nagpala	Addition of 600 MW of generation capacity			245.79	Work under suspension.		Addition of 600 MW of generation capacity	
	Sub Total (i)				**13525.74**				
	New Projects								
1	Singrauli III , U.P	Additon of 500 MW of generation Capacity			124.48	Commencement of foundation U8	08/11	Additon of 500 MW of generation Capacity	These milestone is linked to issue of Main Plant LOA in 4th Quarter 2010-11 which is subject to receipt of MOEFclearance
						Commencement of Boiler erection U8	03/12		
2	Solapur , Maharashtra	Additon of 1320 MW of generation Capacity			459.13	Commencement of foundation U1	06/11	Additon of 1320 MW of generation Capacity	These milestone is linked to issue of Main Plant LOA in 4th Quarter 2010-11which is subject to receipt of MOEF clearance
						Commencement of Boiler erection U1	03/12		
						Commencement of foundation U1	06/11		These milestone is linked to issue

3	Mauda II , Maharashtra	Additon of 1320 MW of generation Capacity			453.08	Commencement of Boiler erection U1	03/12	Additon of 1320 MW of generation Capacity	of Main Plant LOA in 4th Quarter 2010-11which is subject to receipt of MOEF clearance
6	Kudgi , Karnataka	Additon of 2400 MW of generation Capacity			731.35	Main Plant Package Award	2011-12	Additon of 2400 MW of generation Capacity	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	Additon of 1600 MW of generation Capacity	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	Main Plant Package Award	2011-12	Additon of 1600 MW of generation Capacity	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	Main Plant Package Award	2011-12	Additon of 1320 MW generation Capacity	This milestone is linked to aviilability of tie up of all inputs and required clearance.
10	Vindhyachal V , M.P	Additon of 500 MW generation Capacity			156.22	Main Plant Package Award	2011-12	Additon of 500 MW generation Capacity	This milestone is linked to aviilability of tie up of all inputs and required

							clearance.
16	Wind Energy Project & other renewables	Additon of 75 MW of generation Capacity	300.00	Land acquisition and transfer of lease, etc	07/11	Additon of 75 MW of generation Capacity	These milestones are linked to issue of Main Plant LOA in 2010-11which is subject to PPA signing by Beneficiaries.

	Modernization Schemes	646.63

NOTE: FIGURES UNDER COL 4(iii) ARE IEBR FIGURES OF NTPC

Annexure-IV

NHPC Limited
Outcome Budget 2011-12

(₹ in crore)

1	2	43			5		6	7	8
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Annual Plan 2011-12 Proposed		Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors
			Sub Debt	IEBR	Physical Activity	Targets			
A	**Commissioned Schemes**								
1	Dulhasti	Addition of 390 MW capacity		27	Settlement of pending liabilities / residual works.	-	Project completed in March 2007	Mar.'12	-
2	Sewa-II	Addition of 120 MW capacity		30	Settlement of pending liabilities / residual works.		Project completed in Jul 2010	Mar.'12	
B	**Scheme Under Construction**								
1	Uri-II HE	Addition of 240 MW capacity		251	Erection, testing & commissioning of Radial Gates	34%	Anticipated project completion date Nov'2011 (considering compression programme of HM works with the assumption that Law and order situation in Kashmir Valley will remain normal)	Jun'2011	-
					Erection, testing & commissioning of Surge Shaft Gates	100%		Aug'2011	
					Erection, testing & commissioning of Draft Tube Gates	100%		Aug'2011	
					Diversion Tunnel Plugging	100%		Aug'2011	
					Precommissioning, Testing & Commissioning of Unit 1	100%		Oct'2011	
					Precommissioning, Testing & Commissioning of Unit 2	100%		Nov'2011	
					Boxing up, Precommissioning, Testing & Commissioning of Unit 3	100%		Nov'2011	
					Boxing up, Precommissioning, Testing & Commissioning of Unit 4	100%		Nov'2011	
2	Chamera-III	Addition of 231 MW capacity		135	Erection & Commissioning of Radial Gates	12%	Anticipated Commissioning of Project by Aug.'11	Apr.'11	-
					Diversion Tunnel Plugging	100%		May.'11	
					Filling of Water Conductor System	100%		Jul.'11	
					Testing & Commissioning of all three	100%		Aug'11	

					units				
3	Nimoo Bazgo	Addition of 45 MW capacity	121	17	Erection of Intake gates	100%	Anticipated project completion date Sept'11	Apr.'11	
					Erection of Draft tube gates	100%		May'11	
					Concreting of left side non overflow blocks	100%		Aug.'11	
					Construction of roof of control blocks	100%		Jun'11	
4	Chutak	Addition of 44 MW capacity	166	25	Water availability	100%	Anticipated project completion date Aug'11	June'11	
					Erection testing commissioning of unit-1	100%		15th July'11	
					Erection testing commissioning of unit-2	100%		Jul.'11	
					Erection testing commissioning of unit-3	100%		15th Aug.'11	
					Erection testing commissioning of unit-4	100%		Aug'11	
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 Dec'11	Aug.11	
					Concreting of Barrage in Bays I&II including bridge concreting	5510 Cum		Jun.11	
					Erection, testing and commissioning of Radial gate in Bay no.I & II	100%		Oct.11	
					Concreting of Cellular wall	2667 Cum		Oct.11	
					Unit Axis alignment and box up of Unit-IV	100%		Aug.11	
					Concreting of L/B Guide/Retainging Wall	7940 Cum		Sep.11	
					Commissioning of all four unit	100%		Dec.11	
6	TLDP-IV	Addition of 160 MW capacity		35240	2nd Stage river Diversion	100%	Anticipated project completion date Aug '12	Dec.11	-
					Erection of Spiral Case in all units	29.0%		May. 11	
					Rotor Erection of all units at service bay	100.0%		Dec.11	
					Unit Axis Alignment and Box up in all units	65.8%		Jun.12	
					Erection of all Radial Gates in Spillway	40.0%		Oct.11	
					Erection of all Draft Tube Gates	100%		Feb.12	
					Erection of all Intake Gates	100%		Jan. 12	
					Concreting in Power Dam & Intake	25679 Cum		Aug. 11	

					structure upto top level and concreting around the penstock				
					Concreting in RCC Dam	140000 Cum		Mar. 12	
					Concreting in PH	31494 Cum		Aug. 11	
7	Parbati-II	Addition of 800 MW capacity		656	Dam and Inatke Concreting	27920 cum	Anticipated project completion date July'14	Mar'12	Commissioning schedule may be adversely affected as contractual problem for TBM face of HRT is yet to be re-scheduled.
					HRT Excavation Face-4 by TBM	2000 m		Mar'12	
					HRT Overt Lining Face-1	1290 m		Feb'12	
					HRT Overt Lining Face-2	1440 m		Mar'12	
					Surge shaft Lining	75 m		Mar'12	
					Power House Concreting	23590 cum		Mar'12	
8	Parbati-III	Addition of 520 MW capacity		505	Erection, testing & commissioning of Spillway Radial Gates,Stoplog Gates etc.	100%		Oct'11	-
					Completion of HRT 2 & 3 Overt Concrete Lining	2145 m	Anticipated project completion date Dec'11	Aug'11	
					Completion of steel liner erection in Pressure Shaft-I & II	470 m		Oct'11	
					Generator erection, alignment & box up of Unit-1	100%		Sep'11	
					Turbine erection of Unit-4	100%		Oct'11	
9	Subansiri Lower	Addition of 2000 MW capacity		1244	Dam concreting	300000cum	Anticipated Project Completion Aug,14	Dec.'11	-
					Intake concreting upto EL 210m	65,000 cum		Dec.'11	
					Head Race Tunnel - Heading Excavation	400m		Aug.'11	
					Surge Tunnel - Heading Excavation	2000 m		Feb.'12	
					Concreting of Power House	1,00,000 cum		Jan.'12	
					Erection of 2no. Intake gates unit 7 and 8	100%		Nov'11	
10	Kishanganga	Addition of 330 MW capacity	525	279	HRT Intake - Completion of Surface Excavation	10500 cum	Anticipated Project completion	Nov'2011	-
					Pressure Shaft Adit 3 - underground	375 m		March'2012	

					excavation		date Jan 2016		
					Surge Shaft - Completion of excavation of Pilot Shaft	112 m		Feb'2012	
					Spillway - Completion of Left Bank Excavation	300000 cum		Nov'2011	
					HRT Excavation by DBM method	2700 m		March'2012	
					HRT Excavation by TBM method	3000 m		March'2012	
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%	Infrastructure Development and start of construction of project	Mar.'12	All activities subject to CCEA clearance of Project by Mar.'11. Work Plan will be revised after approval and enhancement of Budget allocation.
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.'12	
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.'12	
3	Dibang	Addition of 3000 MW capacity		74	Construction of New road double lane between Dam to DT outlet at right bank-Formation cutting	5Km	Infrastructure Development and start of construction of project	Mar.'12	Enviornment and forest clearance are being persued and as such the project is to be poised before CCEA for Govt. sanction. All these activities are subject to the Enviornment and Forest clearance at the earliest
					Construction of New road from Dam site to Dambuk on right bank-Formation cutting	5Km		Mar.'12	
					Construction of Pathan Camp colony road-Formation cutting	5Km		Mar.'12	
					Construction of New double lane road from + 19 Km point to confluence of Dibang & Ashu pani-Formation cutting	5Km		Mar.'12	
					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.'12	
					Maintenance of G and D site and	100%		Mar.'12	

					Establishment expenses etc.				
D.	**S&I and Other Schemes**								
2	Teesta-IV	Addition of 520 MW capacity		79	Provision for kept for complete land acquisition	100%	Infrastructure Development and start of construction of project	Mar.'12	Achievement is subject to Public hearing and CCEA clearance
					Approach road to Dam & Power House site	100%		Mar.'12	
					Construction of field hostel and office building	75%		Mar.'12	
					Establishment and other ongoing investigation works	100%		Mar.'12	
3	Bursar	Addition of 1020 MW capacity		28	Provision has been kept mainly for establishment Expenses, ancillary works and R&M works.	100%	S&I works for DPR preparation	Mar,12	Further investigation works are held up pending sanction of funds by MoWR/ Planning Commission.
4	Tawnag- I	Addition of 600 MW capacity		63	Post DPR drilling/drifting works Establishment & Preliminary works		Infrastructure Development for construction of project	Mar,12	Revised DPR submitted on 04.06.2010
5	Tawnag-II	Addition of 800 MW capacity		63	Post DPR drilling/drifting works Establishment & Preliminary works		Infrastructure Development for construction of project		Revised DPR submitted on 19.05.2010
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		Priliminary works		
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%	Priliminary works	March'12	Other land acquisition and major works will be taken up after CCEA approval for JVC.

3	Kiru	Addition of 600 MW capacity		17	Provision kept mainly for establishment expenses and some ancillary works only.	100%	Priliminary works	March'12	Other major works will be taken up after CCEA approval for JVC.
4	Kwar	Addition of 520 MW capacity		17	Provision kept mainly for establishment expenses and some ancillary works only.	100%	Priliminary works	March'12	Other major works will be taken up after CCEA approval for JVC.
G.	R&M of Power House	Rennovation of Loktak PS (105 MW)		2			Rennovation of Loktak PS		
H.	R&D works and CDM			6					
	Total		**813**	**4277**					
	Total		**5090**						

Annexure-V

NORTH EASTERN ELECTRIC POWER CORPORATION (NEEPCO)
Outcome Budget 2011-12

(₹ 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
			Non Plan Budget ₹ in Crs	Plan Budget ₹ in Crs	Complementary Extra Budgetary Resources ₹ in Crs				
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
	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	
						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	
						TENGA DAM:			
						Excavation of Tenga Dam :(20000 Cum)	Completion of Tenga Dam excavation	Mar -12	
						Concreting of Tenga Dam : (25000 Cum)	Completion of Tenga Dam concreting	Jan -12	
						HEAD RACE TUNNEL (HRT):			
						Excavation of HRT in Face-II (700 m)	Completion of WCS	Dec -11	
						Boring of HRT Face-III (From Tenga Dam towards Bichom Dam): (700 m)	Completion of WCS	Dec-11	
						Boring of HRT Face-VI (From Tenga Dam towards Surge Shaft): (400 m)	Completion of WCS	Dec-11	
						HIGH PRESSURE TUNNEL:			
						U/G excavation of HPT: (300m)	Completion of Surface Penstock	Sept-11	

						POWER HOUSE:			
						Concreting of Power House: (Total 12000 cum)	Completion of Power House Concreting	Nov-11	
						INSTALLATION OF DT LINERS AND CONES:			
						For Unit I & Unit II	Completion of Power House	May-11	
						ERECTION OF EOT CRANE:			
						For Service Bay	Completion of Service Bay	Dec-11	
2	Pare H.E. Project (110 MW), AP.	Generation of Hydro Power	0.00	25.50	144.50	**DIVERSION TUNNEL:**			
						U/G Excavation (270 m Completion)	Completion of Diversion Tunnel Boring	June-11	
						Lining (270 m Completion)	Completion of Diversion Tunnel Lining	Aug-11	
						COFFERDAM:			
						U/S and D/S Cofferdams (Completion)	Completion of Cofferdams	Dec-11	
						DAM:			
						Excavation (Cumulative 1.40 L Cum)	Completion of Dam Excavation	Jan-12	
						Concreting	Completion of	Feb-12	

						(Cumulative - 30000 Cum)	Dam Excavation		
						HEAD RACE TUNNEL (HRT) BORING:			
						Excavation (Boring) of HRT (Cumulative 1200 m)	Completion of WCS	Nov-11	
						SURGE SHAFT:			
						Boring of Surge Shaft (Cumulative -58 m Completion)	Completion of Surge Shaft	Jan-12	
						POWER HOUSE:			
						Service Bay Column Concreting upto EOT	Completion of Power House	Jul-11	
						Machine Hall Column Concreting upto EOT	Completion of Power House	Oct-11	
3	Tripura Gas Based Power Project (100 MW nominal ± 20%)	Generation of Thermal Power	0.00	0.00	288.00	Piling Works - all fronts	Completion of Piling works	Sept-11	PIB held on 12.07.2010. On the basis of PIB, LOI issued to M/s BHEL on 23.07.2010. LOI for Review Consultancy Service hs for TGBP has been issued to M/s Desein Private Limited, New Delhi on 08/10/2010.
						Foundation Works - Gas Turbine 50% completion	Completion of foundation works	Jan-12	
						Foundation Works - HRSG & Stack (40% completion)	Completion of foundation works	Feb-12	
						Foundation Works - STG (40% completion)	Completion of foundation works	Mar-12	
						Despatch of GT from BHEL Work	Completion of Despatch of GT Work	Mar-12	
						Despatch of Generator Stator from BHEL	Completion of Despatch of Generator Stator	Feb-12	
						Award of Raw Water System	Award of Works	May-11	
4	Tuirial HEP (60 MW), Mizoram	Generation of Hydro Power		62.00	103.00	Tunnel Boring (Cumulative - 1550 Rm Completion)	Completion of Tunnel Boring works	Mar-11	The CCEA clearance of the project was accorded on07-07-1998 with commissioning schedule in July' 06. After completion of about 30% of the project activities the works had totally stopped due to local unrest and subsequent increase in the project cost rendering the project economically unviable. NEEPCO

									put sustained efforts in close coordination with the MOP, GOI for revival of the project through various alternatives most of which eventually did not fructify till revival of the project by the PIB on 04.06.2010 at an estimated cost of ₹ 913.63 Crs (including IDC of ₹ 36.57 Crs) at Mar'10 PL. PIB alsoasked NEEPCO to go ahead by negotiations with the contractor and resumption of project work subject to fulfilment of few conditions which NEEPCO has already fulfilled. The recommended revised commissioning schedule of the project is three years from the date of CCEA approval.
						Power House Excavation (Completion)	Completion of Power House Excavation	Nov-11	
						Excavation of Dam (Cumulative 75000 cum Completion)	Completion of Dam Excavation	Mar-12	
						Award of Lot-IV: Hydro- Mechanical Equipments (Metal Works), Tuirial H.E.Project, Mizoram.	Award of Package-IV	June-11	
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	The Hon'ble Governor, Tripura in presence of the Hon'ble Union Power Minister, GOI and in presence of other dignitaries has laid the foundation stone of Agartala Gas Turbine Power Plant CC Extension Project (52 MW) on 01.01.2011. The Detailed Project Report (DPR) has been prepared by engaging M/S Tata Consulting Engineers as consultant. Environment Clearance from MoEF,
									Government of India, received on 08.09.2010. Application for NOC for construction of chimneys submitted to NAAI, Agartala Airport on 03.08.2010 which is under process at AAI, Regional office, Guwahati. The proposal for Investment approval is being submitted to MOP, GOI within Dec' 10.

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	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.
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	NEEPCO is pursuing with the Govt. of Meghalaya for conclusion of the MoA for implementation of the project. After constant persuasion by NEEPCO the MoA in respect of the project is yet to be concluded with the State Govt.
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	
						Lungreng HEP (815 MW), Mizoram	Preliminary investigation	Mar-12	MOA signed with the Govt. of Mizoram on 18th Mar' 2010
						Chhimtuipui HEP (635 MW), Mizoram	Preliminary investigation	Mar-12	MOA signed with the Govt. of Mizoram on 18th Mar' 2010
						Mat HEP (76 MW), Mizoram	Preliminary investigation	Mar-12	MOA signed with the Govt. of Mizoram on 18th Mar' 2010
						Chhimtuipui HEP (635 MW), Mizoram	Preliminary investigation	Mar-12	MOA signed with the Govt. of Mizoram on 18th Mar' 2010
						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.
9	Renovation & Modernisation of Kopili Power Station	Renovation & Modernisation	0.00	0.00	30.72	Renovation & Modernisation (70%)	Renovation & Modernisation	Mar-12	The earlier estimate of ₹ 74.95 cr for R&M of Kopili Unit-I & II was prepared on the basis of offer of M/s BHEL The detail scope of works was reviewed later on during a meeting held with BHEL and few items of work as proposed earlier were omitted from the scope. The revised estimated amount works out to ₹ 43.55 cr. The R&M activities of Kopili has been quarterly monitored and reviewed by CEA. In the last review meeting of CEA held in April'2010, CEA shifted the completion schedule of the Scheme to
									12thPlan. The revised completion schedule of the work is March'13.
Grand Total			**0.00**	**87.50**	**949.77**				

Annexure-VI

THDC INDIA LTD.
Outcome Budget 2011-12

(₹ in crore)

S.No.	Programme	Objective/ Outcome	Outlay 2010-11 (₹ in crore)			Quantifiable Deliverables/Physical Outputs	Processes/ Timelines	Projected Outcomes	Remarks / Risk Factor
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
1	Koteshwar HEP (400 MW)	Hydro Power Generation	0.00	0.00	230.76	(i) Lowering of stator in pit.leveling & Centering for unit-3	Jun'11	(i) Lowering of stator in pit.leveling & Centering for unit-3 by July'11	
						ii) Lowering of Rotor in pit for unit-3	July'11	ii) Lowering of Rotor in pit for unit-3 by Aug'11	
						iii) Boxing up of unit 2	Aug'11	iii) Boxing up of unit 2 by July'11	
						iv) Commissioning and Synchrnization of Unit-1	Aug'11	iv) Commissioning and Synchrnization of Unit-1 by July'11	
						(i) Lowering of stator in pit.leveling & Centering for unit-4	Oct'11	(i) Lowering of stator in pit.leveling & Centering for unit-4 by Oct'11	
						ii) Lowering of Rotor in pit for unit-4	Nov'11	ii) Lowering of Rotor in pit for unit-4 by Nov'11	
						iii) Boxing up of unit 3	Nov'11	iii) Boxing up of unit 3 Oct'11	
						iv) Commissioning and Synchrnization of Unit-2	Dec'11	iv) Commissioning and Synchrnization of Unit-2 by Oct'11	
						V) Boxing up of unit-4	Feb'12	V) Boxing up of unit-4 by Jan'12	
						VI) Commissioning and synchronization of unit-3	Mar'12	VI) Commissioning and synchronization of unit-3 by Jan'12	

2	Tehri PSP (1000MW)	Hydro Power Generation	0.00	0.00	81.28	U/S Surge Shaft including access tunnel	Oct'11	Award of EPC Contract	
						Penstock assembly chamber & access tunnel			
						U/G Power house & vertical tunnel			Subject to approval of RCE by GOI
						D/s Surge shaft & access tunnel			(Refer Note No. 3)
						TRT and outlet structure			
3	Vishnugad Pipalkoti (444MW)	Hydro Power Generation	0.00		48.30	Development of complete communication facilities at THDC complex.	May'11	Development of complete communication facilities at THDC complex by May'11	
						Construction of 1 MVA power line with Sub-station for Power House site	Sep'11	Construction of 1 MVA power line with Sub-station for Power House site by Sept'11	(Refer Note No.4)
						Completion of various civil works of DT			
						Main Administrative Building (Upper) Terrace/Lower Terrace).	Mar'12	Main Administrative Building (Upper) Terrace/Lower Terrace).	
4	New Projects	Hydro Power Generation	0.00	0.00	29.51				
	i) Karmoli (140MW)					Survey & Investigation works	-		Request for de-reservation of 100 Ha. Of Gangotri National Park area and for grant of permission for S&I works pending with State Govt.
	ii) Bokang Bailing (330MW)					Survey & Investigation works	-		Chief Wild Life Warden (CWLW) has been reqeusted to grant permission for S&I Works.

	iii) Jadhganga (50MW)					Survey & Investigation works	-		
	iv) Malari Jhelam (55MW)					Preperation of DPR		Preparation of DPR	The villagers of Malari are being persuaded to allow S&I Works.
	v) Jhelam Tamak (60 MW)					Preperation of DPR		DPR completed and accepted by CEA for consideration of TEC.	
	vi) Sankosh Multi Purose Project (4060 MW)					Updation of DPR			
	vii) Bunakha HEP (180 MW)					Updation of DPR			
	viii) Malshej Ghat PSS (600 MW)					Updation of DPR		MoU for implementation to be signed with Govt. of Maharashtra by Mar'12.	
	ix) Humbarli PSS (400 MW)					Updation of DPR of Humbarli			Clearance from State Wild Life Board (SWLB) awaited for S&I
	TOTAL								
				0.00	**389.85**				

Note:

1 Plan budget includes GBS from the Govt amount to `0.41 Cr.
2 Complementry Extra Budgetary resources includes commercial borrowings.
3 CCEA approval for RCE of Tehri PSP is prerequisite for awarding the EPC contract.
4 Environment clearance accorded in Aug'07. acquisition of 50% land for the project is a prerequsite for award of works of VPHEP. The Project is posed for World Bank funding.
i) Clerance to divert forest land reqired by the Project.
ii) Issuence of section (4) of the land acquisition act for the Private land to be requried in village Hatt.
section (4)
Notification of private land in village Hatt has been issued. For forest land the issue is pending with MoEF.

Annexure-VII

DAMODAR VALLEY CORPORATION
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Project	Objective/Outcome	Outlay BE 2011-12 (Rs. Cr.)	Quantifiable Deliverables/Physical Output	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	**51.67**	To Complete balance works & Contract Closing	Capacity addition of 500 MW	03/2012	
2	Chandrapura TPS Extn. Unit# 7 & 8 (2x 250 MW)	Capacity addition of 500 MW	**113.71**	1] COD of unit-7	Capacity addition of 500 MW	04/2011	
				2] Completion of balance EPC & Non-EPC work		03/2012	
3	Mejia TPS Phase-II: Unit1&2 (2x 500 MW)	Capacity addition of 1000 MW	**569.34**	1] COD of Unit-2	Capacity addition of 1000 MW	04/2011	
				2] Completion of balance EPC & Non-EPC works		03/2012	
4	Koderma Stage-I:U# 1 & 2 (2x500 MW)	Capacity addition of 1000 MW	**785.46**	Unit-1: 1] Declaration of COD	Capacity addition of 1000 MW	06/2011	
				Unit-2: 1] Synchronisation		10/2011	
				2] Full load/Commissioning		11/2011	
				3] COD		12/2011	
				Completion of balance activities for both units		03/2012	

5	Durgapur Steel TPS U# 1&2 (2x500 MW)	Capacity addition of 1000 MW	**754.66**	Unit-1: 1] Declaration of COD	Capacity addition of 1000 MW	06/2011	
				Unit-2: 1] Synchronisation		07/2011	
				2] Full load/Commissioning		09/2011	
				3] COD		12/2011	
				Completion of balance activities for both units		03/2012	
6	Raghunathpur TPS Ph-I: Unit# 1&2 (2x 600 MW)	Capacity addition of 1200 MW	**1334.79**	Unit-1: 1]Boiler Hydro Test	Capacity addition of 1200 MW	05/2011	
				2] Boiler light up		11/2011	
				3] TG Box-up		11/2011	
				Unit-2: 1] Boiler Hydro Test		08/2011	
				2] TG Box-up		12/2011	
7	Bokaro 'A' TPS: (1x 500 MW)	Capacity addition of 500 MW	**834.98**	1] TG Erection Start	Capacity addition of 500 MW	11/2011	
				2] Boiler Hydro Test		02/2012	
8	Raghunathpur TPS Ph-II: Unit# 1&2 (2x 660 MW)	Capacity addition of 1320 MW during 12th plan	**631.00**	1] Order placement for SG & STG package	Capacity addition of 1320 MW during 12th plan	06/2011	

				2] Placement of order for BOP Package		07/2011	
	A2] DVC's Joint Venture Power Projects						
9	Maithon RB TPS (1050 MW) *[Equity contribution @26% from DVC to MPL, proposed Joint Venture of TPC & DVC], [Estd. project cost= Rs. 4578.08 Crs.]*	Capacity addition of 525 MW	**70.00**	Provision kept for providing equity to M/s MPL for construction of the project.	Capacity addition of 525 MW	03/2012	
10	Bokaro Steel TPS *[Equity Contribution @50% from DVC to BPSCL, a Joint Venture of DVC &SAIL], [Estd. project cost= Rs. 3172.835 Crs.]*	Capacity addition of 500 MW	**0.00**			by 03/2011	
10	A3] Investigation / Feas. Studies / DPR etc. for future projects, if any.		**2.00**	Provision for expenditure towards Investigation / Feas. Studies / DPR etc. for new projects, if any.		03/2012	
	Total: A : [1 to 10]		**5147.61**				
B.	**Dam/Hydel Projects**						
1	Belpahari Dam/Hydel	Study by Consultant (M/s CWC)	**0.00**	-------		-------	
	Total :Dam/Hydel Projects :		**0.00**				
C.	**T& D schemes**						
	TSC Schemes: T & D		**331.52**	Please Refer to Appendix-T&D-3			
	R&A of T&D		**50.52**	Please Refer to Appendix-T&D-3			
	Total T& D schemes	To facilitate T&D of power	**382.04**		To facilitate T&D of power		
D.	**Communication schemes**		**4.42**				
	1] Satellite Communication (VSAT)	Establishment of Satellite communication station at upcoming	**0.58**	Procurement, Erection & Commissioning for	Establishment of Satellite communication station at	By 03/2012	

		new Power Stations along with complete augmentation of VSAT system		Speech and data communication	upcoming new Power Stations along with complete augmentation of VSAT system		
	2] Very High frequency communication (VHF)	Speech communication for up-coming stations.	**0.02**	Procurement, Erection & Commissioning for Speech communication	Speech communication for up-coming stations.	By 03/2012	
E.	**R&M Schemes**						
	PHS U-1	R&M/LE	1.50	Engagement of Consultant for R&M job. Tendering and commencement of R&M works.	R&M/LE	03/2012	
	MHS U- 1&3	R&M/LE	0.75	Engagement of Consultant for R&M job. Tendering and commencement of R&M works.	R&M/LE	03/2012	
	MHS U-2	R&M/LE	0.30	Balance payment to the consortium of M/s Alstom & M/s BHEL.	R&M/LE	03/2012	
	Others (Phase – II & III)	Improved performance	0.51	Completion of balance work of 9th plan activities & closing of 8th & 9th plan contracts.	Improved performance	03/2012	
	Sub Total R&M :		**3.0600**				
F.	**Pollution:**	For Environmental compliance	**91.792**	Dry Ash Disposal Sys. for BTPS 'B': Part completion of supply &	For Environmental compliance	03/2012	

				erection of Dry Ash sys. For other plants requirement for various works relating to environmental compliance.			
G.	**Misc. Spill Over Works**						
	[1] Mejia TPS U#1,2 &3 (3x 210 MW)		**2.00**	For settlement of final bills.		03/2012	
	[2] Mejia TPS Extn. U# 4 (1x 210 MW)	**Under Commercial Operation since 13.02.2005**	**0.44**	For settlement of final bills.		03/2012	
H.	**Refurbishment/Extension/Improvement**	To improve performance of Generating units with improved infrastructural network	**206.35**	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	03/2012	
I.	**R&D Centre**	To serve the requirement of DVC power stations and Transmission & Distribution system	**2.08**	Procurement of consumables and other running expenditure.	To serve the requirement of DVC power stations and Transmission & Distribution system	03/2012	
J.	**SLDC scheme**	Equity contribution to SLDC	**8.00**	Equity participation in SLDC	Equity contribution to SLDC	03/2012	
K.	**Equity participation NHPTL**	Equity contribution to NHPTL	**12.50**	Equity participation in NHPTL	Equity contribution to NHPTL	03/2012	
L.	**Equity participation: MAMC**	Equity contribution to MAMC	**30.00**	Equity participation in MAMC	Equity contribution to MAMC	03/2012	
M.	**Equity participation: DVTDPL**	Equity contribution to DVTDPL	**0.30**	Equity participation to DVTDPL	Equity contribution to DVTDPL	03/2012	
	Grand Total in Rs. Cr. :A to M		***5890.59***				

Annexure-VIII

SJVN LIMITED
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Scheme /Programme/ Project	Objective /Outcome	Outlay 2011-12			Quantifiable Deliverables/Physical Output (2011-12)	Process/ Timelines	Projected Outcomes	Remarks/Risk factors
			Non-Plan Budget	Plan Budget	Comple-mentary 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		Major Civil Works (Process primarilly comprises following)			
						Balance other works	March, 2012	Settlement of all pending Claims of NJHPS	
				72.52		Electro-Mechanical Works	March, 2012		
				0.39		Infrastructural Works	March, 2012		
		Sub-Total		**78.77**					
2	Rampur Hydro Electric Project(412 MW)	Construction of RHEP		195		Major Civil Works (Process primarilly comprises following)		A Total of 73 % expenditure on Rampur Hydro Electric Project against the approved cost of 2047.03 crores	
						Overt lining of HRT Kazo U/S (2100 m. Cumm)	March , 2012		
						Overt lining of HRT Kunni D/S and Kasholi U/S (2750 m Cumm) (2100 m. Cumm)	March , 2012		
						Heading Exacvation of HRT Kasholi D/S (1125 m Cumm)	March , 2012		
						Heading Exacvation of HRT Goshai U/S (1725 m Cumm)	March , 2012		
						Overt lining of HRTGoshai D/S (950 m. Cumm)	March , 2012		
						Completion of Heading Exacvation of HRT Bayal U/S	January, 2012		
						Benching Excavation of HRT Bayal U/S (1200 mtr. Cumm)	March , 2012		
						Lining of S/Shaft (90 mtr.)	March , 2012		
				127.88		Electro-Mechanical Packages(Process primarilly comprises following)	March , 2011		
						Erection of Draft Tube of 3rd Unit	August, 2011		
						Erection of Stay Ring & Spiral Casing of 2nd Unit	February, 2012		

						Erection of Draft Tube of 4th Unit	October, 2011		
						Erection of Draft Tube of 5th Unit	November, 2011		
						Erection of Draft Tube of 6th Unit	January, 2012		
				32.69		Infrastructural Works (Process primarilly comprises R&R expenses and buildings)	Continuous process		
				17.26		Interest During Construction	Continuous process		
				56.85		IEDC	Continuous process		
		Sub-Total		**429.68**					
3	Luhri Hydro Electric Project (775 MW)	Construction of LHEP		184.55		Acquisition of private and forest land	Running payments upto March, 2012	Diversion of forest land and Aquision of Private land & commencement of preconstruction activities	
						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, 2012		
				15.63		IEDC	Continuous process		
		Sub-Total		**200.18**					
4	Dhaulasidh HEP (66 MW)	Construction of DSHEP		15.67		Land Acquisition	March, 2012	Land Acquisition and development of infrastructure	
						Development of Infrastructure mainly comprising of approach roads and bridges and Residential and non-residential buildings.	Running payments upto March, 2012		
						Prequalification of bidders for main works	August, 2012		
				5.75		IEDC	Continuous process		
		Sub-Total		**21.42**					
5	Devsari HEP (252 MW)	Construction of DHEP		91.18		Acquisition of private and forest land	Running payments upto	Land Acquisition and development of infrastructure	

							February, 2012		
						Arrangement of Construction Power	March, 2012		
						Construction of various infrastructural works such as approach roads/bridges to various Project components, Construction of Residential and non-residential buildings.	Running payments upto March, 2012		
				12.39		IEDC	Continuous process		
		Sub-Total		**103.57**					
6	Naitwar Mori HEP (60 MW)	Construction of NMHEP		7.00		Cost of land to be acquired and other related expenditure	November, 2011	Land Acquisition and development of infrastructure, award of major civil works	
				5.55		Construction of various infrastructural works such as buildings, environment and ecology expenses and approach roads and bridges to various Project components	Running payments upto March, 2012		
				20.00		Major Civil Works	Running payments upto March, 2012		
				5.86		IEDC	Continuous process		
		Sub-Total		**38.41**					
7	Jakhol Sankari HEP (51MW)	Construction of JSHEP		1.94		Survey Investigation and DPR preparation	Running payments upto March, 2012	Land Acquisition and development of infrastructure	
				0.80		Cost of land to be acquired and other related expenditure	Running payments upto March, 2012		
				0.85		Construction of various infrastructural works such as Residential and non-residential buildings, roads and bridges etc.	Running payments upto March, 2012		
				5.71		IEDC	Continuous		

							process		
		Sub-Total		**9.30**					
8	Arun-IIIHEP (900 MW)	Construction of Arun-III HEP		37.83		Preparation of Detailed Project Report	September, 2011	Development of infrastructure	
						Development of Infrastructure mainly comprising of roads and bridges, Residential and non-residential buildings.	Running payments upto March, 2012		
				7.54		IEDC	Continuous process		
		Sub-Total		**45.37**					
9	Wangchu HEP (600 MW)	DPR preparation of Wangchu HEP		4.79		Survey Investigation, DPR preparation and necessary infrastructural development	Running payments upto March, 2012	DPR preparation and necessary infrastructural development	
				1.95		IEDC	Continuous process		
		Sub Total		**6.74**					
10	Kholongchu HEP (650 MW)	DPR preparation of Kholongchu HEP		4.30		Survey Investigation, DPR preparation and necessary infrastructural development	Running payments upto March, 2012	DPR preparation and necessary infrastructural development	
				1.98		IEDC	Continuous process		
		Sub-Total		**6.28**					
11	50 MW Wind Farm Project	Setting up of 50 MW of Wind Farm		200.00		Consultancy, erection and commissioning	Running payments upto March, 2012	Commencement of work on wind farm project	
		Sub-Total		**200.00**					
12	Tipaimukh HEP(1500 MW)	Construction of Tipaimukh HEP		2.00		Towards Equity contribution of SJVN	Running payments upto March, 2012	Equity contribution	
		Sub-Total		**2.00**					
Grand Total of SJVN*				**1141.72**					

*** including Rs. 8.59 crore equity from Government of Himachal Pradesh (Rs.1141.72 crore - Rs.8.59 crore = Rs.1133.13 crore)**

Annexure-IX

POWERGRID
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Projects / Schemes	Objective / Outcomes	Outlay (11-12) (Rs. in Cr.)	Physical Outputs / Quantifiable Deliverables for the year (11-12)		Process / Timeliness	Projected Outcomes	Remarks/ Status/ Risk Factors
				CKM	Transformer Erection		Date of Compln. of Projects	
	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	Power Evacuation	1161	929	8	Mar.12	Aug.'12	
2	Eastern Region System Strengthening-I (ERSS-I)	Grid Strengthening	117	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 Andal Airport. Powergrid is making ready a portion (19 Km) to provide connectivity for LILO at Durgapur Steel TPS (being conne
3	Eastern Region System Strengthening-II (ERSS-II)	Grid Strengthening	12	0	Dec.'10	Dec.'10		Planned to complete by Dec.'10 Budget kept for payment of balance works & final payments.
4	Eastern Region System Strengthening-III (ERSS-III)[LILO of Meramundali - Jeypore at Bolangir]	Grid Strengthening	418	0	0	Mar.12	Nov.12	
5	ER-I RHQ office & township	Infrastaructure Developments	2					
6	Indian Bangladesh (India Portion)	Power Evacuation	51	0	0	Mar.12	Oct.12	Under Tendering. Land for construction of BahrampurS/S is yet to be acquired.
7	Immediate evacuation system for Nabinagar TPS	Power Evacuation	29	179	0	Mar.12	Jun.12	

8	Transmisison system for development of pooling Stations in Northern part of West Bengal and Transfer of power from Bhutan	Power Evacuation	32	0	0	Mar.12	Jan.15	
9	Transmission System for Farakka Stage-III	Power Evacuation	12	0	0	Jun.11	Jun.11	Planned to complete by Mar.11. Budget kept for payment of balance works & final payments.
10	Transmission system for Phase I generation Projects in Orissa -Part A	Power Evacuation	483	0	0	Mar.12	Mar.'13	
11	Transmission System for Start up power to DVC & Maithon RB Projects	Power Evacuation	14	0	0	Feb.'11	Feb.'11	Planned to complete by Feb.11. Budget kept for payment of balance works & final payments.
12	Strengthening of East West Transmission Corridor	Grid Strengthening	11	0	0	Dec.'10	Dec.'10	Planned to complete by Dec.'10. Budget kept for payment of balance works & final payments.
13	Tranmission System for BARH	Power Evacuation	259	0	0	Mar.'11	Mar.'11	Transmision system completed except for Pole-II at Balia & Bhiwadi Converter Station. Barh Gen. ant. by Dec.12
14	Transmission System associated with Rihand-III & Vindhyachal-IV	Power Evacuation	1652	160	0	Mar.12	Nov.'12	
15	Transmission System for transfer of power from different projects from Sikkim to NR/WR (part-A)	Power Evacuation	45	0	0	Mar.12	Jan.13	
16	North East - NR/WR Inter-connector (Subansiri & Kameng)	Power Evacuation	1488	795	1	Mar.12	Aug.13	Lower Subansiri Genration projects (NHPC) and Kameng HEP delayed. Lower subansiri ant. by Dec.13. There is no commitment for Kamneg HEP by NEEPCO as against earlier comitment of Dec.12. AC Transmision system shall be idle for prolonged period.
17	Substation Works of Transmission sytem associated with Pallatana & Bongaigaon	Power Evacuation	410	353	2	Mar.12	Dec.12	
19	Augmentation of 220/132 kV Transformation Capacity at Raebareli (POWERGRID) by 1*100 MVA Transformer	Grid Strengthening	6	0	1	Feb.12	Feb.12	

21	Establishment of 400/220 kV GIS Pooling Station Near CHAMERA-II	Power Evacuation	44	0	0	Mar.11	Mar.11	Generation Projects delayed and now anticipated by……
22	Northen Region System Strengthening-VII(NRSS-VII)	Grid Strengthening	3	0	0	Mar.11	Mar.11	
23	Northen Region System Strengthening-IX(NRSS-IX)	Grid Strengthening	19	0	0	Oct.10	Oct.10	Completed. Budget kept for balance works & final payment.
24	Northen Region System Strengthening-X(NRSS-X)	Grid Strengthening	21	0	0	Oct.10	Oct.10	Completed. Budget kept for balance works & final payment.
25	Northen Region System Strengthening-XI(NRSS-XI)	Grid Strengthening	7	0	0	Oct.10	Oct.10	Completed. Budget kept for balance works & final payment.
26	Northen Region System Strengthening-XII(NRSS-XII)	Grid Strengthening	18	0	0	Oct.10	Oct.10	Completed. Budget kept for balance works & final payment.
27	Northen Region System Strengthening-XIII(NRSS-XIII)	Grid Strengthening	71	38	1	Nov.11	Nov.11	
28	Northen Region System Strengthening-XIV(NRSS-XIV)	Grid Strengthening	16	22	2	Aug.11	Aug.11	
29	Northen Region System Strengthening-XV(NRSS-XV)	Grid Strengthening	107	220	1	Nov.11	Nov.11	
30	Northen Region System Strengthening-XVI(NRSS-XVI)	Grid Strengthening	93	0	0	Mar.12	July.13	
31	Northen Region System Strengthening-XVII(NRSS-XVII)	Grid Strengthening	43	230	0	Aug.11	Aug.11	
32	Northen Region System Strengthening-XVIII(NRSS-XVIII)	Grid Strengthening	113	30	0	Nov.'11	Nov.'11	
33	Northen Region System Strengthening-XIX(NRSS-XIX)	Grid Strengthening	120	25	0	Feb.12	Feb.12	
34	Northen Region System Strengthening-XX(NRSS-XX)	Grid Strengthening	11	0	0	Mar.12	Jan.13	
35	Northen Region System Strengthening-XXI(NRSS-XXI)	Grid Strengthening	524	20	0	Mar.12	Apr.13	
36	Northen Region System Strengthening-XXIII(NRSS-XXIII)	Grid Strengthening	36	0	2	Dec.11	Dec.11	
37	Northern Region Transmission System Strengthening	Grid Strengthening	374	55	1	Mar.12	Nov.12	

38	NRSS 765kV for NCR and around Part-I	Grid Strengthening	202	345	0	Feb.12	Feb.12	Transmision lines transversed around the NCR area. Progress slow due to ROW problames & project likely to be delayed.
39	NRSS 765kV for NCR and around Part-II	Grid Strengthening	281	0	3	Jan.12	Jan.12	Transmision lines transversed around the NCR area. Progress slow due to ROW problames & project likely to be delayed.
40	NRSS 765kV for NCR and around Part-III	Grid Strengthening	409	225	0	Mar.12	May.12	
41	Supplementry Transmission System associated with DVC & Maithon RB	Power Evacuation	266	809	2	Mar.12	Aug.12	
42	System Strengthening for Sasan Mundra in Northen region	Grid Strengthening	360	200	1	Mar.12	Aug.12	
43	Transmission System Associated with Koteshwar HEP	Power Evacuation	31	0	0	Feb.11	Feb.11	
44	Transmission System for Karcham Wangtoo & System Beyond Abdullapur	Power Evacuation	19	0	0	Sept.11	Sept.11	
45	Transmission System for Koldam H.E.P.(Powergrid)	Power Evacuation	13	0	0	Mar.12	Dec.12	Line completed in Mar.'10. Transmission system is idle due to delay in Genretaion project which is now ant. in third quarter of 2011-12.
46	Transmission System for Parbati-III	Power Evacuation	60	19	0	Jun.11	Jun.11	Generation project delayed & now ant. by Nov.'11.
47	Transmission System for Rampur	Power Evacuation	29	207	0	Nov.11	Nov.11	Generation project delayed & now ant. beyond 11th plan.
48	Transmission System for URI-II	Power Evacuation	17	24	0	Oct.11	Oct.11	Generation project delayed & now ant. by May.'11.
49	TS for evacuation of CHAMERA-III HEP	Power Evacuation	33	0	0	July.11	July.11	Generation Projects delayed
50	Fibre optic communication system in lieu of existing ULDC microwave links	Communication	50	0	0			
51	Power Grid Equity (Karcham Wangtoo Transmission Project)	POWERGRID Equity	5	0	0			
52	Power Grid Equity (Teesta Urja Ltd.)	POWERGRID Equity	20	0	0			
54	Power Grid Equity (Parbati-II& Koldam)	POWERGRID Equity	32	0	0			

55	II nd Spare Converter Transformer for Talcher Kolar	Grid Strengthening	4	0	0			
56	IIND Spare Converter Transformer for Vizag	Grid Strengthening	1	0	0			
57	Southern Region System Strengthening-IX (SRSS-IX)	Grid Strengthening	14	182	0	Feb.'12	Feb.'12	
58	Southern Region System Strengthenig - X (SRSS - X)	Grid Strengthening	78	25	1	Mar.12	Apr.'12	
59	Southern Region System Strengthenig - XI (SRSS - XI)	Grid Strengthening	65	208	1	July.11	July.11	
60	Southern Region System Strengthening - XII (SRSS-XII) [Yelahanka]	Grid Strengthening	91	0	0	Mar.12	Jun.12	
61	SR-ICOMPLEX	Infrastaructure Developments	18					
62	SR-II Complex (RHQ building)	Infrastaructure Developments	8					
63	Supplementary Transmission System for Vallur TPS	Power Evacuation	27	0				
64	Transmission System associated with Chennai NTPC-TNEB JV TPS (North Chennail -LILO OF 400 KV DC Almathi - Sriperumbudur)	Power Evacuation	3	0	0	Mar.11	Mar.11	
65	Transmission System Associated with Kaiga 3&4	Power Evacuation	61	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 Kerala portion of line by Coffee planter & forest clearance in Kerala & Karnataka. Matter take
66	Transmission System associated with Kudankulam Atomic Power Project	Power Evacuation	130	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.
67	Transmission System Associated with Simhadri-II	Power Evacuation	3	0	0	July.11	July.11	
68	Transmission System for Kalpakkam PFBR	Power Evacuation	39	110	0	Mar.12	Mar.12	
69	Tuticorin (Powergrid Portion)	Power Evacuation	22	243	0	Feb.12	Feb.12	

71	Raipur Bus Splitting	Grid Strengthening	7	0	0	Nov.11	Nov.11	
72	Transmission System Associated with Mundra UMPP	Power Evacuation	944	1879	4	Mar.12	Oct.12	Scope of project likely to be revised.
73	Transmission System Associated with Sasan UMPP	Power Evacuation	1396	935	0	Mar.12	Dec.12	Commisisoning of Gen. projct now ant. Jan.13 onwards
74	Transmission System for Gandhar Stage-II	Power Evacuation	0	0	0	*	*	Project deffered
75	Transmission System for Korba -III(500MW)	Power Evacuation	11	0	0	Jun.11	Jun.11	Efforts are being made to complete by Mar.11.
76	Transmission System for Mauda ATS	Power Evacuation	97	250	0	Mar.12	Oct.12	
77	Western Region System Strengthening- II (WRSS-II)	Grid Strengthening	177	177	0	Dec.11	Dec.11	
78	Western Region System Strengthening - V(WRSS-V) (Vapi-New Mumbai)	Grid Strengthening	62	50	0	*	*	Completion of 400 KV D/C Vapi - Navi Mumbai Line uncertain as work completely held-up.
79	Western Region System Strengthening - VI (WRSS - VI)	Grid Strengthening	41	0	0	Mar.11	Mar.11	
80	Western Region System Strengthenig - IX (WRSS - IX)	Grid Strengthening	17	0	1	Sept.11	Sept.11	
81	Western Region System Strengthening - X(WRSS-X)	Grid Strengthening	81	12	2	Feb.12	Feb.12	
82	Western Region System Strengthening - XI (WRSS - XI)	Grid Strengthening	112	20	1	Feb.12	Feb.12	
	TOTAL - Ongoing Projects		**13157**	**9500**	**35**			
	B. NEW SCHEMES							Provision kept for initial advance and infrastructure work.
1	Cross Border Power Transmission Company Limited	POWERGRID Equity	4					
2	Energy Efficiency Services Limited	POWERGRID Equity	5					
3	National High Power Test Laboratory Private Limited	POWERGRID Equity	6					
4	Other New Schemes	Others	1					

5	Bays for Pvt Sector Lines-ER-1	Grid Strengthening	2					
6	East Coast Project	Power Evacuation	149					
7	Eastern Region System Strengthening - IV (ERSS - IV)	Grid Strengthening	6					
8	Supply of Spare Transformer in ER - II	Grid Strengthening	3					
9	Transformer & Reactor for ER I	Grid Strengthening	3					
10	Transmission System associated with Talliya UMPP	Power Evacuation	1					
11	Transmission system for Jharkhand IPP/WBSEDCL Projects	Power Evacuation	119					
12	Transmission system for Phase I generation Projects in Orissa -Part B	Power Evacuation	694					
13	Transmission System For Phase-I Generation Projects in Orissa (Part- C)	Power Evacuation	298					
14	Transmission system for transfer of Power from generation Projects in Sikkim to NR/WR- DPR -I Part B	Power Evacuation	287					
15	ER-II Headquarters	Infrastaructure Developments	10					
16	Transmission system for South West Interconnection	Grid Strengthening	156					
17	North East Transmission company Limited	POWERGRID Equity	31					
18	Bus Reactors in NR	Grid Strengthening	21					

19	Northern Region System Strengthening XXII (NRSS XXII)	Grid Strengthening	31					
20	Transmission System for Barh-II	Power Evacuation	61					
21	Common Transmission System with other SR IPPs	Power Evacuation	1					
22	Replacement of Porecelain Insulator	Grid Strengthening	10					
23	Transmission System for Tehri II PSP	Power Evacuation	0					
24	POWERGRID ERP Project	ERP	35					
25	New Telecom	Telecom	182					
26	Long term Open Access (LTOA) for Krishnapatnam Area	Power Evacuation	188					
27	Long term Open Access (LTOA) for Tutucorin Area Part-A	Power Evacuation	10					
28	Long term Open Access (LTOA) for Tutucorin Area Part-B	Power Evacuation	181					
29	Southern Region System Strengthening - XIV (SRSS-XIV)	Grid Strengthening	15					
30	Southern Region System Strengthening - XV (SRSS-XV)	Grid Strengthening	15					
31	Spare ICTs in NR	Grid Strengthening	20					
32	Transmission System for Krishnapatnam UMPP -PART B	Power Evacuation	123					
33	Transmission System for Krishnapatnam UMPP -PART C	Power Evacuation	152					
34	Southern Region System Strengthenig - XIII (SRSS - XIII)	Grid Strengthening	114					
35	Transmission System for Krishnapatnam UMPP -PART-a	Power Evacuation	176					

36	400 KV S/S at Dadar Nagar Haveli	Grid Strengthening	104					
37	400 KV S/S at Daman & Diu	Grid Strengthening	8					
38	Transmission System for IPPs in Chhattisgarh (PART-A)	Power Evacuation	447					
39	Transmission System for IPPs in Chhattisgarh (PART-B)	Power Evacuation	247					
40	Transmission System for IPPs in Chhattisgarh (PART-C)	Power Evacuation	165					
41	Transmission System for IPPs in Chhattisgarh (PART-D)	Power Evacuation	355					
42	Transmission system for Nabhi Nagar, Tillaiya & Barh - II	Grid Strengthening	1					
43	Western Region System Strengthening - XII (WRSS - XII)	Grid Strengthening	15					
	Total - New Schemes		**4454**					
	C. <u>Completed Schemes</u>							
1	Trans. System for TALA (Powergrid Portion)	Power Evacuation	5					Outlay kept for final payments.
2	Enterprise Wide Converged I T & Communication Network in Powergrid (EWCIT)	Communication	0.5					Outlay kept for final payments.
3	Rihand Dadri convertor transformer	Grid Strengthening	2					Outlay kept for final payments.
4	System Strengthening Scheme in Uttaranchal	Grid Strengthening	5					Outlay kept for final payments.
5	System Strengthening -VI in NR (Gurgaon S/Stn) (NRSS-VI)	Grid Strengthening	17					Outlay kept for final payments.
6	Transmission System Associated with RAPP 5&6	Power Evacuation	3					Outlay kept for final payments.
7	System Strenghthening-V in NR (NRSS-V)	Grid Strengthening	7					Outlay kept for final payments.

8	System Strengthening in NR-VIII (NRSS-VIII)	Grid Strengthening	2					Outlay kept for final payments.
9	Transmission System associated with SEWA-II HEP	Power Evacuation	2					Outlay kept for final payments.
10	Telecom Base Network	Telecom	26					Outlay kept for final payments.
11	Southern Region System Strengthening - VIII (SRSS-VIII)	Grid Strengthening	3					Outlay kept for final payments.
12	System Strengthening-VII of Southern Regional Grid (SRSS-VII)	Grid Strengthening	4					Outlay kept for final payments.
13	Transmission System Associated with NLC-II Expansion Project	Power Evacuation	11					Outlay kept for final payments.
14	Western Region System Strengthenign -VII (WRSS-VII)	Grid Strengthening	3					Outlay kept for final payments.
	Total - Completed Schemes		**89**					
	GRAND TOTAL		**17700**					

Annexure-X

BUREAU OF ENERGY EFFICIENCY
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12	Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Process/ Timelines	Remarks
1	2	3	4	5	6	7	8
1	Standards & Labeling Programme	- To reduce end use consumption by applying standards/ labeling for equipments/ appliances - Mandatory labeling	39.05	○ Continuation of awareness campaign ○ Check testing-Independent Agency ○ Finalizing of rating plan for Vehicles, UPS/Inverters, Office Automation products and other large refrigeration systems, Inverter batteries. ○ Capacity building of Laboratories.	○ Enhancement of awareness about energy efficient products ○ Market transformation towards energy efficient products in the market	Progressively from April, 2011 to March, 2012	- Building awareness in masses on the need to use energy efficient devices -Inclusive participation of industry -Balanced & effective implementation
2	Energy Conservation Building Codes (ECBC)	To reduce energy consumption in commercial buildings.	1.29	• Capacity building and enhancing the pool of ECBC expert Architects – EOI • Training material for various stakeholders • Simplified compliance procedures for state & local bodies to assist them implement provisions of ECBC code. • Capacity building of state & local government personnel through training and building simulations. • Strengthening of testing infrastructure in buildings. • Promotion of energy audits through ESCOs and implementation of EE measures on performance contracting mode. • Rating of ESCOs to improve investor confidence. • Innovative financial products like setting up of partial risk guarantee fund for risk mitigation.	• ECBC implementation on voluntary basis • Enhancing capacity and awareness of stakeholders	Progressively from April, 2011 to March, 2012	-Availability of trained personnel in ECBC -Compliance procedure & requirements -Availability of ESCOs & their financial credibility -Availability of finance to ESCOs bases projects
3	Bachat Lamp Yojana -	To promote energy efficient & high quality CFLs as replacement for incandescent bulbs in households	2.00	• Coverage of entire country in a phased manner in phased partnership with DISCOMs. • PoA is registered with UNFCC on 29th April, 2010. • 23 CFL Manufactures/ Investors have agreed to participate in PoA. • 16 States have commenced project preparation.	• Estimated replacement of about 400 million incandescent light bulbs in	Progressively from April, 2011 to March, 2012	

						Other states in the process • Estimated 6.5 crores CFLs to be distributed	household sector • Market transformation in favour of energy efficient CFLs in the household sector by high scale volumes & lower retail price.		
4	SDA Strengthening Programme	To empower the SDAs as partners of BEE at state level to implement EC Act.		8.88		• Establishment/ Maintenance of Internet platform of SDAs • Publicity awareness in States • Maintenance of list of designated consumers and list of Energy Managers and Energy Auditors • Organizing workshops/ training programmes • Implementation of Energy Efficient Demonstration Projects • Preparation of DPRs under IGEA of the Govt. Building • Implementation of LED Demonstration project under LED village campaign • Domestic/International training programme for the SDA personnel • Preparation of State wise sector specific action plans	○ To strengthen SDAs as partners of BEE at state level ○ Effective proliferation of the awareness and promotional programmes in states.	Progressively from April, 2011 to March, 2012	- Subject to approval of RCE
5	Designated Consumers and SMEs Programme	Targeted energy consumption reduction of Designated Consumers and SMEs. Capacity building of Energy Auditors and Managers		3.09		• 150 DPRs will be prepared in 29 clusters. • Availability of financing by capacity building of banking personnel in matters like project appraisal of performance contracting. • Proposed 5 Demo projects in SME Clusters. • 25 workshops for Financial Institutions Local Service Providers and Industrial Associations.	○ Creation of trained manpower to undertake this job ○ Implement data collection/ collation and analysis in respect of Designated	Progressively from April, 2011 to March, 2012	-Lack of data on energy consumption including measurement & verification available with SMEs. -Lack of project development capability & the ability to translate energy efficiency benefits

							Consumers as mandated by EC Act. ○ Development and marketing of energy efficient products and services for SMEs		into savings -Lack of standardized contracts, audit & M&V protocols, annual performance reports & so on
6	Agriculture DSM & Mu DSM	To reduce the overall power consumption, improving efficiencies of ground water extraction & reducing the subsidy burden of the states To reduce energy cost & improve energy overall incurred by the municipalities		2.00		¾ Business model linked to subsidy reduction being evolved. ¾ Shelf of bankable DPRs to be prepared – 139 ULBs for Mu DSM. In Ag DSM 5 fresh DPRs proposed in States. ¾ In AgDSM, 4 Workshops proposed for Utility employees and various stakeholders. ¾ Baseline development, conducive regulatory regime & payment security mechanism being worked out ¾ Awareness & outreach to local & municipal bodies ¾ Manual for Mu DSM being developed with standard contract documents to enable easier implementation ¾ Risk mitigation measures for encouraging PPP being evolved ¾ CDM benefits for the scheme being put in	○ To demonstrate by setting example the benefits and business models for energy conservation projects to other government/ semi-government and other 3organizations	Progressively from April, 2011 to March, 2012	-Regulatory, financial, political and technological risk - Baseline formulation and monitoring - Incentive to farmers - Awareness and capacity - Subsidy linked approach.
7	Contribution to SECF	SECF is a statutory requirement and under EC Act. It is also one of the deliverables of SDAs ECAP.		20.49		¾ The scheme will provide contribution to SECF after it is notified by states and will be pari-passu with the contribution made by the states.	○ The effort will be to create a pool of financially sustainable activities for SDAs which can augment the fund.	Progressively from April, 2011 to March, 2012	-Notification of SECF by States -Matching contribution from states -Sustainable business model for SECF Subject to approval of the scheme by State Government
8	BEE-GEF-WB Project – Financing Energy Efficiency at MSMEs	To increase demand for energy efficiency investment in MSMEs and to build their capacity to access		2.00		¾ Awareness creation of Industrial Association, SMEs and LSPs (one programme in each targeted cluster)) ¾ Technical Assistance to energy auditors (Five training programmes)	○ Kick off meetings with IAs followed with half a day stakeholders consultation	Progressively from April, 2011 to March, 2012	○ Discussions are going on with SIDBI & TERI to have a common knowledge portal to reduce duplication of

		commercial finance				¾ Marketing & Outreach efforts (will encompass 5 WB cluster + 30 Clusters under BEE SME programme) ¾ Knowledge Management Activities ¾ Helpline	meetings o Work is to be awarded for training of energy auditors (Both National & International), and Media & Outreach activities o Development of Sector specific training manuals for Energy Auditors programmes o Knowledge Portal to be developed o Finalising the work modalities for SME helpline		efforts o Agencies involved in WB pilot studies (in 5 targeted clusters) are being requested to make a presentation on study findings.
9	Super Efficient Equipment Programme	To accelerate demand for super efficient appliances like AC/Refrigerator/ DT etc.		45.00		¾ Sales of super efficient appliances in market through manufacturers	o Reduction of excess avoided capacity from Business as usual scenario.	Progressively from April, 2011 to March, 2012	
	Total			**123.80**					

Annexure-XI

ENERGY CONSERVATION
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Process/ Timelines	Remarks
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
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	--	0.86	--	○ National Awards to industry establishment for achieving energy savings	Enhancement of awareness about energy efficient products Greater proliferation of adoption of energy efficient technologies by industry.	Progressively from April 2011 to March 2012. The Award function is scheduled for 14th December, 2011.	
	(ii)National Level Painting Competition for School Children	To inculcate in children the relevance of energy efficiency and conservation	--	0.85	--	○ Organization of painting competition for school children all over the country	Awareness in children about need of energy conservation	Organisation of school, state and national level competition in October, November and December, 2011.	
	(iii)Awareness & Publicity	To spread the message of energy conservation and efficiency through the media	--	18.74	--	○ Awareness campaign through print, visual and electronic media	Enhancement of awareness about energy efficient products Greater proliferation of adoption of energy efficient practices by masses.	Progressively from April, 2011 to March, 2012.	
				20.45					
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		110.35		• Baseline Energy audit of DCs in 9 sectors (about 70% of Total) • Creation of M&V system • Operationalization of PRGF & VGF • Conducting consultation and awareness workshop • Creation of an web-based energy	• Specific energy consumption norms for Pulp & Paper, Cement, Chlor-Alkali, Fertilizer, Aluminum and Textiles • Specific energy consumption norms for Steel, Power Plants; • SEC targets for 4 sectors (Cement, Pulp& Paper, Chlor Alkaliand Aluminum); Trading	Progressively from April, 2011 to March, 2012.	

						monitoring system • Creation of pool of Designated Energy Auditors for M&V purpose • Review of EA reports and incorporating in target setting approach • Upgradation of professional staffing in BEE for NMEEE • Monitoring and tracking of energy usage pattern of DCs • Study on MTEE	Protocols for PAT; Enhancing BEE corpus • SEC targets for 4 sectors (Power Plants, Textiles, Fertilizer and Steel); Testing of trading Protocols for PAT • Enhancement of corpus of BEE to take up the increased workload • Operationlisation of Perform, Achieve and Trade (PAT) scheme being one of the 4 new initiatives of the NMEEE • Setting up of trading platform for PAT • Specific energy consumption studies for 9 industrial sector initially covered under PAT scheme		
	Total			**130.80**					

Annexure-XII

CENTRAL POWER RESEARCH INSTITUTE
Outcome Budget 2011-12

Approved Schemes under XI Plan

(₹ in crore)

Sl No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12		Quantifiable Deliverables	Projected outcomes	Process/ Timelines	Remarks
1	2	3	4		5	6	7	8
			4 (i) Non – Plan	4 (ii) Plan				
1.	Modernisation and augmentation of switchgear test facilities at CPRI, Bangalore Outlay: ₹ 24.60 Cr	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 would be completed as per schedule.
2.	Modernization of short circuit test facilities and Augmentation of power transformer test facilities Outlay: ₹ 23.60 Cr	i)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 measurements 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.

3.	Augmentation of test facilities for optimization of 800kV AC /DC transmission system Outlay: ₹ 38.00 Cr	To augment test facilities for conducting optimization studies & transmission systems of 800kV AC & 800kV DC ratings	-	15.30	Establishing of in-door laboratory, by commissioning of DC &AC test facility, material handling etc. Completion of Civil works for indoor laboratory building.	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 ratings beyond 400 KV.	Apr – 11 to Feb – 12	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.
4.	Setting up of test facilities for pre-qualification test on 400 kV XLPE cable system Outlay: ₹ 14.80 Cr	To set up test facility for testing for pre-qualification test on 400kV 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	On completion of the project, all the test facilities under pre-qualification test for cable system for 400 class will be established to serve the cable industries	Apr – 11 to Jan – 12	Project would be completed as per schedule.
5.	Centre of Excellence for Life Cycle Management and Condition Assessment of High Voltage Substation and Power Plant Electrical equipment Outlay: ₹ 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	R & D and diagnostic infrastructure for functional evaluation, simulation, ageing studies and diagnostic monitoring of specimens / models of power apparatus insulation would ultimately reduce break downs and enhance reliability of power supply.	Apr – 11 to Mar - 11	Project would be completed as per schedule.

6.	Centre of Excellence for Di-electric Studies Outlay: ₹ 7.68 Cr	To set up centre of excellence for di-electric studies wherein several laboratories will come up under one roof with additional testing & research facilities in the areas of di-electric materials and material technologies	-	0.00	Procurement and commissioning balance equipment like, GC-ECD and coal test facility etc	Establishment of Centre of excellence for di-electric studies wherein several laboratories will come up under one roof with additional testing & research facilities in the areas of di-electric materials and material technologies.	Apr – 11 to Feb - 12	Project would be completed as per schedule.
7.	Centre for Creep & Mechanical Testing Total Project outlay ₹. 2.40 Cr	To establish testing facility for carrying out mechanical tests & creep test on boiler components.	-	1.00	Procurement installation and commissioning of creep testing machine and DG set	Establishment of Creep test facility	Apr – 11 to Sep - 11	Project would be completed as per schedule.
8.	Collaborative research on Emerging Technologies. Total Project outlay ₹. 1.60 Cr	To conduct collaborative advanced research involving utilities, academia and industries on demand driven projects.	-	0.84	Taking up Collaborative research projects in emerging new technologies such as: High Temperature Superconductin g technology, Energy Storage devices, Smart Grid, Development of controls for FACTS devices etc.	Continuation of short term course, taking up collaborative projects etc.	Apr – 11 to Mar - 12	Project would be completed as per schedule.

9.	Quality accreditation for new facilities and business development for CPRI Total Project outlay ₹. 1.20 Cr	To enhance the market reach of CPRI in the global perspective & to realize higher business turnover	-	0.65	• Identification of countries and prioritization • Visit to SE Asian, SAARC countries • Obtaining international accreditations	Enhancement in out reach of test facilities and brand image of CPRI. Increase in test revenue and services.	Apr – 11 to Mar – 12	Project would be completed as per schedule.
10.	Plan R&D Outlay: ₹ 14.90 Cr	Inhouse R&D plan of CPRI aimed at product/ process development, augmentation of test facilities, improvement of standards etc.	-	10.0048	Completion of the schedule individual projects under the scheme.	Inhouse projects would help in solving power system problems, improve operational efficacies and also produce new products / process.	Apr – 11 to Mar – 12	Under the XI plan, Plan R&D scheme was approved in March 2009 for a total outlay of ₹.14.90 Cr.
11.	RSoP Schemes Outlay: ₹ 10.00 Cr	Ministry of Power sponsored programmes on Research for Indian Power Sector	-	6.7324	Completion of the schedule individual projects under the scheme.	Projects would help in solving power system problems, improve operational efficacies and also produce new products / process by pooling in resources / talents from other organizations.	Apr – 11 to Mar – 12	Under the XI plan, Plan R&D scheme was approved in March 2009 for a total outlay of ₹.10.00 Cr.

12	National Perspective Plan projects Total Project outlay Ongoing 6 projects : ₹ 6.99 Cr	Undertaking projects identified under National Perspective Plan report as approved by Standing Committee on R&D and Ministry of Power	-	1.93482	Continuation of 6 approved NPP projects at IIT-Roorkee, NHPC,C&G,CD AC,TNEB,CPRI.	Development of STATCOM lamp for IT park, steel plant, better silt erosion material, HTS and optical CT	Apr – 11 to Mar – 12	-
13	Augmentation of High Voltage, Diagnostic, Relay, Vibration, LED test facilities and Infrastructure protection. Outlay: ₹.62.65 Cr	Upgradation of High Voltage facilities at Bangalore and Bhopal units and establish EMI / EMC & LED test facilities	-	32.55	Implementation of 9 sub projects under Augmentation of High Voltage, Diagnostic, Relay, Vibration, LED test facilities and Infrastructure protection.	Augmentation of HV test facility at Bangalore and Bhopal, establishment of EMI / EMC facility, diagnostic facility at Noida, LED test facility, implementation of infrastructure protection measures.	Apr – 11 to Mar – 12	Project approved in Jan 2011, project comprises of 9 sub projects and all efforts would be made to complete the project well before March 2012.

New Schemes under XI Plan Projects (Awaiting Approval)

14	On-line test facility for large power transformer test Total Project outlay ₹298.64 Cr (Proposed MoP / CPRI share ₹ 24 Cr)	To establish on-line test facility for testing power transformers in the range of 100-315 MVA	-	24.00	Finalization of project by Technical consultant. Ordering of equipment. Finalization of building plan and commencement of civil works.	-	Apr-10 to Mar-12	Equity participation of CPRI / MoP to the extent of ₹. 24 Cr is under consideration.
15	National Perspective Plan projects Phase-2 (SFC of 3 proposals submitted)	Undertaking projects identified under National Perspective Plan report as approved by Standing Committee on R&D and Ministry of Power	-	5.6598	Procurement of equipment and instruments, completion of civil works commissioning of augmented facility for HV testing at Bangalore and Bhopal, establishing test facility LED, EMI / EMC evaluator, diagnostic facility etc.	-	Apr-10 to Mar-12	SFC proposal is under consideration of MoP.
16	Establishment of second	-	-	32.00	-	-	-	-
	SC alternator for HPL Outlay: ₹. 509 Cr							
17	Project under formulation	-	-	6.00	-	-	-	-
18.	Liability of Income tax	-	28.00	-	-	-	-	-
	Total		**163.40**					

Annexure-XIII

NATIONAL POWER TRAINING INSTITUTE (NPTI)
Outcome Budget 2011-12

(₹ in crore)

Name of the Scheme	Objective/Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/Risk Factors
		4(i)	4(ii)	4(iii)				
		Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
Modernization & Up gradation of Training Facilities at Corporate office Faridabad	Training/ 1790 Trainees per year		1689.21		Revenue of ₹ 200.00 lakhs per year will be generated after completionof the Scheme in the year 2011-2012	to increase training facilites	2011-12	The submission drawings for all proposed construction will be approved by HUDA after issuing of completion certificate for previous works.After getting the approval, the proposed construction will be started by CPWD. The matter for identifying the replica plant was taken up with NTPC authority who has suggested that since, NTPC has already established 660MW super critical simulator, NPTI may considered to installed 800 MW super critical simulator. The matter has again been taken up to identify replica plant .
Non-Plan		640.00						Funds will be utilized for Pension Fund.
TOTAL		**640.00**	**1689.21**					

Annexure-XIV

CENTRAL ELECTRICITY AUTHORITY
Outcome Budget 2011-12

(₹ in crore)

Sl.No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2011-12			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	IEBR				
1.	All India Load Survey Scheme	To assess demand of Power over a period of time	2.27	-	-	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.	Continuous process for bringing out Electric Power Survey Report once in 5 years. Continuous process for collection of data on captive generation and installed capacity from industries. Continuous process for bringing out Annual General Review and	18th Electric Power Survey Committee has been constituted by CEA with consultation of MoP in Feb., 2010. Brain storming session & 1st meeting of 18th EPSC was held on 27.8.2010. Report of the Committee is proposed to be brought out by the end of October, 2011. Process for Publication of General Review 2011 containing data for the year 2009-10 and Growth of Electricity Sector in India from 1947 to 2011.

								Growth of Electricity Sector in India from 1947 onwards.	
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.	-	4.11	-	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.	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.
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	-	0.41	-	Identification and selection of sites for location of coastal and pithead thermal power projects in	Shelf of potential sites for pit head and coastal thermal projects including	Originally approved term was 5 years beginning from the 1st year of the 10th Plan. Revised	-

		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.				different states.	Ultra Mega Projects would be available for investment by prospectiv e investors for expeditious thermal capacity addition in the country.	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	
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	-	3.35	-	Civil, Electrical and Horticultural maintenance of SRPC Staff Quarters at Bangalore. Construction of Office building & Staff	Creation of housing infrastructu re of SRPC, Bangalore and creation of Office-cum-residential complex	Civil, Electrical & Horticultural maintenance of Staff Quarters. Works identified in Col. 5 are likely to be completed during 2011-	A pending court case filed in the city civil court pertaining to land on the western side of SRPC, Bangalore. Provision has been made under Capital Head for SRPC, Bangalore in anticipation of clearance by the court.

		resulting in increased & better integrated operation of the regional grid.				Quarters for NERPC, Shillong and RIO, Shillong.	for NERPC / RIO, Shillong.	12.	
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	36.95	-	-	(i) Monitoring of 46 hydro projects (13785 MW) is in progress. During the year 2011-12, 490 MW hydro capacities have been commissioned and nil MW is likely to be commissioned in the remaining period of 2010-11. (ii) Monitoring of 20 thermal power projects (25 Units) aggregating to 13131 MW are under construction for commissioning	(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.	Continuous process	-

		electrification and distribution planning, etc.				during the year. (iii) Data collection & publication of: 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	(iii)Economical cost of generation of electricity. Iv)Accelerated pace of capacity addition to reduce demand and supply of power.		

						stations (Annual). g) Review of Performance of thermal power stations (Annual). (iv) Techno-economic appraisal and concurrence to 10 nos. of hydro-electric projects with a total capacity of 4597 MW.			
6.	Design & Consultancy	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.	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.	0.91	-		Training of 1000 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	0.43	-	-	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 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.	2.27	-	-	Inspection of electrical installations totaling to 2,00,500 equivalent MV.	Assured safety of electrical installation s and personnel.	Continuous process	-
12.	Upgradation of IT facilities in CEA – Phase-I	To develop Centralized Information System for all information relating to the power sector. Centralized Database and information system of power sector in CEA to be made available	-	0.013	-	(i) Furnishing data by various stakeholders in power sector electronically and formation of data bank. (ii) Acceptance, commissioning & testing of Information Management System covering	Centralized database and information system of power sector in CEA to be made available to all stake holders in power sector.	2010-11	

		to all stake holders in power sector.				Servers / Networking equipments / application software development. (iii) Conversion of data to information and generation of necessary reports. (iv) Making available the information to various Govt. Departments and stakeholders in power sector.			
13.	Upgradation of IT facilities in CEA – Phase-II	Comprehensive and more intensive IT based system for monitoring of execution of power projects. Setting up of	-	5.14	-	Procurement of servers & associated system software for disaster data recovery center.	Efficient monitoring of execution of power projects. Developme nt of sound	Scheduled to be completed in 12th Plan period subject to approval from the competent authority.	Project yet to be approved

		disaster data recovery center for second backup of data. Building redundancy in data center for higher availability. Procurement of Planning Model software. Maintenance of IT facilities.				Procurement of Personal Computers, Laptops, peripheral devices & softwares Procurement of Planning Model software. Ensure security, reliability of the data & reduce the risk of data loss due to disaster or any other unforeseen reasons.	and upto date centralized database system for Power Sector of the country. Higher availability of IT facilities.		
14.	National Load Despatch Center (NEPSIC)	The scheme is related to operation and maintenance of National Electric Power System Information Centre (NEPSIC) at	0.14	-	-	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	-

		New Delhi for collecting vital power system operational data from different Regional Power Committees (RPCs) for use in CEA / Ministry of Power.							
15.	Regional Coordination	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	13.81	-	-	Facilitation of coordinated operation of regional power grids in the country	Facilitation of secured and reliable operation of the Regional Grids.	Continuous process	-

		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)							

16.	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 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.	Continuous process	-

17.	Computerizatio n of PTCC process	Computerisatio n of processing of the PTCC cases for route approval	-	0.011	-	. Appointment of the consultant. . Preparation of the project report with methodology and cost estimates. . Preparation of the tender documents for implementer / developer of the system.	. The consultant will prepare the various documents . Project Report . Tender Documents	1.March 2011 2.May 2011 3.January 2012	--
18.	Optimisation of National Grid Programme	Development of plan wise transmission system based on capacity addition demand growth projection and corresponding transmission needs for the next 3 Five	-	0.10	-	Review the transmission programme, make assessment of the adequacy and reliability of the proposed transmission network, evaluate cost	Adequate, optimized & reliable transmissio n network. Effectivene ss of the investment		Power system scenario in the country is undergoing rapid changes and transmission planning has become significant in time context. During 12^{th} & 13^{th} Plan periods, about nine high capacity corridors considering 765 kV EHV AC and HVDC

		Year Plan taking the services of international experts in the field of transmission planning.				effectiveness of investment and suggest optimization and factoring in state of art developments.			systems have been identified. Further the draft 12th Plan NEP (Transmission) document is under preparation. The grid optimization scheme i.e. "Optimisation of National Grid Programme for the period 2012-22" that was envisioned in 2009 may not be in the present form and it appears that the scheme could be required to be re-formulated in the overall perspective by considering recommendation of the consultant appointed by MoP – M/s Booz & Co., outcome of 12th NEP (Transmission), emerging power system scenario etc.
19.	Technical Assistance by World Bank to support CEA for appointment of Consultants	To carry out studies (through consultant) for identification of barriers for	-	2.01	-	i) TOR, RfP, monthly / Quarterly monitoring reports. ii) Study reports	Speedy & cost effective implement ation of Energy	The progress of the scheme will depend on the following: - Appointment of	Delay in selection of consultants Delay in completion of Pilot R&M projects.

	for addressing Barriers to Energy Efficiency R&M of Coal Fired generating units in India	implementation of EER&M projects in Thermal Power Stations in India, Developing markets for implementation of R&M schemes in TPS, Review of experience from Pilot R&M projects, Review of institutional capacity at CEA in the field of R&M and implementation of Strengthening of Institutional capacity at CEA.				on: - Reduction of R&M barriers. III) Developing Market for implementation of R&M Iv) Review of Experience from Pilot R&M projects. v) Review of institutional capacity and Strengthening of Institutional Capacity at CEA.	Efficient R&M schemes in Thermal Power Stations in India.	various consultants. Timely completion of Pilot R&M projects.	

20.	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	**77.03**	**16.23**	**-**					

Annexure-XV

JOINT ELECTRICITY REGULATORY COMMISSION (JRRC) FOR THE STATE OF MANIPUR & MIZORAM
Outcome Budget 2011-12

(₹ in crore)

1	2	3	4			5	6	7	8
			Non-Plan Budget	Plan Budget	Complementary extra-budgetary Resources	Quantifiable Deliverables/Physical outputs	Processes/ Timelines	Projected Outcomes	Remarks/ Risk factors
			4(i)	4(ii)	4(iii)				
	Joint Electricty Regulatory Commissi on (JERC) for Manipur & Mizoram	To fulfill the commitment of the Government of India for assisting the States of North-Eastern Region in the initial 5 years in settin up of the Commission. It would help in regulating tariff for	-	2.38 crore	-	Targets for the year 2011-12 are as below: 1. To pursue the State Governments for privatization of the Distribution Sector. 2. Making 5 (five) new Regulations (including Multi-year Tariff). 3. Conducting 4 (four) public hearings on various issues. 4. Conduct of 8 (eight) State Advisory Committee meetings and 4 (four) nos. of State Co-ordination Forum Meetings. 5. Organize 4 (four) State	Government of India will meet the expenditure during the initial 5 years from the date of constitution and thereafter the Governments of the two States will share the cost. The targets as indicated in	1. This will improve the quality of power supply. 2. These are new regulations required for proper functioning of the Commission. 3. It will help taking important decisions. 4. To decide important issues facing in management of power supply in the States of Manipur and Mizoram.	Fund Rules and Form of Annual Statement of Account Record Rules for the Commission are yet to be notified by the Government. All the vacant posts of officers and staff are to be filled up during the year.

		supply of electricity in the States of Manipur and Mizoram.				Level Workshop on important issues. 6. Tariff of Officers and Staff of the Joint Commission. 7. Field visits and interactions with the State Government functionaries. 8. Issue Retail Tariff of Mizoram and Manipur for financial year 2010-11.	col.5 are expected to be achieved during 2011-12.	5. To provide public and private relationship and bring awareness. 6. This will enhance the efficiency of officers and staff. 7. To acquire basic information and the ground realities of projects.	

Annexure-XVI

ASSISTANCE TO FORUM OF REGULATORS FOR CAPACITY BUILDING
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Scheme/ Program	Objective/ Outcome	Outlay 2010-11			Quantifiable Deliverables/ Physical outputs	Projected Outcomes	Processes/ Time-lines	Remarks/ Risk Factors
1	2	3	4			5	6	7	8
			Non-Plan Budget	Plan Budget	Complementary extra-budgetary Resources				
			4(i)	4(ii)	4(iii)				
	Assistance to Forum of Regulators for Consultancy and Capacity Building	Capacity building by way of training / re-orientation of personnel of Regulatory Commission and Consultancy studies to evolve best regulatory practices.		2.00 (plan assist sistance		• Regulatory Commissions will have trained personnel. • Study reports will be finalized for suitable actions by the Regulatory Commissions	• 120 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.	

Annexure-XVII

COMPREHENSIVE AWARD SCHEME
Outcome Budget 2011-12

(₹ in crore)

Sl No	Name of Scheme/ Programme/ Project	Objective/Outcome	Outlay 2011-12						
1	2	3	4			5	6	7	8
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Quantifiable/ Physical Outputs	Projected Outcomes	Processes/Timelines	Remarks/Risk factor
			4 (i)	4 (ii)	4 (iii)				
	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.	-	₹ 0.82 crore	-	Improvement in performance of generation, transmission distribution and environment management	To contribute in achieving reliable affordable and quality power supply to all by 2012	-	-

Annexure-XVIII

MOP SECRETARIAT
Outcome Budget 2011-12

(₹ in crore)

Sr. No.	Name of Scheme/ Programme/ Projects	Objective/ Outcome: Sanctioned cost/ Cumulative expenditure from beginning till 31.12.2005.	Outlay 2010-2011			Quantifiable Deliverables / Physical Outputs	Processes / Timelines	Projected Outcomes: Date of completion of the project	Remarks
1.	2.	3.		4.		5.	6.	7	8
			4(i)	4(ii)	4(iii)		!		
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
	(c) MOP Secretariat (Main) Office Expenses	(b) To meet the requirement of office expenses i.e. i. Payment of telephone bills	₹.3.75 crore		_____	(a) To meet the requirement of office expenses i.e. Payment of telephone bills,	_____	Smooth functioning of office	

		ii. House keeping iii. maintenance of IT related, and office automation items iv. Purchase of stationary items. v. Requirements of Central Registry Section vi. variation consumable. vii. maintenance and purchase of petrol for staff cars. Etc.				Housekeeping stationary items, Maintenance of office equipment, petrol for staff car and other Electric items etc.			

		(including O/o Controller of Accounts, Ministry of Power)							
	(c) Office Expenses (Plan)	(c) A Plan scheme 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		1.00 Computerization & office Automation	_____		_____	Following are the major benefits when the scheme is fully implemented i. Availability of versatile and developed centralized online technical data base system. ii. Development of a well interconnected local area network and remote connection with various power utilities. iii.Enhanced skill of manpower in the Ministry of Power in the	

		and prompt decision making. The Plan Scheme is proposed to be continue during the current financial year under XI th Plan Scheme						field of IT. iv. Conductive environment and aesthetic ambience created through renovation/office automation is facilitating smooth and effective discharge of official work. The project will be completed in 2012 v.Replacement of old IT related items.	

Annexure-XIX

FUNDS FOR EVALUATION STUDIES
Outcome Budget 2011-12

(₹ in crore)

Sr. No.	Name of Scheme/ Programme	Objective /Outcome	Outlay 2010-11			Quantifiable Deliverables/ Physical Outputs (2010-11)	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
	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	-	1.00 crore		The evsaluation 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.	

Annexure-XX

JOINT ELECTRICITY REGULATORY COMMISSION (JRRC) FOR THE STATE OF GOA & UTS EXCEPT DELHI
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Scheme/ Program	Objective/ Outcome	Outlay 2010-11			Quantifiable Deliverables/ Physical outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
1	2	3	4			5	6	7	8
		Non-	Plan Budget	Plan Budget	Complementary extra-budgetary Resources				
	Joint Electricty Regulatory Commissio n (JERC) for Goa & UTs	To meet the statutory requirement of setting up Electricity Regulatory Commission	4.00	NIL	-	The Commission would regulate tariff for supply of electricity in the State of Goa and UTs except Delhi resulting in efficiency improvements. About 25 Petitions are likely to be disposed during the year 2011-12. The petitions include the tariff petition, miscellaneous cases. Two Regulations are expected to be finalized.	This will result in efficiency improvement and firm tariff.	The procedures of framing regulations as also of passing of Tariff orders by JERC have been laid down in detail in the JERC (Conduct of Business) Regulations/ JERC (Terms and Conditions for determination of Tariff) Regulations. These procedures would be followed while disposing off the petitions and other issues.	It is expected that the targets set will be achieved. However, the possible constraints which have the potential of slippages on time line include the complexities involved in some cases.

Annexure-XXI

APPELLATE TRIBUNAL FOR ELECTRICITY
Outcome Budget 2011-12

(₹ in crore)

Sl. No.	Name of Scheme/ Program	Objective/ Outcome	Outlay 2010-11			Quantifiable Deliverables/ Physical outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
1	2	3	4			5	6	7	8
		Non-	Plan Budget	Plan Budget	Complementary extra-budgetary Resources				
		4(i)	4(ii)	4(iii)					
	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 Tribunal under Petroleum and Natural Gas Regulatory Board Act.	8.50	-	-	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 under the Petroleum and Natural Gas Regulatory Board Act.	N.A.	Spread throughout the year	APTEL has been setup with appellate jurisdiction in disputes of the power sector. In terms of Petroleum and Natural Gas Regulatory Board Act, 2006, the Appellate Tribunal for Electricity shall also be the Appellate Tribunal for the purpose of Petroleum and Natural Gas Regulatory Board and shall exercise the jurisdiction, powers and authority conferred on it by or under the Petroleum and Natural Gas Regulatory Board Act. Some risk factors are inadequate number of Members of the Tribunal, their non-availability due to illness or other unavoidable circumstances, workload due to transfer of all cases from 25 High Courts, complexities and lengthy nature of issues etc. Further, inabilities of the Tribunal to fill up the vacancies and strengthen the Registry, Inadequate staffing etc. are critical risk factors. To overcome this risk factor, the Tribunal is presently trying to amend the Recruitment Rules so that candidates from various other sectors like State Govts, PSUs, etc. can be considered.

Annexure-XXII

CENTRAL ELECTRICITY REGULATORY COMMISSION
Outcome Budget 2011-12

(₹ in crore)

S. No	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2011-12			Quantifiable Deliverables/ Physical outputs	Projected Outcomes	Processes/ Timeline	Remarks/Risk Factors
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget (Rs/ in crore)	Plan Budget	Complementary extra-budgetary Resources				
1	Central Electricity Regulatory Commission	To perform the statutory functions under the Electricity Act 2003	31.48 (to be met from CERC Fund)	-	-	120 Petitions are likely to be disposed during the year 2011-12. The petitions include the tariff petitions for the Tariff period 2009-14, applications for grant of transmission and trading licenses, adoption of tariff arrived through the process of competitive bidding, miscellaneous cases involving grid disciplines and monitoring	Passing of tariff orders will result in firm tariff for the 5 year Tariff Period for which the Terms & conditions of Tariff have been specified by CERC.	The procedures of framing Regulation as also of passing orders by CERC are already laid down in detail in the Conduct of Business Regulations. These procedures would be followed while disposing of the petitions and other	As per the past trend, it is expected that the targets set will be achieved. However, the possible constrains which have the potential of slippages on time line include the complexities involved in some cases.

						the functioning of the Power Exchanges and adjudication matters. Implementation of National Transmission Tariff framework. Development of Benchmark Capital Cost for Thermal Power Stations.	This would promote effective utilization of assets across the country and accelerated development of the new transmission capacities. This will enable the Commission to undertake the exercise of prudence check of capital cost of generation and transmission	issues highlighted in column-5. The targets as indicated in column-5 are expected to be achieved during the year 2011-12.	

						Implementation of Renewable Energy Certificate (REC) framework. Implementation of regulatory Information Management System (RIMS) in CERC.	projects more effectively. This is aimed at promoting investment in Renewable Energy segment and enabling compliance of Renewable Purchase Obligation (RPO). This will enable the Commission to manage the data base/ information more effectively for decision making.		

CHAPTER-III
Major Initiatives/Reforms & Policy Measures

1. Accelerated Capacity Addition Programme

The Government is consistently working towards fulfilling the commitment made in the National Electricity Policy to meet the demand for power and eliminating both peaking and energy shortages by 2012. An unprecedented capacity addition of 78,700 MW during XI Plan was originally targeted to meet these objectives. At the time of mid-term appraisal carried out by the Planning Commission, the XI Plan target has been revised to 62,374 MW. This is a challenging task as the proposed capacity addition is higher than the cumulative achievement of the last three Plans. Effective steps have been taken for realization of the targeted capacity addition. As against the mid-term appraisal target of 62,374 MW, a capacity of 32,512 MW has already been commissioned till 31.01.2011 and a capacity aggregating to 30,380 MW is under construction for commissioning during XI Plan. A capacity addition target of 20359 MW has been fixed for 2010-11. Against this target, a capacity addition of 10210 MW has been achieved upto 31.01.2011. This is higher than the highest capacity addition ever achieved in a single year of 9585 MW in 2009-10.

2. 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 Special Purpose Vehicles (SPVs) are set up as wholly owned subsidiaries of the Power Finance Corporation (PFC) Ltd – the nodal agency for these projects. These SPVs, alongwith 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 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. Two units each of 800 MW of Mundra UMPP are expected to be commissioned in the 11th Five Year Plan and efforts are on to commission Unit 3 also in the 11th Plan itself.

The pre-RfQ activities for Chattishgarh and Orissa UMPP had been completed and the RfQ have also been issued on 15.03.2010 and 11.06.2010 respectively. 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.

3. 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 derives benefit from economies of scale**. T**hese guidelines were modified in 1998, 2002, 2006 to encourage power development in Jammu & Kashmir and the North-Eastern region.

However, in the wake of several important statutory and policy level changes in the power sector, Ministry of Power revisited some of the provisions of the prevailing Mega Power Policy and in October 2009 brought them in line with the National Electricity Policy, 2005 and Tariff Policy, 2006. The major provisions of the revised Mega Power Policy are as follows:

(i) The existing condition of privatization of distribution by power purchasing states has been replaced by the condition that power purchasing states shall undertake to carry out distribution reforms as laid down by Ministry of Power (MoP).

(ii) The condition requiring inter-state sale of power for getting mega power status has been removed.

(iii) The present dispensation of 15% price preference available to the domestic bidders in case of cost plus projects of Public Sector Undertakings (PSUs) would continue. However, the price preference will not apply to tariff based competitively bid projects of PSUs.

(iv) The developers of mega power projects would not be required to undertake International Competitive Bidding (ICB) for procurement of equipment for the mega power project if the requisite quantum of power has been tied up through tariff based competitive bidding or the project has been awarded through tariff based competitive bidding.

(v) All benefits, except a basic custom duty of 2.5% only, available under mega power policy would be extended to expansion unit(s) of existing mega power projects even if the total capacity of

expansion unit(s) is less than the threshold qualifying capacity, provided the size of the unit(s) is not less than that provided in the earlier phase of the project. All other conditions for grant of the mega power status shall remain same.

(vi) Mega Power Projects may sell power outside long term PPA(s) in accordance with the National Electricity Policy 2005 and Tariff Policy 2006, as amended from time to time.

The modified policy seeks to rationalize the procedure for grant of mega certificate and facilitate quicker capacity addition.

4. Re-structured Accelerated Power Development Reforms Programme (R-APDRP) :

"Re-structured APDRP" was approved as a Central Sector Scheme in July, 2008. The focus of the programme is on actual, demonstrable performance in terms of AT&C loss reduction. Projects under the scheme are taken up 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 is to be taken up in **Two Parts**. Part-A shall include the projects **for establishment of baseline data and IT applications for energy accounting/auditing & IT based consumer service centers.** Part-B shall include regular **distribution strengthening projects.** Part-C is an enabling component for the implementation of R-APDRP. Under Part-D, there is a provision for incentive for utility staff in towns where AT&C loss levels are brought below the base line levels.

5. 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 g**uidelines for encouraging competition in development of transmission projects and tariff based competitive bidding for transmission services in 2006.** 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.

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

Standard Bidding Documents (SBDs), Request for Qualification (RfQ), Request for Proposal (RfP) and Transmission Service Agreement (TSA) have also been issued. Power Finance Corporation (PFC) and Rural Electrification Corporation (REC) are appointed as the Bid Process Coordinators (BPC) for the following transmission projects to be taken up through tariff based competitive bidding:

A. Power Finance Corporation:

S.No.	Name of the Project
i)	Scheme for Enabling Import of NER/ER surplus by NR.
ii)	System strengthening common for WR and NR a) Dharamjaygarh-Jabalpur 765 kV b) Jabalpur pool – Bina 765 kV -
iii)	System Strengthening for WR a) Jabalpur-Bhopal 765 kV S/C line b) Bhopal-Indore 765 kV S/C line c) 765/400 kV substation at Bhopal with 2x1500 MVA 765/400 kV and interconnecting 400 kV lines/LILO d) Aurangabad-Dhule 765 kV S/C line e) Dhule-Vadodara 765kV S/C line f) 765/400 kV substation at Dhule with 2x1500 MVA 765/400 KV and interconnecting 400 kV lines/LILO

B. Rural Electrification Corporation

S.No.	Name of the Project
i)	Evacuation system for North Karanpura
ii)	Talcher-II Augmentation System
iii)	Transmission System Associated with Krishnapattnam UMPP Synchronous interconnection between SR and WR (Part-B) Raichur-Sholapur 765 kV S/C line-1

The above transmission projects have already been awarded to the successful bidders by the respective BPCs and these projects likely to be completed during XII Plan.

6. National Grid

Generation capacities and demand points are unevenly distributed across the country due to various natural and historical factors. The demand for power, (and to some extent, even its supply), is characterized by intra-day and seasonal variations. An integrated power transmission grid helps to even 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 22,400 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 39.5 billion kWh (2009-10). 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.

7. Trading of Electricity:

The Central Electricity Regulatory Commission (CERC) have powers to grant Inter-state Trading Licences. The Commission has so far granted 47 inter-state trading licences, of which 38 are in existence as on October 31, 2010. The volume, price and trading margin of the electricity traded by these licensed inter-state traders are as under:

Volume and Price of Electricity Transacted by Trading Licensees

Period	Volume (MUs)*	Purchase Price (₹)	Sale Price (₹)	Trading Margin (₹)
2005-06	14188.81	3.14	3.23	0.09
2006-07	15022.74	4.47	4.51	0.04
2007-08	20964.77	4.48	4.52	0.04
2008-09	21916.92	7.25	7.29	0.04
2009-10	26819.15	5.22	5.26	0.04
2010-11 (Apr-Nov 10)	20162.99	5.00	5.05	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 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.

*The volume during 2009-10 and 2010-11 includes the volume transacted through Term Ahead Market (TAM) of Power Exchanges. This is for the reason that the procedure for transactions through trading licensees and TAM is similar.

8. Electricity Transacted through Power Exchanges

The CERC has given approval to two power exchanges viz. M/s Indian Energy Exchange Ltd.(IEX) and Power Exchange India Ltd.(PXIL). The IEX and PXIL started their operations from 27 June, 2008 and 22 October, 2008 respectively. The volume and price of electricity transacted by these Power Exchanges is given below:

Volume and Price of Electricity Transacted through Power Exchanges (Day Ahead Market)				
Period	Volume (MUs)		Price (₹)	
	IEX	PXIL	IEX	PXIL
2008-09	2623.22	149.36	7.48	7.60
2009-10	6170.93	915.30	4.98	4.79
2010-11 (Apr-Nov 10)	7056.07	982.53	3.44	3.67

In addition to the transactions in the Day Ahead Market (collective transactions), Power Exchanges are undertaking transactions in the Term Ahead Market (i.e. transactions through intra-day contracts, day ahead contingency contracts and weekly contracts) from September 2009. The volume of electricity transacted in the Term Ahead Market of the two power exchanges is given in the following table.

Volume of Electricity Transacted under Term Ahead Contracts of Power Exchanges		
Period	Volume of IEX (MUs)	Volume of PXIL (MUs)
2009-10 (Sept to Mar)	95.17	2.74
2010-11 (Apr to Nov)	554.62	787.60
Note: Term ahead contracts introduced in the two power exchanges from September 2009. Procedure for bilateral transactions through trading licensees and transactions through TAM of power exchanges are similar, therefore, the volume of TAM has been included in the volume of electricity transacted through trading licensees.		

9. Focus on Energy Conservation & Energy Efficiency

Awareness and Outreach

The General Awareness Campaign creates awareness to motivate people to save power by rational use of electricity. This campaign serve as the umbrella campaign for the energy conservation initiatives and lays emphasis on the subject as the need of the hour.

The allocation of resources over the various media platforms is such that TV and satellite constitutes the highest allocation followed by print and radio. The plan for cinema and internet has also been proposed. The entire campaign is spread over 4 years (2008-09 to 2011-12) and will cost around ₹ 74.02 crores. An amount of ₹ 46.80 crore has been utilised so far. The various initiatives taken by the Ministry are as under:

National Energy Conservation Awards has been initiated by the Government of India, Ministry of Power more than a decade ago to promote and recognize energy conservation efforts. These awards are given away every year on 14 December which is

also observed as the National Energy Conservation Day. The Awards Scheme recognizes best practice from large / medium and small scale industries, building sector, zonal railways, State Designated Agencies (SDAs) and Municipalities and Manufactures of BEE Star labeled appliances. The scheme is gaining popularity each year, given that there were 6 per cent more awardees in 2010-11 as compared to 2009-10.

Children are an important target group as well as stakeholders in increasing awareness; therefore the Ministry of Power and BEE organizes a National level Painting Competition for children studying in standards 4th, 5th and 6th. In 2010, 47153 schools and 15.63 lakhs children participated in the Competition as compared to 40814 schools and 9.11 lakh children in 2009. Thus, there is an increase of around 71.57% in student participation in 2010.

The Energy Conservation Act, 2001 provides the preparation of educational curriculum on efficient use of energy and its conservation for schools, boards, universities or autonomous bodies and coordinates with them for inclusion of such curriculum in their syllabus. NCERT incorporated a Chapter on Energy Conservation in IXth Standard Science book in pursuance of efforts made by BEE. Promotion of energy efficiency in schools is being promoted through the (Building Energy Awareness on Conservation) BEACON project which is now in its third phase.

National Mission for Enhanced Energy Efficiency (NMEEE) is one of the eight national missions under the National Action Plan on climate change. The Ministry of Power and Bureau of Energy Efficiency (BEE) have prepared the implementation framework to upscale the efforts to create and sustain market for energy efficiency to unlock investment of around ₹ 74,000 crore. The Mission, over the next five years, is likely to achieve about 23 million tons oil-equivalent of fuel savings- in coal, gas, and petroleum products, along with an expected avoided capacity addition of over 19,000 MW. The carbon dioxide emission reduction is estimated to be 98.55 million tons annually. BEE will be the mission implementing agency with DG, BEE as the Mission Director.

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

Schemes for Promoting Energy Efficiency in India during XI Plan (2007-2012)

In order to enhance the efforts to promote energy efficiency during the XI plan period and to achieve the target of reducing consumption by 5% (equivalent to 10,000 MW of avoided capacity) by 2012, BEE has initiated several programmes/schemes targeting the following areas:

House hold lighting

Commercial Buildings

Standards & Labeling of appliances

Demand Side Management in Agriculture /Municipalities

SMEs and Large Industries

Capacity Building of SDAs

Briefly, the various initiatives are as under:

Bachat Lamp Yojana : The scheme promotes energy efficient and high quality CFLs as a replacement for incandescent bulbs in households. The scheme has been registered as a Programme of Activities (PoA) with the CDM Executive Board on 29.4.2010 under UNFCCC.

Standards & Labeling Scheme: Targets high energy end user equipments & appliances to lay down minimum energy performance standards. The total targeted avoided capacity during the XIth Plan is 3000 MW. Several other widely used equipments & appliances have been included in the scheme, viz. Motors, Color TVs, Ceiling Fans, Geysers, LPG stoves, Agricultural pumps, Air conditioners, Refrigerators, TFLs and Distribution Transformers etc.

Energy Conservation Building Codes (ECBC) & Energy Efficiency in existing buildings : ECBC minimum energy performance standards for new & existing commercial buildings having a connected load of 100 kW. These codes define norms of energy requirement per square meter of area and takes into consideration the climatic regions of the country where the building is located. Energy efficiency measures in existing buildings are also being carried out through retrofitting.

Designated Agencies Strengthening Programme: The main emphasis of the scheme is to build capacity necessary to enable them to discharge regulatory, facilitative and enforcement functions under the Act, given that the institutional capacity is limited - both in terms of human and infrastructure resources.

Designated Consumers & SMEs : To promote Energy Efficiency in SMEs during the XI plan. BEE in consultation with Designated State Agencies, will initiate diagnostic studies in 25 SME clusters in the country, including 4-5 priority clusters in North East Region, and develop cluster specific energy efficiency manuals/booklets, and other documents to enhance energy conservation in SMEs.

Agricultural (Ag DSM) and Municipal (Mu DSM) Demand Side Management (DSM) Scheme: To reduce the overall power consumption, improving efficiencies of ground water extraction & reducing the subsidy burden of the states.

Contribution to State Energy Conservation Fund (SECF) Scheme: The scheme provides contribution to SECF after it is notified by states. The effort will be to create a pool of financially sustainable activities for SDAs (like training programmes, fee for services, etc) which can augment the fund.

Energy Conservation Information Center : The Energy Conservation Information Center has been set up, known as Beenet, which is a web enabled online data collection and collation system.

Professional Accreditation: BEE has conducted 10 National Certification Examinations across the country up till 2010 and has certified 7766 Energy Managers out of which 5390 are Energy Auditors.

Super Efficient Equipment Programme : The key policy objective is to create an appropriate policy and regulatory framework to incentivise manufacturers to produce and sell Super Efficient Equipments (SEE) which could significantly reduce energy consumption without compromising on comfort levels.

BEE-WB-GEF Project – Financing Energy Efficiency at MSMEs : The project will be jointly executed by Bureau of Energy Efficiency (BEE) and Small Industries Development Bank of India (SIDBI). The four major components are viz. 1) Activities to increase Awareness and Build Capacity, 2) Activities to increase investment, 3) Activities for Knowledge Management, and 4) Project management.

10. POLICY INITIATIVES

10.1 Rural Electrification Policy

The Central Government has notified Rural Electricity Policy under section 4 & 5 of the Electricity Act, 2003 on 23 August, 2006.

The Policy aims at:-

Provision of access to electricity to all households.

Quality and reliable power supply at reasonable rates.

Minimum lifeline consumption of 1 unit per household per day as a merit good by year 2012.

10.2 Provision of supply of electricity in 5 Km area around Central Power Plants:

The Hon'ble Union Minister of Power announced in the Parliament on 21.07.2009 that the Government is considering supplying of reliable power supply to the villages within radius of 5 km of Power Stations set up by Central Public Sector Undertakings (CPSUs). Ministry of Power issued Guidelines vide Order dated 27 April, 2010 to operationlize the scheme. Salient features are :

The scheme will cover all existing and upcoming power plants of CPSUs. The cost of the scheme will be borne by the CPSU which owns plant.

The scheme will be implemented by the CPSUs for the area around its plants. Scheme is to supplement the existing infrastructure of the DISCOM to the extent required to operationalize the scheme. State Utility need to provide data, clearances, access and space in their existing substations for making the implementation possible. State utility shall also identify a nodal officer for this purpose.

CPSU and state utility will make an assessment of the power requirement of the area. The assessed amount of power will be made available/ allocated to the state utility from the Central Government unallocated quota over and above the allocated quota. Under the scheme, electricity shall be supplied only for the domestic usage purpose.

All revenue villages and habitations, irrespective of their population falling within 5 km. radius from the power house of CPSUs are eligible for electrification. At least one 11 kV radial feeder, if it does not already exist, will be provided by the CPSU for the area from the nearest existing substation of the state utility. CPSUs will provide free single lamp

electricity connections to BPL households. LED bulbs shall be provided with connections to BPL households. Supply of LED bulbs by CPSUs will be a one time affair.

A tripartite agreement is to be signed by State Government, State Utility and the concerned CPSU for implementation of the scheme. Model Tripartite Agreement has been circulated to all to facilitate faster implementation on 3.8.2010.

The tariff, as decided by the SERC for other villages, shall be applicable for this area. State Utility will take the meter reading of all the consumers, issue bills and collect the tariff as in normal cases.

10.3 Tariff Policy

The Cabinet has approved the proposal of Ministry of Power on 06.01.2011 for amendment in para 6.4(1) of Tariff Policy for fixing a minimum percentage of the total consumption of electricity in the area of a distribution licensee from solar energy also in accordance with the National Solar Mission strategy, which was notified vide resolution dated 20.01.2011.

10.4 Guidelines for Procurement of Electricity

In compliance with section 63 of the Electricity Act, 2003, the Central Government has notified guidelines on 19.01.2005 for procurement of power by Distribution Licensees through competitive bidding which has been amended from time to time. Central Government has issued the Standard Bidding Documents containing RFQ, RFP and model PPA for long term procurement of power from Case-2 projects having specified site and location through tariff based competitive bidding through said guidelines and Standard Bidding Documents for long term procurement of power from Case-1 projects, where the location, technology or fuel is not specified through said guidelines.

This has resulted in larger private sector investments in power sector and also resulted in competitive tariffs.

10.5 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. However, any expenditure incurred by the Project developer for acquiring the site from the State Governments will not form a part of the project cost, thus protecting the interests of the consumers. In order to enable the project developers to recover such costs, the developer will be allowed 40% of the saleable energy through merchant sales. This dispensation, however, is contingent upon a transparent procedure being followed by the host State in allotting projects and upon timely achievement of specified milestones. There will be a progressive reduction of the merchant power quantum of 40% if there is delay in commissioning the project. The concurrence by CEA, all clearances, financial closures and award of work will have to take place by January, 2011. The project developer would also have to set apart 1% of the power towards the development of the local area over and above 12% free power to home State(s). A similar 1% matching contribution is expected from the host state for local area development. Further, the project authorities will also bear 10% State Government's contributions for electrification of villages in the affected area under RGGVY. The project developer will also provide 100 units of free power to each project affected family (PAF) per month for a period of 10 years. This will provide a regular stream of revenue for the welfare of the project affected people. With this new Hydro Power Policy, it is expected that project developers will be able to reach financial closure early, the consumers will not have to pay unduly high tariff and project affected families (PAFs) will get a better R&R package.

10.6 Current Status regarding Continuation of exemption from tariff based competitive bidding for public as well as private Hydro Electric Projects for five years beyond January, 2011:

Under clause 8.4.1 (a) of the New Hydro Power Policy 2008, cost plus tariff dispensation available to the Public Sector under clause 5.1 of the National Tariff Policy 2006 regarding exemption from tariff based bidding up to January 2011, has also been extended to private sector hydro electric projects (HEPs)

The risks and uncertainties are so high for hydro-electric projects that it would be extremely risky to make bids on the basis of tariff even before the DPR and other pre-construction investigations are carried out. Development of hydro power projects is fraught with a number of uncertainties. The problems are particularly acute in the case of storage projects, which involve construction of large dams & creation of reservoir involving large displacement primarily due to the uncertainties relating to R&R. Similarly, large run-of the river (ROR) projects involving tunnels over long distances have also been found to be risky in view of the uncertainties and wide variations in geology observed in the Himalayas.

Both Central Electricity Regulatory Commission (CERC) and Central Electricity Authority (CEA) have recommended continuation of cost plus based tariff regime beyond the year 2011. In exercise of its statutory powers under section 79(2) of the Electricity Act, 2003, CERC has advised that cost plus tariff could continue for large sized multipurpose storage hydro projects in view of the complexities and larger construction risks involved. Similarly CEA has suggested that the cost plus dispensation available to CPSUs/PSUs and private sector hydro projects till January, 2011 may be extended for another five years period as it is felt that the situation is not yet ripe to decide hydro projects on competitive bidding.

Accordingly, a proposal to continue exemption from tariff based competitive bidding for public as well as private sector Hydro Electric Projects for five years beyond January, 2011, is under active consideration of the Ministry.

11. Operationalisation of Open Access

Open access is one of the key features of the Electricity Act, 2003. Open access in inter-state transmission is fully operational. 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 has operationalised Power System Operation Corporation (POSOCO) w.e.f 01.10.2010. POSOCO will manage the load dispatch functions earlier being managed by the CTU i.e. POWERGRID.

The Task Force on Measures for Operationalising Open Access in the Power Sector set up under the chairmanship of Member (Power), Planning Commission after deliberating on the issue had submitted its report on 23.01.2009. The Planning Commission has reconstituted an inter-Ministerial Task Force on Measures for Operationalising Open Access in the Power Sector. The Task Force will examine the progress made in implementation of the recommendations made by the previous Task Force for operationalising open access in Power Sector.

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) Accelerated Power Development & Reforms Programme (APDRP)

(3) Restructured Accelerated Power Development & Reforms Programme (R-APDRP)

(4) Generation & capacity addition

(5) Transmission

(6) Energy Conservation & Energy Efficiency

(7) 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 are provided free electricity connections. The rate of reimbursement for providing free connection to BPL households is ₹ 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 31.12.2010	Achievement for quarter ending 31.12.2010 for the year 2010-11
Total villages to be electrified	118499	100000	89675	11419
BPL households covered	246.45 lakh	175 lakh	140.70 lakh	39.73 lakh

The details are at Annexure-I.

(2) Accelerated Power Development and Reforms Programme (APDRP) :

Government launched Accelerated Power Development and Reforms (APDRP) in 2002-03 as additional central assistance to the states for strengthening and up gradation of sub-transmission and distribution systems with main objectives of reduction in AT&C and commercial losses; improve quality and reliability of supply of power. X-Plan APDRP Scheme has been completed/ short closed as on 31.03.2009.

For assisting State Power Utilities in effective and smooth implementation of the programme, Ministry of Power appointed NTPC, POWERGRID, CPRI, MECON, NPC and WAPCOS as advisor cum consultants (AcCs). Their main responsibilities were to assist the utilities and the Ministry, in formulation of DPRs, Vetting of DPRs, Project Monitoring, MIS preparation etc.

An amount of ₹ 19.48 crore was kept in BE 2010-11. ₹ 19,43,78,874 has already been released to Advisor-cum-Consultants for the year 2010-11. The details are given at Annexure-II.

3. Restructured 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 31.07.2008. The achievements up to December, 2010 are given in the Annexure-III. An amount of ₹ 1871.79 crore has been disbursed as on 15 February, 2011 comprising of ₹ 23.38 crore under Part A, ₹ 73.55 crore for SCADA and ₹ 1774.86 crore for Part-B during current financial year 2010-11

(4) Generation & capacity addition :

4.1 The generation upto 31.12.2010 of CPSUs and capacity addition upto 31.01.2011 in respect of NTPC Ltd. and NHPC Ltd. are as under:-

Sl.N.	CPSU	Generation upto 31.12.2010	Capacity addition upto 31.01.2011
1.	NTPC Ltd.	162624 MUs	1490 MW
2.	NHPC Ltd.	15941 MUs	120 MW
3.	NEEPCO	4073 MUs	
4.	SJVN Ltd.	6402.50 MUs	
5.	THDC India Ltd.	2486 MUs	

4.2 XI-Plan Targets and Achievements

Sector –Wise Details

Type	Mid-term appraisal target	Commissioned (Upto 31.1.2011) (MW)	Under construction
Central	21,222	8,750	12,472
State	21,355	12,721	8,655
Private	19,797	11,041	9,253
Total	**62,374**	**32,512***	**30,380**

* This includes a capacity of 518 MW commissioned from additional projects

The progress of work/outcome upto December, 2010 vis-à-vis outlay for 2010-11 in respect of NTPC Ltd., NHPC Ltd., THDC India Limited, SJVN Ltd. and NEEPCO are given at Annexure-IV, V, VI, VII, and VIII respectively.

(5) Transmission

POWERGRID, during FY 2010-11 (upto December 31, 2010), has commissioned/completed about 3607 circuit Km. against the target of 6820 ckm of transmission line and about 2775 MVA against the target of 5010 MVA of transformation capacity addition are as under:-

S.N.	CPSU		Targets for 2010-11	Achievements upto 31.12.2010
1.	PGCIL	Capacity addition	5010	2775
		Transformation Erection (Nos.)	10	11
		Ckm commissioning	6820	3607

The details are at Annexure-IX.

(6) Energy Conservation & Energy Efficiency

The details of the scheme (Energy Conservation, Awareness, Awards & Painting Competition Scheme) achievements etc. including NMEEE are at Annexure-X.

National Mission for Enhanced Energy Efficiency (NMEEE): To enhance energy efficiency, four new initiatives have been introduced in the NMEEE. These are: (i) a market based mechanism to enhance cost effectiveness of improvements in energy efficiency in energy-intensive large industries and facilities, through certification of energy savings that could be traded; (ii) accelerating the shift to energy efficient appliances in designated sectors through innovative measures to make the products more affordable; (iii) creation of mechanisms that would help finance demand side management programmes in all sectors by capturing future energy savings; (iv) developing fiscal instruments to promote energy efficiency

The implementation of few initiatives of the NMEEE is as under:-

i) Perform Achieve and Trade (PAT):

(a) Amendments to EC Act, 2001 have been passed by Parliament; and enacted on 24.08.2010.

(b) Ministry of Power has already issued regulations notifying 9 sectors as Designated Consumers who will be covered under the PAT scheme. Baseline specific energy consumption audits have been completed in each of the designated consumers.

(c) Methodology for target setting: Draft methodology has been prepared by Indian Institute of Science, Bangalore and CSTEP, Bangalore. The first draft of specific energy consumption targets for 8 sectors (except Railways) would be completed by 15.3.2011.

(d) Setting up of Trading Infrastructure: The work has been assigned to the two Power Exchanges to set up the trading infrastructure.

(e) Energy Audits of Industry: Detailed audits of all identified Designated Consumers are being carried out in year 2010-11 and 2011-12 through EESL.

ii) Market Transformation of Energy Efficiency (MTEE):

(a) Lighting CDM Project - the Programme of Activity (PoA) has been registered by UNFCCC in June, 2010. 23 projects have been prepared under the PoA, and another 50 under preparation. Project implementation has been completed in the entire state of Kerala. A total of about 16 million CFLs have already been distributed under the BLY.

(b) Development of Super Efficient Equipment Programme (SEEP) Policy Framework: Draft SEEP policy framework has been prepared by BEE and has been discussed with NMCC as well as the Forum of Regulators (FOR), both of who have given in principle consent. The goal of SEEP is not only to reduce cost of energy efficient equipments to stimulate accelerated market transformation but also to encourage domestic manufacturing to sustain the market. NMCC has already endorsed the recommendations in the meeting held on 19.5.2010 for LEDs, and FOR has given in-principle approval in its meeting held on 18.6.2010.

iii) Energy Efficiency Financing Platform (EEFP):

MoU with M/s. PTC India Ltd, M/s. SIDBI and HSBC Bank signed by BEE. PTC India Ltd. has commenced financing of several building energy efficiency projects in Rashtrapati Bhavan Estate, ESIC Hospitals at Rohini and East Delhi, AIIMS, Safdarjung Hospital. SIDBI has taken up project preparation of energy efficiency projects in 25 SME clusters which will then be offered financing.

iv) Framework for Energy Efficient Economic Development (FEEED):

The following are the elements of FEEED as per the implementation framework along with the present status and timelines:

S.No	Fiscal Instrument	Present Status	Timelines
1	Partial Risk Guarantee Fund	Award of PRGF management to a Financial Institution.	March, 2011
2	Venture Capital Fund for Energy Efficiency	Creation of VCF Trust	March, 2011
3	Energy Efficiency in Public Procurement	COS approved the proposal in principle. Guidelines to be issued by MOF under preparation	Draft guidelines sent to Ministry of Finance for issue
4	Tax/ Duty concessions for energy efficiency	Detailed proposal submitted to Department of Revenue	To be taken up in FY 2011-12

Energy Efficiency Services Ltd. (EESL), a Joint Venture of 4 CPSUs viz. NTPC, PGCIL, REC and PFC, with an equity base of ₹ 190 crore has been incorporated to lead the market-related actions of the mission. The Board of the company with Chairman NTPC as the Chairman has been constituted. Interim CEO of EESL has been appointed by Ministry of Power.

6.2 Ministry of Power, through BEE, has initiated a number of energy efficiency initiatives through a range of measures, including the launch of Energy Conservation Building Code large, existing & new commercial buildings; the launch of Standard & Labelling scheme for appliances; the initiation of process for the development of energy consumption norms for industrial sub-sectors and an annual examination to certify energy auditors and energy managers. The Ministry has set up a targeted reduction of 5% energy consumption by the end of XI Five year Plan.

6.3 The energy conservation target planned for the XI Plan is 10,000 MW. The achievements in respect of energy saved relating to the programmes/schemes of the BEE during 2007-08, 2008-09 & 2009-10 is 4995.97 MW. BEE has achieved 2482.4 MW upto 31.12.2010 against the target of 2600 MW fixed for 2010-11.

(7) Capacity Building & Programmes Assessment:

The schemes/programmes/projects indicating the outlay for 2010-11, the quantifiable deliverable/physical outputs, the achievements for the quarter ending December, 2010 in respect of Ministry of Power Secretariat ₹1.00 crore under MoP Sectt. under Plan scheme and ₹3.75 crore under Non-Plan scheme and the Central Electricity Authority under Plan scheme ₹65.64 crore and ₹15.00 crore are indicated at **Annexure-XI** and **Annexure-XII** respectively.

Apart from these, there is a provision of ₹ 0.75 crore under Comprehensive Award Scheme **(Annexure-XIII).**

Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)
Achievements upto 31.12.2010

Annexure-I

(₹ in crore)

Sr. No.	Name of Scheme/ Programme	Objective / Outcome	Outlay 2010-11			Quantifiable Deliverables/ Physical Outputs (2010-11)	Processes/ Timelines	Projected Outcomes	Remarks/ risk Factors	Achievements for the quarter ending December, 2010
			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 Vidhyutikaran Yojana (RGGVY)	Electrifying all villages and providing access to electricity to all rural households.		₹ 5,500 crore		Electrification of 15,000 un-electrified Villages and offering electricity connections to around 46 lakhs BPL households	The target is to electrify 1.00 lakh un-electrified villages and . provide free connections to 1.75 crore rural households by March, 2012 as per revised timelines.	Will facilitate overall rural development, employment generation and poverty alleviation	Total 567(235 for X Plan and 332 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 total 573 projects to electrify 1.18 lakh un-electrified villages and to release electricity connections to 2.46 crore BPL households have been sanctioned. During 2010-11 (Up to December, 2010, 11419 un-electrified villages were electrified and electricity connections to 39,73,327 lakh BPL households were released and Rs. 3211.40 crore subsidy has been released up to December, 2010.

Annexure-II

CONSULTANCY CHARGES FOR APDRP PROJECTS
Achievements upto 31.12.2010

(₹ in crore)

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2010-11			Quantifiable deliverables/ physical outputs	Projected outcomes	Processes/ timelin ess	Remarks/ risk factors	Achievement (Up to third quarter ending December, 2010)
1	2	3	4			5	6	7	8	
			4(i)	4(ii)	4(iii)					
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources					
1.	Consultancy Charges for APDRP Projects		-	19.48 crore	-	All the schemes sanctioned under the 10th Plan APDRP have been completed/short closed as on 31.03.2009.	The 10th Plan APDRP Scheme has been completed/short closed as on 31.03.2009.			₹19,43,78,874 (Rupees Nineteen Crore Forty Three Lakh Seventy Eight Thousand and Eight Hundred Seventy Four) has been released to Advisor-cum-Consultants for the year 2010-11 vide this Ministry's sanction order No.17/1/2008-APDRP, dated 21st June,2010.

Annexure-III

RESTRUCTUIRED ACCELERATED POWER DEVELOPMENT AND REFORMS PROGRAMME (APDRP) IN XI PLAN

Achievements upto 31.12.2010

(₹ in crore)

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2010-11			Quantifiable deliverables/ physical outputs	Projected outcomes	Processes/ timeliness	Remarks/ risk factors/	Achievements till 31.12.2010
1	2	3	4			5	6	7	8	9
			4(i)	4(ii)	4(iii)					
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources					
	Accelerated Power Development and Reforms Programme (APDRP)	To reduce Aggregate Technical and Commercial (AT&C) loss of the State Power Utilities	-	3700.00 Cr. Loan-3600.00 Cr. Grant-100.00 Cr.	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 for energy accounting / auditing & IT based consumer service centers. Part-B includes regular distribution strengthening	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 progarmme, 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 required system is achieved and verified by an independent agency. Part-B includes regular distribution strengthening projects.	Implementation of the projects sanctioned under Part-A and part –B of the progarmme. 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 having AT&C loss above 30%: Reduction by	• 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	• Under Part-A of the Re-Structured APDRP 1401 projects worth of ₹ 5177 Crore, to cover almost the entire country for establishment of IT enabled Baseline System have been approved by the GOI. • Under Part-A of R-APDRP, total, 18 Nos SCADA Projects worth ₹ 471.58 Crore are approved so far. • Under Part–B, 775 projects worth ₹ 14854.43 Crore for strengthening of

					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 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		These projects on completion should benefit in AT&C loss reduction in project areas.	3% per year Utilities having AT&C loss below 30%: Reduction by 1.5% per year	as conversion of loan to grant is linked to loss reduction.	sub- transmission distribution system, against 1100 eligible towns in the country have also been sanctioned so far. • ₹ 3528.25 Crore has been released to PFC as loan till date. • ₹ 69.13 crore has been released as Grant and ₹ 1249.69 Crore has been released as loan to PFC as on 31.12.2010.

					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 30% and @ 1.5% per annum for utilities with baseline AT&C loss levels less than 30% have to be achieved.					

NTPC Limited
ACHIEVEMENTS UPTO 31.12.2010

Annexure-IV

(₹ in crore)

Sl. No	Name of Scheme / Programme/ Project	Objective Outcome	Non-Plan Budget	Plan Budget	Complementary EBR	Act Exp Upto Dec'10	Quantifiable Deliverables/Physical Milestones	Processes /Timelines	Projected Outcomes	Remarks / Ant.	Achievements wrt col (5)
1	2	3	4(i)	4(ii)	4(iii)	5	6 7		8	9	
	Ongoing Schemes										
1	Sipat-I (3x660 MW)	Additon of 1980 MW of generation Capacity			1067.60	357.62	TG Box up U#2	10/10	Additon of 1980 MW of generation Capacity	Work in progress Ant by Feb 11	
							TG on Barring Gear U#1	05/10		Completed	12/10(A)
							Rolling and Sync.U#1	07/10		Work in progress Ant by Feb 11	
							Boiler Light up U#2	11/10		Completed	12/10(A)
2	Barh - I (3X660MW)	Addition of 1980 MW of generation Capacity			732.45	524.49	DM Plant readiness	12/10	Addition of 1980 MW of generation Capacity	Work in progress Ant by 02/11	
							U# 2 TG Erection Start	01/11		Delay due to Power Machine issue Ant by 05/11	
							U# 3 TG Erection Start	07/10		Delay due to Power Machine issue Ant by 11/11	
3	Koldam HEPP (4x200 MW)	Additon of 800 MW of generation Capacity			735.57	247.82	Clay filling and other filling material for Main Dam	03/11	Additon of 800 MW of generation Capacity	Work in progress Ant 03/11	
							Concreting and completion of Power House Complex	12/10		Ant 07/12	
							Completion of Desilting Chamber including Trash rack erection	11/10		Completed	12/10(A)
4	Loharinag Pala HEPP (4x150 MW)	Additon of 600 MW of generation Capacity			345.18	14.57	Completion of 5Km HRT Excavation	06/10 *	Additon of 600 MW of generation Capacity	Work under suspension	
							Completion of Barrage foundation concreting	08/10 *			
							Power House excavation -2 lac M3	03/11 *			
							*Loharinagpala-Presently work is suspended at site w.e.f. 20/02/09. the above date are with the assumption of restart of				

							work w.e.f. end of Sept'09.				
5	Farakka III	Additon of 500MW of generation Capacity			527.48	153.54	Completion of Steam Blowing	06/10	Additon of 500MW of generation Capacity	Work in progress Ant by 02/11	
							Oil Flushing completion	05/10		Completed	09/10 (A)
							Putting TG on Barring Gear	07/10		Work in progress Ant by 02/11	
							Turbine Rolling & Synchronization	08/10		Work in progress Ant by 02/11	
6	Simhadri- II	Addition of 1000 MW of generation Capacity			1503.32	521.54	TG Box Up, U#3	07/10	Addition of 1000 MW of generation Capacity	Completed	12/10(A)
							Boiler Light Up, U#3	07/10		Completed	09/10 (A)
							Completion of Steam Blowing, U#3	09/10		Achieved in 01/11	
							Oil Flushing completion, U#3	10/10		Work in progress Ant by 02/11	
							Turbine Rolling & Synchronization, U#3	11/10		Work in progress Ant by 03/11	
7	Tapovan Vishnugad	Additon of 520 MW of generation Capacity			595.40	131.98	Completion of 5 Km HRT excavation	06/10	Additon of 520 MW of generation Capacity	Work in progress Ant by 03/11	
							Barrage Raft concreting completion	12/10		Contract terminated. New contract being awarded	
							Power House Cavern excavation	03/11		Completed	12/10(A)
8	Mauda	Additon of 1000 MW of generation Capacity			1421.54	724.79	U# 2, Commencemnt of Boiler erection	04/10	Additon of 1000 MW of generation Capacity	Completed	04/10 (A)
							U# 2, Boiler drum lifting	09/10		Completed	12/10(A)
							U# 2 Completion of TG Pedestal	01/11		Work in progress Ant by 06/11	
							U# 1, Hydro Test	02/11		Work in progress Ant by 03/11	
9	Bongaigaon	Additon of 750 MW of generation Capacity			1636.10	562.77	U# 1 TG Box Up	12/10	Additon of 750 MW of generation Capacity	Foundation work in progress Ant 11/11	
							U# 1 Boiler Light Up	12/10		Work in progress Ant 11/11	
							Completion of Steam Blowing	01/11		Work in progress Ant 02/12	
							Oil Flushing Completion	01/11		Work in progress Ant 01/12	

10	Barh II	Additon of 1320 MW of generation Capacity			1528.72	570.40	U#4, TG Deck completion	12/10	Additon of 1320 MW of generation Capacity	Completed	10/10 (A)
							Start of Condenser Erection	01/11		Completed	11/10(A)
							EOT Crane commissioning	12/10		Completed	10/10 (A)
							Start of TG Erection	03/11		Work in progress Ant 03/11	
11	Rihand III	Additon of 1000 MW of generation Capacity			964.01	670.47	U#5, Boiler Drum Lifting	06/10	Additon of 1000 MW of generation Capacity	Completed	08/10 (A)
							U#6,Commencement of Structural Steel Work	08/10		Completed	04/10 (A)
							U#6,Commencement of Boiler Erection	07/10		Completed	04/10 (A)
							U#6, Boiler Drum Lifting	12/10		Achieved in 01/11	
12	Vindhyachal IV	Additon of 500 MW of generation Capacity			962.95	621.13	U#11, Drum Lifting	06/10	Additon of 500 MW of generation Capacity	Completed	06/10 (A)
							U#11, Condenser Erection Start	11/10		Completed	09/10(A)
							U#12, Start of Boiler Erection	07/10		Completed	06/10 (A)
	Sub Total (i)				**12020.32**	**5101.12**					
ii	**New Projects**										
1	North Karanpura	Addition of 1980 MW of generation capacity			360.50	5.40	Main Plant Package Award	2010-11	Addition of 1980 MW of generation capacity	Main Plant package award is linked to settlement of Coal bearing issues	No Progress could be made due to the issue raised by MoC that plant location is on Coal bearing land . Matter discussed in meeting of MoP with MoS (Coal), (Independent Charge) on 11/2/10, 5th & 6th August '10 and on 19/1/2011; but yet to be resolved. To be discussed again on 10/2/2011.
2	Darlipalli	Additon of 3200 MW of generation Capacity			469.00	0.00	Main Plant Package Award	2010-11	Additon of 3200 MW of generation Capacity		GOI approval for Bulk tendering for 800 MW Units received on 10/1/11.NIT for Main Plant scheduled in February, 2011 and Award

											scheduled in November, 2011.
3	Solapur	Additon of 1320 MW of generation Capacity			339.00	64.15	Main Plant Package Award	2010-11	Additon of 1320 MW of generation Capacity		NIT issued in 10/09. However retendering had to be done for SG pkg. (Fresh NIT issued on 23.06.10, OBD held on 25.08.10. Price bids invited. Matter presently subjudice). LOI for Turbine Generator placed on 25.1.2011. Steam Generator award expected in 2010-11.
4	Rupsiabagar Ksiabara	Additon of 261 MW of generation Capacity			178.91	4.97	Main Plant Package Award	2010-11	Additon of 261 MW of generation Capacity		Progress held up as approval of forest clearance proposal not accorded by FAC, MOEF. Being pursued with MOEF. Further progress dependent upon forest clearance
5	Kawas II	Additon of 1300 MW of generation Capacity			400.00	0.00	Commencement of Civil Works for GT foundation	10/10	Additon of 1300 MW of generation Capacity	These milestones are linked to issue of Main Plant LOA in 2009-10, which is linked to allocation of gas by Dec'09	These milestones were linked to Main Plant Award in 2009-10 after receiving allocation of gas. Allocation of Gas still awaited.
							Commencement of Foundation for HRSG	12/10			
6	Gandhar II	Additon of 1300 MW of generation Capacity			400.00	0.00	Commencement of Civil Works for GT foundation	10/10	Additon of 1300 MW of generation Capacity	These milestones are linked to issue of Main Plant LOA in 2009-10, which is linked to allocation of gas by Dec'09	These milestones were linked to Main Plant Award in 2009-10 after receiving allocation of gas. Allocation of Gas still awaited.
							Commencement of Foundation for HRSG	12/10			

7	Mauda II	Additon of 1320 MW of generation Capacity			361.00	1.51	Main Plant Package Award	2010-11	Additon of 1320 MW of generation Capacity		NIT issued in 10/09. However retendering had to be done for SG pkg. (Fresh NIT issued on 23.06.10, OBD held on 25.08.10. Price bids invited. Matter presently subjudice). LOI for Turbine Generator placed on 25.1.2011. Steam Generator award expected in 2010-11.
8	Vindhyachal V	Additon of 500 MW of generation Capacity			145.90	0.00	Main Plant Package Award	2010-11	Additon of 500 MW of generation Capacity		In view of plant location (Singrauli) identified as critically polluted area by MOEF(moratorium extended till Mar.'11). LOA likely to take place in 2011-12, after MoEF clearance.
9	Kudgi	Additon of 2400 MW of generation Capacity			702.00	0.02	Main Plant Package Award	2010-11	Additon of 2400 MW of generation Capacity		GOI approval for Bulk tendering for 800 MW Units received on 10/1/11. NIT for Main Plant scheduled in February, 2011 and Award scheduled in November, 2011.
10	Lara	Additon of 1600 MW of generation Capacity			519.00	8.61	Main Plant Package Award	2010-11	Additon of 1600 MW of generation Capacity		GOI approval for Bulk tendering for 800 MW Units received on 10/1/11.NIT for Main Plant scheduled in February, 2011 and Award scheduled in November, 2011.
11	Singrauli III	Additon of 500 MW of generation			160.00	0.00	Commencement of Civil Works	12/10	Additon of 500 MW of generation	These milestones are linked to issue of Main Plant LOA	These milestones were linked to issue of Main Plant LOA in 2009-10.
							Commencement of Structural	03/11			

		Capacity					Steel Works		Capacity	in 2009-10	Singrauli area notified as critically polluted area by MoEF(moratorium extended till Mar.'11). Schedule for LOA and milestones activi-ties can be finalised only after moratorium is revoked by MOEF.
							Handing Over of Fronts for Boiler Erection	03/11			
12	Renewable Energy Schemes	Additon of 100 MW of generation Capacity			350.00	0.00	Land acquisition and transfer of lease, etc	09/10	Additon of 100 MW of generation Capacity		As prospective parties did not comply with qualifying requirements retendering of 100 MW wind project had to be done.Retendering done, bids received for 75 MW. LOA for 39 MW anticipated in 2010-11after sgining of PPA with Beneficiaries.
							Completion of Civil & Infra-structural Works	12/10			
							Erection of Towers	02/11			
13	Renewable Energy Schemes	Additon of 500 MW of generation Capacity			130.00	0.00	Main Plant Package Award for Phase-I (100 MW)	2010-11	Additon of 500 MW of generation Capacity		FR approved . Forest land involved. Award now likely in 2011-12 after forest clearance
14	Other New Projects				310.52	1.74					
	Sub Total (ii)				**4825.83**	**86.40**					
iii	Coal Mining				296.46	183.93					
iv	Renovation & Modernization Schemes				365.14	29.95					
v	Other Misc. Schemes				4842.25	1439.16					
	Sub Total (iii+iv+v)				**5503.85**	**1653.04**					
	GRAND TOTAL				**22350.00**	**6840.56**					

NHPC Limited
ACHIEVEMENTS UPTO 31.12.2010

Annexure-V

(₹ in crore)

1	2	3	4		5		6	7	8	Achievement up to 3rd Qtr.	
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Annual Plan 2010-11 Proposed		Quantifiable deliverables / Physical Output	Targets	Projected Outcomes	Process/ Timelines	Remarks/ Risk factors	Physical (unit) / Financial (Rs. Crore)	Remark
			Sub Debt	IEBR	Physical Activity						
A	**Commissioned Schemes**										
1	Dhauliganga-I	Addition of 280 MW capacity		8	Settlement of pending liabilities / residual works.	-	Completed in Oct/Nov,2005	Mar.'11	-	5.94	-
2	Dulhasti	Addition of 390 MW capacity		56	Settlement of pending liabilities / residual works.	-	Completed in March 2007	Mar.'11	-	0.37	-
3	Teesta-V HE Project	Addition of 510 MW capacity		10	Settlement of pending liabilities / residual works.	-	Completed in March 2008	Mar.'11	-	-	-
4	Sewa-II	Addition of 120 MW capacity		46						41.7	Project already commissioned in Jul'10
B	**Scheme Under Construction**										
1	Uri-II HE	Addition of 240 MW capacity		351	Completion of Overt Lining of TRT	2740 m	Anticipated project completion date Feb,11	Oct'10	Now anticipated project completion date Nov,11	2153 m	Presently Overt lining is being done in riverine portion. 291 m remain balance. This activity is now scheduled for completion in March'11.
					Completion of Concreting in Power House	5054 cum		Sept'10		4689 cum	Concreting of Generator barrel of Unit-4 is in progress. 365 Cum remain balance. This activity is now scheduled for completion in Jan'11.
					Completion of Transformer Bay	612 cum		Aug'10		1857 Cum	This activity is now scheduled for completion in Jan'11.
					Completion of Concrete lining in Surge Shaft	78 m		Sept'10		23.13 m	Start of lining of Surge shaft was delayed due to poor geology which necessitated additional support system during excavation. To expedite the lining works, slip form shutter has been erected and this activity started w.e.f. 24.11.2010. This activity is now scheduled for completion in April'11.
					Lowering of Stator of Unit – II	100%		Oct'10		100%	Lowered on 12.11.2010.
					Completion of Unit – I	100%		Feb'11		98%	Boxing up is in progress

					Erection of Spillway Radial Gates	100%		Sept'10		12%	Start of erection of 2nd stage embedded parts and other HM components were delayed due to flood in May'10 and recent spurt in civil disturbances in the Valley since Jun'10. However after diversion of river flow through DT the HM work of radial gates have commenced from Nov'10. This activity is now scheduled for completion in June'11.
					Erection of Pressure Shaft Liner	100%		Oct'10		20%	Slow progress due to recent spurt in civil disturbances in Kashmir valley since Jun'2010.
2	Chamera-III	Addition of 231 MW capacity		284	Completion of HRT Overt Concrete lining	3573 m	Anticipated project completion date Dec,10	May'10	Now anticipated project completion for first unit in Aug 11.	4350 m	Completed in Oct.'10 except the 65 m balance which will be ocmpleted with Adit plugging.
					Completion of concreting in Desilting Chambers	740 cum		Jul'10		10432 cum	Presently, concreting in Trench of DC-II completed & Trench of DC-1 and Hopper of DC-I & DC-II is in progress and expected to be completed in Jan.'11..
					Completion of Dam concreing including deck slab	30000 cum		Aug'10		37933 cum	Main Dam concreting including Deck slab competed. Presently, secondery and miscellenious concreting is in progress.
					Lining of Surge Shaft	104 m		Jul'10		103 m	Completed in Dec.'10.
					Completion of Balij Nallah Works	50%		Dec'10		35%	10 out of 15 Nos. Saddle supports installed & steel liner is being erected from Adit-IV side.
					Erection & Commissioning of Radial Gates	100%		Jan'11		15%	Erection of Radial gates in progress and all trunions have been erected and their concreting in progress except one trunion in Bay-3. Progress of this work need to be expedited.
3	Nimoo Bazgo	Addition of 45 MW capacity	66	167	Spiral case erection of Unit-3	100%	Anticipated project completion date Dec,10	May'10	Now anticipated project completion for Sep, 11.		Compl. In Apr'10
					Completion of plunge Pool concreting	11000 cum		Jun'10		12828cum	
					Completion of concreting in Spillway blocks upto EL 3094 M	12000 cum		Jul'10			Completed in Jun'10
					Completion of roof over Power house	100%		Aug'10			work is yet to start and expected by May,11
					Erection of draft tube gates	100%		Aug'10			work is yet to start and expected by Apr'11
					Erection of Intake gates	100%		Sept'10			work is yet to start and expected by

											May'11
					Completion of 2nd stage River diversion	100%		Oct'10			work is yet to start and expected by Mar,11
4	Chutak	Addition of 44 MW capacity	349	22	Barrage concreting upto top	16000 cum	Anticipated project completion date Feb,11	Oct'10	Now anticipated project completion for Aug, 11.	Completed	Concreting of piers and breast wall completed upto top
					Concreting in Power House	6000 cum		Sept'10		3233cum	work started and expected by Feb,11
					Completion of RCC lining of Surge shaft	43 m		Sept'10			Compl. In Sept'10
					Completion of HRT Overt lining	1890 m		Oct'10			Compl. In Sept'10
					Erection, testing and commissioning of Radial gates	100%		Nov'10		85%	work completed and expected by Mar,11
5	TLDP-III	Addition of 132 MW capacity		274	Erection, testing and commissioning of Radial gate in Bay no.III	100%	Anticipated project completion date Feb,11	Aug.2010	Now anticipated project completion date Dec,11	0%	(i) All construction activities were stopped due to indefinite strike called by GJMM w.e.f 10.05.10 to 19.07.10. (ii) High discharge on 21.07.2010 inundated barrage bays S1 & S2. (iii) Restoration work started in Oct,10 and Concreting in S-I & II and in left bank retaining wall area restarted in Nov,10.
					Concreting of Barrage in Bays I&II including bridge concreting	37160 Cum		Sep.2010		29365cum	
					Erection, testing and commissioning of Radial gate in Bay no.I & II	100%		Dec.2010		0%	
					Erection, testing and commissioning of Spillway stoplog in Bay no.I & II	100%		Sep.2010		0%	
					Concreting of L/B Guide/ Retaining wall	17900 Cum		Dec.2010		12485 cum	
					Commissioning of one unit	100%		Jan.2011		0%	
6	TLDP-IV	Addition of 160 MW capacity		371	Initial Filling for construction of coffer dam 116730 cum and 2nd stage diversion	100%	Anticipated project completion date Aug,11	Nov. 2010	Now anticipated project completion date Aug,12	-	All construction activities were stopped due to indefinite strike called by GJMM w.e.f 10.05.10 to 19.07.10 & its cascading effect.
					Erection of Spiral Case in all units	77%		Aug. 2010		9.00%	
					Erection of all Radial Gates in Spillway	18.50%		Nov. 2009		18%	
					Concreting of generator barrels in all units	13250 Cum		Dec. 2010		-	
					Concreting in RCC Dam	160000 Cum		Mar. 2011		-	
					Concreting in PH	37087 Cum		Dec. 2010		17022 Cum	

7	Parbati-II	Addition of 800 MW capacity		472	Dam and Intake Concreting (cum)	41500	Anticipated project completion date Mar,13	Mar.'11	Now anticipated project completion date July,14	22790 cum	Progress suffered as access road were damged due to flood in Jigrai Nallah.
					HRT Excavation Face-3 (m)	134		Jun.'10		101 m	Completed.
					HRT Excavation Face-4 by TBM (m)	1500		Mar'11		58 m	Excavation of TBM face resumed on 23.06.2010 after treatment of face ahead of face and required modification of TBM. Progress is slow as shear zone has been re-encountered and its treatment is in progress
					HRT Overt Lining Face-1 (m)	1800		Mar'11		480 m	Progress suffered as access road were damged due to flood in Jigrai Nallah
					HRT Overt Lining Face-2 (m)	1422		Feb.'11		36 m	work stopped due to resource crunch of the contractor(M/s HJV)
					HRT Overt Lining Face-8 (m)	1200		Nov.'10		790 m	Presently work is stopped due to damaged road and land slide because of heavy rainfall. Restoration work is in progress.
					Ferrule Erection of left Inclined Pressure Shaft (m)	480		Mar'11		458 m	
					Power House concreting (cum)	6000		Mar'11		11151 m	Power house concreting resumed from June,10.
8	Parbati-III	Addition of 520 MW capacity		426	Completion of rockfilling in Dam up to Top level (cum)	123000	Anticipated project completion date Jun,11	Jan'11	Now anticipated project completion date Dec,11	56300cum	Progress suffered due to monsoon effects.
					HRT Overt Lining Face-2 (m)	1978		Dec.'10		491 m	Earlier progress of excavatiuon suffered due to poor geological conditions. As per revised schedule work is to be completed by Aug'11.
					HRT Overt Lining Face-3 (m)	1986		Dec'10		-	
					HRT Overt Lining Face-4 (m)	1800		Oct.'10		912 m	As per revised schedule work is to be completed by July'11.
					HRT Overt Lining Face-5 (m)	1600		Sep.'10		876 m	Progress suffered due to heavy ingress of water from HRT Face-4 side. As per revised schedule work is to be completed by May'11.
					Compl. Of Conc. Lining & erection of Vertical Pr. Shaft I&II (m)	580		Mar.'11		45 m	Work on Vertical Pressure Shaft-1 has been resumed. Work in Vertical Pressure shaft 2 is scheduled to start from Mar'11.
					Compl. Of Concreting up to generator barrel EL 974 - Unit-I & II (100%)	100%		Oct.'10		79%	Progress suffered due to delay in redeployment of erection contractor by M/s BHEL.
9	Subansiri Lower	Addition of 2000 MW capacity		1245	Dam concreting	7,50,000 cum	Anticipated Project Completion Dec,12.	Mar'11	Now anticipated project completion date Aug,14	76,147 cum	Coffer dams breached on 12.05.2010. Concreting resumed on 3rd week of Dec-10.
					Intake concreting	95,000 cum		Mar'11		81,481 cum	Work is in progress.

					Head Race Tunnel - Heading Excavation	1,950 m		Mar'11		1560 m	---- do ----
					Head Race Tunnel - Concrete Lining (Overt)	2,650 m		Mar'11		1067 m	---- do ----
					Surge Tunnel - Heading Excavation	1,650 m		Mar'11		716 m	---- do ----
					Completion of 2nd Stage Concreting in Unit-1 & 2 of Power House upto EL 93 M	9,000 cum		Mar'11		4000 cum	---- do ----
					Erection of Pit liner & Stay rings of Unit-1 & 2	100%		Mar'11		---	Activity delayed due to delay in erection of crane beam in U-1 & 2.
10	Kishanganga	Addition of 330 MW capacity	366	45	Completion of excavation (500 m) of Adit – I to HRT		Anticipated project completion date Jan,16.	Jun'10	-	Completed	Excavation of Adit 1 stands completed in April'2010.
					Diversion Tunnel Concrete Lining	400 m		March'11			Excavation completed in Nov,10. Arrangemant for erection of shutters for concreting is in progress.
					Excavation of MAT up to Power House Crown	500 m		Feb'11		84 m	Slow progress due to poor geology and recent spurt in civil disturbances in Kashmir valley since Jun'2010.
					Completion of Adit to TBM	150 m		Jun'10		138 m	Due to poor geology, advancement is being done with the help of steel ribs support system. This has affected the rate of progress of Adit Excavation. Further slow progress due to recent spurt in civil disturbances in Kashmir valley since Jun'2010.
					HRT Excavation by DBM method	2700 m		March'11		1746 m	Excavation in Face -1 completed. Excavation in Face-2, 3 & 4 is in progress.
C.	**New Schemes**										
1	Kotli Bhel Stage-1A	Addition of 195 MW capacity		42	DT Open Excavation (cum)	22500		Sep.'10	All activities subject to CCEA clearance of Project by Mar.'10. Work Plan will be revised after approval and enhancement of Budget	7.62	Forest clearance yet to award.Environment clearance accorded to KB-IB project has been quashed by National Environment Appellate Authority (NEAA) vide their order dated September,15,2010. NHPC has filed a civil Appeal before Hon'ble Supreme Court on 22.11.10. Meanwhile Ministry of Environment & forest has withdrawn environmental clearance issued to project vide letter no. J-12011/21/2007-IA.I, dated 22.11.2010. MOEF vide letter dated 16th
					Dam Spillway & Cofer Dam-Surface Excavation (cum)	407615		Mar.'11			
2	Kotli Bhel Stage-I B	Addition of 320 MW capacity		42	D.T. Excavation (cum)	69990		Mar.'11		3.45	
					Power House Excavation & Backhill (Cum)	581500		Mar.'11			
3	Kotli Bhel Stage-II	Addition of 530 MW capacity		42	D.T. Surface Excavation (cum)	55500		Nov.'10		8.43	
					D.T. Underground Excavation (Cum)	37275		Mar.'11			
					MAT to Power House, Approach Gallery, Constn. Adits to PH & Surge Chamber						

					Top i/c Portals & Plugs				allocation.		November 2010 has requested NHPC to deposit ` 5,26,316/-, ` 10,10,562 /- and `13,39,059 /- for KB-IA KB-IB and KB-II projects respectively at WII, Dehradun for the study on cumulative environment impact of various Hydro Projects.
					(1) Surface Ex. At Portals 9cum)	12750		Mar.'11			
					(2) Underground Ex. (cum)	29312		Mar.'11			
					(3) Road Network (km)	5		Mar.'11			
3	Dibang	Addition of 3000 MW capacity		69	Construction of New road double lane between Dam to DT outlet at right bank	5Km		Mar.'11	-	9.5	Environment & Forest Clarance are being pursued and as such the project could not be poised before CCEA for Govt. sanction.
					Construction of New road from Dam site to Dambuk on right bank	5		Mar.'11			
					Construction of Pathan Camp colony road	5		Mar.'11			
					Construction of New double lane road from + 19 Km point to confluence of Dibang & Ashu pani	5		Mar.'11			
					Provision kept for land acquisition, maintenance of G&D site & Establishment expenses etc.	100%		Mar.'11			
D.	**S&I and Other Schemes**										
1	Vyasi	Addition of 120 MW capacity		--						0.02	Projcted handed over to State Govt.
2	Teesta-IV	Addition of 520 MW capacity		42	Approach Road to Dam site & Power House site	100%		Mar.'11		5.88	Project is under clearance/sanction. Draft EIA/EMP reports submitted to SPCB for conductance of Public herring
					Provision kept for land acquisition, maintenance of G&D site & Establishment expenses etc.	100%					
3	Bursar	Addition of 1020 MW capacity		21	Provision kept for balance investigation works, establishment Expenses, ancillary works and R&M works.					7.45	
4	Tawnag- I	Addition of 600 MW capacity		7	Post DPR drilling/drifting works Establishment & Preliminary works					11.79	Revised DPR submitted on 4.6.10. Concurrence awaited.
5	Tawnag-II	Addition of 800 MW capacity		8	Post DPR drilling/drifting works Establishment & Preliminary works						Revised DPR submitted on 21.5.10. Concurrence awaited.

6	Subansiri(Middle)	Addition of 1600 MW capacity		1	Establishment & Preliminary works					0.03	Project being handed over to M/s. JPL.
7	Subansiri (Upper)	Addition of 2000 MW capacity		1	Establishment & Preliminary works					0.09	Govt. of AP allotted the project to IPP. MOP decision is awaited.
E.	**Other Projects / New Schemes ***	Preparation of FR / DPR of new projects		10							
F.	**Schemes under Joint Venture**										
1	Loktak Downstream	Addition of 66 MW capacity		5	Establishment & Preliminary works						JVC has been formed. EIA/EMP studies finalized except for R&R plan.
2	Pakal Dul	Addition of 1000 MW capacity		31	Provision kept for land acquisition, maintenance of G&D sites, minor infrastructures and establishment expenses only.					3.48	Pomoters agrement among the parties of JVC has been signed on 21.12.2010
G	R&M of Power Houses	Rennovation of Loktak PS (105 MW)		5							
H	R&D Works			5							
	Total		**781**	**4108**							
	Total		**4889**								

THDC Limited
ACHIEVEMENTS UPTO 31.12.2010

Annexure-VI

(₹ in crore)

S. No.	Name of Schemes/ Programme	Objective/ Outcome	Outlay 2010-11 (₹ in crore)			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Projected outcomes	Remarks / risk factor	Achievement in Qtr. ending Dec'10
			Non-Plan Budget	Plan Budget	Complementa-ry Extra-Budgetary Resources					
1	2	3	4(i) 4	(ii)	4(iii)	5	6		7	8
1	**Koteshwar HEP (400 MW)**	Hydro Power Generation	0.00	0.00	580.35	i) Raising of all Dam blocks up to full height i.e. El.618.50M	July'10	-		Achieved in June'2010
						ii) Rising of stilling basin R/D, training wall up to full height i.e. EL 555.00 m	July'10	-		Achieved
						iii) Concreting around spiral casing up of Generator Barel - all found units	Jan'11	Expected in Jun'11		
						iv) Concreting of Power House Machine hall area (between B&D line) upto EL 570.00 m	Aug'10	-		Achieved in July'10
						iii) Erection and testing of Hydraulic Hoist of intake service gate	Oct'10	Achieved in Jan'11	Some target are shifted. This was due to flooding of Power House consequent to unprecedented rains in Sep'1o.	
						iv) Erection and testing of spill way radial gates	Oct'10	Achieved in Jan'11		
						v) Extension of EOT crane upto unit-4	July'10	-		Achieved
						vi) Completion of Gude Apparatus, turbine assembly unit-3	Jan'11	Expected in Jul'11		
						vii) Stator assemble, lowering and pit levelling and centring unit-2	Nov'10	-		Achieved in Aug'10
						viii) Rotar assemble and installation in pit for unit-2	Nov'10	Achieved on 13-02-11		
						ix) Boxing of Unit-1	Oct'10	-		Achieved in July'10
						x) Boxing of Unit-2	Feb'11	Expected in Jul'11		
						xi) Spining and trial run of Unit-1	Nov'10	Achieved in Jan'11		
						xii) Synchronization and commissioning of Unit-1	Dec'10	Expected in Jul'11		
						xiii) Spining, synchronization, trial run, testing and commissioning of Unit-2	March'11	Expected in Oct'11		
2	**Tehri PSP (1000MW)**	Hydro Power Generation	0.00	0.00	115.35	i) Approach Adits (Pending payment)				Completed
						ii) Retaining wall at disposal area (Chopra village)	Dec'10	Achieved		

3	**Vishnugad Pipalkoti (444MW)**	Hydro Power Generation	0.00	126.76		i) Award of Civl Works contract	Sept'10			
						ii) Hat Bridge across river Alaknanda (Approach to power house) & Dam site Bailey Bridge	Oct'10	Expected in May'11(Haat)		Dam site Bailey Bridge completed. Haat bridge under advanced stage of completion
						iii) Forest Clearance for Project	Aug'10	*		In progress
						iv) Land acquisition for Project	Sept'10	*		In progress
						v) Work of field hostel, permanent office building, Guest House, Telephone exchange, bank, shops etc.		Expected in Mar'11		In progress
4	**New Projects**	Hydro Power Generation	0.00	0.00	34.37					
	i) Karmoli (140MW)					Survey & Investigation works			Subject to Wild Life clearance	
	ii) Bokang Bailing (330MW)					Survey & Investigation works	Being taken up			Drilling & Drifting permission is required from Chief Wild Life Warden (CLWL) & GoUK
	iii) Jadhganga (50MW)					Survey & Investigation works			Subject to Wild Life clearance	
	iv) Malari Jhelam (55MW)					Preperation of DPR				Under progress
	v) Jhelam Tamak (60 MW)					Preperation of DPR				Completed
						Completion of site specific design earthquake parameters study for Jhelum Tamak HEP	Jan.'10			Completed
	vi) Sankosh Multi Purose Project (4060 MW)					Updation of DPR	March'11			In Progress
	vii) Bunakha HEP (180 MW)					Updation of DPR	March'11			In Progress
	viii) Malshej Ghat PSS (600 MW)					i) Completion of site specific seismic studies ii) Completion of Shear Wave studies	i) March'10 ii) March'10			Completed for Malshej Ghat. DPR completed
	ix) Humbarli PSS (400 MW)					i) Updation of DPR				Awaiting clearance from State wild Life Board. Desk studies for updation of DPR taken up
	x) Dhukawan (24 MW)					i) Updation of DPR	June'10			Completed in June'10
	TOTAL			0.00	**856.83**					

Note:

1 Plan budget includes GBS from the Govt amounting to ₹ 0.41 Cr.

2 Complementry Extra Budgetary resources includes commercial borrowings.

** World bank has informed their willingnessfor lone negotiation pending conformtion by the MoEF, that two negotiation cndition are met

i) Clerance to divert forest land reqired by the Project.

ii) issuence of section (4) of the land acquisition act for the Private land to be requried in village Hatt Section (4).

Notification of private land in village Hatt has been issued. For forest land the issue is pending with MoEF 50% land acquisition is prerequisite for award of the contract.

SJVN Limited
ACHIEVEMENTS UPTO 31.12.2010

Annexure-VII

(₹ in crore)

Sl. No.	Name of the Scheme / Programme	Objective /Outcome	Outlay 2010-11 (Rs. In Crores)	Quantifiable Deliverables/physical outputs 2010-11	Process/ Timeliness	Projected Outcome	Remarks/ Risk	Achievement upto December 31, 2010/ Comments
1	Nathpa Jhakri Hydro Electric Project	Balance works/payments of 1500 MW Hydro Power Station (Project commissioned on May 18, 2004)	1.5	Major Civil Works (Process primarilly comprises following)				
				Balance other works	March, 2011	Settlement of pending Claims and balance payments		Generation of 6402.545MUs achieved till December 31, 2010 aginst the MOU target of 6700 Mus ,which is well in line with the set targets. Payments for balance claims are being made as and when the claims get settled.
			12.03	Electro-Mechanical Works	March, 2011			
			10.99	Infrastructural Works	March, 2011			
		Sub-Total	**24.52**					
2	Rampur Hydro Electric Project(412 MW)	Construction of RHEP	180	Major Civil Works (Process primarily comprises following)		A Total of 51 % expenditure on Rampur Hydro Electric Project against the approved cost of 2047.03 crores		
				Cumulative HRT Heading Excavation (Cum. 5 KM).	March , 2011			2956m completed. Slow progress due to poor rock conditions.
				Cumulative HRT concreting (3.7 KM).	March , 2011			2733m completed.
				Completion of widening of Surge Shaft (60 m depth).	March , 2011			Widening of surge shaft completed on 28.04.10. Widening depth was increased by 21m i.e.upto 149.50m and has been completed on 30.07.10.
				Concrete lining of surge shaft (120m)	March , 2011			Concreting in surge shaft mutlifunction is in progress.
				Machine Hall concreting (16600 cum.)	March , 2011			Concreting is under progress.
			100.00	Electro-Mechanical Packages	March , 2011			Erection of Draft tube liners and EOT cranes is in progress.
			20	Infrastructural Works (Process primarilly comprises R&R expenses and buildings)	Continuous process			Under process
			40.13	Interest During Construction	Continuous process			Continuous process
			19.78	IEDC	Continuous process			Continuous process
		Sub-Total	**359.91**					
3	Luhri Hydro Electric Project (775 MW)	Construction of LHEP	37.47	Acquisition of private and forest land	Running payments upto March, 2011	Diversion of forest land and Aquision of Private land & commencement of preconstruction activities		For diversion of forest land State Govt. has desired to include the details of land and trees for associated transmission on system accordingly by the case for acquisition of forest land and private land is being pursued with State Govt.
				Widening of roads through HPPWD and construction of approach roads and bridges	Running payments upto March, 2011			HPPWD has submitted the estimate for widening of roads to SJVN for release of advance and the same is under process.
				Expenditure towards CAT Plan.	Running payments upto March, 2011			PCCF shimla has approved the report . The report now has been sent to GOHP on 29.06.10 along with diversion of forest land case for onward transmission to MOEF, GOI.

				Residential and non-residential buildings	Running payments upto March, 2011			Shall be taken up after land acquisition.
			10.94	IEDC	Continuous process			Continuous process
		Sub-Total	**48.42**					
4	Khab Hydro Electric Project (1020 MW)	Construction of KHEP	0.00	Revised PFR and DPR preparation	Running payments upto March,2011		Subject to Clearance to go ahead with execution of project which presently has been assigned to Himachal Pradesh Power Corporation Limited. Govt. of HP has been requested to assign the project to SJVN.	The project has been withdrawn by the Government of Himachal Pradesh.However, SJVN has requested Government of Himachal Pradesh to reconsider its decision and allocate Khab HEP to SJVN.
5	Devsari Dam HEP(252 MW)	Construction of Devsari HEP	23.30	Acquisition of private and forest land	Running payments upto March, 2011	Diversion of forest land and Aquision of Private land & commencement of preconstruction activities		For acquisition of private land all the cases have been processed by Energy and Revenue department of Govt. of Uttarakhand and all the cases have been vetted by Legislative department and processed for approval of CM. Eleven cases have been approved by CM. For diversion of forest land draft revised fact sheet has been finalized with Nodal Officer.High Power Committee meeting is to b eheld on 12.01.11 at Dehradun.
				Residential and non-residential buildings	March, 2011			Shall be taken up after land acquisition.
				Arrangement of construction power, infrastructural works development such as roads and bridges etc.	March , 2011			Detailed project report has been preapred and submitted to CEA on 29.06.10. The matter for allocating construction power for DHEP is being pursued with Governemnt of Uttarakhand.Development of infrastructural works shall be taken up after land acquisition.
				IEDC	Continuous process			
		Sub-Total	**23.30**					
6	Naitwar Mori HEP (60 MW)	Construction of NMHEP	13.74	Acquisition of private and forest land	Running payments upto March, 2011	Diversion of forest land and Aquision of Private land & commencement of preconstruction activities		In progress . The matter for acquisition of Private land is being pursued with Governemnt of Uttarakhand. Regarding forest land to be diverted for project components and mining all the details classifications asked by Nodal Officer has been submitted. In this regard the High level Committee meeting is scheduled in January 2011.
				Residential and non-residential buildings	March, 2011			Shall be taken up after land acquisition.
				Major Civil Works	Running payments upto March, 2011			Shall be taken up after the award of works.
				IEDC	Continuous process			Continuous process
		Sub-Total	**13.74**					

7	Jakhol Sankari HEP (51MW)	Construction of JSHEP	5.38	Survey Investigation and DPR preparation	Running payments upto March, 2011	DPR		Topographic survey completed. Drilling work is in progress. Identification of land completed, proposal is being prepared for submission to GOUK.
				IEDC	Continuous process			Continuous process
		Sub-Total	**5.38**					
8	Arun-IIIHEP (402 MW)	Construction of Arun-III HEP	27.31	Land Acquisition	Running payments upto March, 2011	Land acquisition & development opf Roads and bridges		Identification of land for project roads for transfer of ownership has been completed.
				Development of Infrastructure mainly comprising of roads and bridges.	Continuous process			In progress. Cost estimates have been prepared.
				IEDC	Continuous process			Continuous process
		Sub-Total	**27.31**					
9	Dhaulasidh HEP (66 MW)	Construction of DSHEP	9.60	Land Acquisition	March, 2011	Diversion of forest land and Aquision of Private land & commencement of preconstruction activities		Identification of land for the projects has been completed. Revenue Papers has been prepared and submitted to GOHP.
				Development of Infrastructure mainly comprising of roads and bridges.	Running payments upto March, 2011			Land has been identified for infrastructure works.Award for the purchase of land is under process.
				IEDC	Continuous process			Continuous process
		Sub-Total	**9.60**					
10	Wangchu HEP (900 MW)	DPR preparation of Wangchu HEP	2.99	Survey Investigation and DPR preparation	Running payments upto March, 2011	DPR		80% Topographic Survey has been completed. EIA and EMP studies have been awarded to M/s WAPCOS on 31.08.10.Inception report has been received. Drilling and Drifting works have been awarded.
				IEDC	Continuous process			Continuous process
		Sub Total	**2.99**					
11	Kholongchu HEP (484 MW)	DPR preparation of Kholongchu HEP	7.81	Survey Investigation and DPR preparation	Running payments upto March, 2011	DPR		Topographic Survey completed Geological explorations of the project area is in progress. EIA & EMP studies are in progress. Hydro Meteorological observations are being made regularly.
				IEDC	Continuous process			Continuous process
		Sub-Total	**7.81**					
Grand Total of SJVN			**525.17**					

An expenditure of ₹ 422.53 Crores has been incurred till December, 2010 against Total Budget Estimate of ₹525.17 Crores for 2010-11.

North Eastern Electric Power Corporation (NEEPCO)

ACHIEVEMENTS UPTO 31.12.2010

Annexure-VIII

(₹ in crores)

Sl. No.	Name of the Scheme / Programmes	Objective / Outcome	Outlay 2010-11			Quantifiable Deliverable / Physical Outputs	Projected Out-comes	Process / Timelines	Remarks / Risk Factors	Achievements W.e.f April' 10 toi Dec' 10 (For the year 2010-11)
			Non Plan Budget	Plan Budge	Complementary Extra Budgetary Resources					
1	2	3	4			5	6	7	8	9
			4(i)	4(ii)	4(iii)					
1	Kameng HEP (600 MW), A.P.	Generation of Hydro Power	0.00	0.00	400.00	Completion of Diversion Tunnel Boring	Completion of Di-version Tunnel Boring	Aug-10	Cumulative progress upto Dec'10 is 348 Rm (heading) out of 350 Rm. Benching com-pleted 61 Rm upto Dec'10.	308.25 Rm
						Completion of Bichom Dam Excavation (Cumulative- 100%)	Completion of Bichom Dam exca-vation	Mar -11	Cumulative progress upto Dec'10 is 514133 Cum out of 611546 Cum.	95069 Cum
						Bichom Dam Concreting (Cumulative - 90,000 cum)	Completion of Bichom Dam con-creting	Mar -11	Cumulative progress upto Dec'10 is 6803.18 Cum out of 357490 Cum.	2621.18 Cum
						Tenga Dam Excavation (Cumulative - 90% completion)	Completion of Tenga Dam excava-tion	Mar -11	Cumulative progress upto Dec'10 is 90980 Cum out of 147075 Cum.	10730 Cum
						Tenga Dam Concreting (15 000 cum)	Completion of Tenga Dam concret-ing	Mar -11		2755.00 Cum
						HRT Boring:				
						HRT Face-II Boring (1000 m)	Completion of WCS	Mar -11		175.65 Rm
						HRT Face - III Boring (1000 m)	Completion of WCS	Mar -11		183.39 Rm
						HRT Face –VI Boring (1041 m)	Completion of WCS	Feb-11		546.00 Rm

						HRT Face-VII Boring (189 m)	Completion of WCS	Aug-10	Boring of Face-VII Completed on 27.05.2010.	83.00 Rm
						Lining concreting of Face-I (150 Rm)	Completion of Lining concreting	Mar -11	Work yet to be started	---
						Kerb Concreting F-VII (100% completion)	Completion of Kerb concreting	Sept-10	Work yet to be started	---
						Invert concreting of Face-VII (500m)	Completion of Invert concreting	Mar-11	Work yet to be started	---
						Kerb Concreting of F-VIII (100% completion)	Completion of Kerb concreting	Mar-11	Work yet to be started	---
						Completion of Concrete Lining of Surge Shaft (Cumulative-100%)	Completion of Surge Shaft Lining Con-creting	May -10	Cumulative progress upto Dec'10 is 40.95 Rm out of 70. 00Rm.	11.75 Rm
						High Pressure Tunnel:				
						Fabrication of steel Liner of HPT (3000 MT)	Completion of Steel Liner of HPT	Mar-11		1241.85 MT
						Completion of Fabrication of Gates of HPT (100% completion)	Completion of Fab-rication of Gates of HPT	Mar-11		35%
						Completion of erection of steel liner from Surge Shaft to BP-II (100% completion)	Completion of erec-tion of steel liner from SS to BP-II	Mar-11	Work yet to be started	---
						Completion of erection of steel liner from Face-IX to BP-II (100% Completion)	Completion of erec-tion of steel liner from Face-IX to BP-II	Mar-11		718.06 MT
						Boring of High Pressure Tunnel (Cumulative for the year 500 m)	Completion of bor-ing of HPT	Mar-11		191.25 Rm
						Boring of Vertical Shaft (180 m)	Completion of bor-ing of vertical shaft	Dec-10		117.10 Rm
						Surface Penstock:				

						Completion of Excavation of Surface Penstock (100% completion)	Completion of excavation of surface penstock	Dec-10	Cumulative progress up to Dec, 2010 is 125333 Cum out of 407504 Cum. Total qty. of open excavation i/c open excavation for valve house, vertical shafts qty is 581075 and achieved upto Dec' 10 is 331383 cum.	---
						Construction of Pedestal (Cumulative-50% completion)	Completion of Pedestal	Mar-11		---
						Erection of Steel Liner (40% completion)	Completion of erection of steel liner	Mar-11		---
						Power House:				
						Completion of Pit Excavation (Unit-II, III, IV)	Completion of Power House excavation	Mar-11	Cumulative progress of Power House Pit Excavation up to Dec, 2010 is 1054890 Cum out of 1214865 Cum.	5908 Cum
						Concreting of Power House (10000 cum)	Completion of Power House Concreting	Mar-11	Cumulative progress of Power House concreting up to Dec, 2010 is 19411.11Cum out of 75600 Cum.	10182 Cum
2	Pare H.E. Project (110 MW), AP.	Generation of Hydro Power	0.00	45.00	85.00	**Diversion Tunnel:**				
						Completion of Diversion Tunnel U/G Excavation (270m)	Completion of Diversion Tunnel Boring	Dec-10	Diversion Tunnel open excavation started w.e.f 27.11.09 and completed in Nov'10.	24.00 Cum
						Diversion Tunnel Inlet & Outlet Concreting (2 Nos)	Completion of Diversion Tunnel Inlet & Outlet Concreting	Feb-11		---
						Cofferdam:				
						Completion of construction of U/S and D/S Cofferdams (100% completion)	Completion of Cofferdams	Mar-11	---	
						Dam:				
						Excavation of Dam (Right Bank) EL 248 downwards (24325 cum)	Completion of Excavation of Dam	Feb-11	---	
						Excavation of Dam (Left Bank) EL 248 downwards (21520 cum)	Completion of Excavation of Dam	Mar-11	---	
						HRT Boring:				

						Boring of HRT Face-I (Cumulative 300 m)	Completion of WCS	Mar-11	Boring of Face- I started w.e.f 26.08.2010	83.00
						Boring of HRT Face-II (Cumulative 500 m)	Completion of WCS	Mar-11	Boring of Face- II started w.e.f 26.08.2010	102.00
						Boring of HRT Face-III (Cumulative 500 m)	Completion of WCS	Mar-11	HRT boring of Face-III will be started on completion of HPT portion of Face-III, 45 Rm.	0.00 Rm
						Intake Area:				
						Excavation of Intake Area & Slope Stabilisation (50% Completion)	Completion of Intake Structure	Mar-11		---
						Surge Shaft:				
						Completion of Open Excavation of Surge Shaft (Cumulative 15000 cum)	Completion of open excavation of Surge Shaft	May-10	Open excavation of Surge Shaft total Qty. 83333 Cum completed on 11.11.2010.	49087 Cum
						Boring of Surge Shaft (Cumulative 30 m of depth)	Completion of Surge Shaft	Mar-11		---
						High Pressure Tunnel:				
						Boring of Pressure Shaft (50% completion)	Completion of pressure shaft	Dec-10	Total Qty. of boring is 181.00 Rm. Target Qty. of boring during the Year 2010-11 is (181x50%) = 90.50 Rm. Boring of Face- III started w.e.f 04.09.2010.	56.50 Rm
						Power House:				
						Completion of Excavation & Slope stabilisation of Power House	Completion of Excavation & Slope Stabilisation	Sept-10	Cumulative progress up to Dec, 2010 is 86379 Cum out of 110000 Cum.	86379 Cum
						Service Bay Column Concreting upto EOT (60% Completion)	Completion of Column Concreting	Jan-11	---	
						Award of EPC contract for Package-IV (For Transformer & Switch Yard)	Award of Package-IV	Aug-10	Techno commercial bid opened on 11.06.2010 and the evaluation report has been prepared and concurrence of SNC-Lavalin obtained, concurrence of KfW is awaited.	---
3	Tripura Gas Based Power Project (100 MW nominal ± 20%)	Generation of Thermal Power	0.00	0.00	130.00	Award of Make-up water system of Tripura Gas Based Power Project	Award of Make-up water system	Sept-10	Tender process is being initiated. Single stage double envelops bids for the works received and opened on 30.09.2010. Techno-commercial bids evaluation is under process.	---

						Completion of Design & Engineering works EPC Contract (50% completion)	To start execution of the project	Mar-11	The PIB in its meeting dated 12.07.2010 has recommended the RCE of the project at ` 623.44 Crs including IDC at Nov' 09 Price Level. As permitted by the PIB in the above meeting the LOI for the EPC contract was issued to M/s BHEL on 23rd July'2010 LOI for Review Consultancy Services for TGBP has been issued to M/s Design Private Limited, New Delhi on 08/10/2010. Design & Engineering works commenced after issue of LOI. 1st Design Co-ordination meeting held on 13.09.2010 & 14.09.2010 respectively. CCEA clearance of the project is awaited.	
						Civil works for non-plant (20% completion)	To start execution of the project	Mar-11	Price bid in respect of 20 nos of building has already been opened. Evaluation of bid is under process. Other non plan civil works will be started in due course of time.	---
4	Tuirial HEP (60 MW), Mizoram	Generation of Hydro Power	0.00	0.00	170.00	Continuation of project activities after presumed Resumption of works by Mar -10	Resumption of project works	Mar-11	The CCEA clearance of the project was accorded on 07-07-1998 with a commissioning schedule in July' 06. After completion of about 30% of the project activities the works had totally stopped due to local unrest and subsequent increase in the project cost rendering the project economically unviable. NEEPCO put sustained efforts in close coordination with the MOP, GOI for revival of the project through various alternatives most of which eventually fructify till revival of the project. After detailed deliberations, PIB recommended Tuirial HEP (60 MW) in Mizoram on 04.06.2010 at an estimated cost of ` 913.63 Crs (including IDC of ` 36.57 Crs) at Mar'10 PL. PIB also asked NEEPCO to go ahead by negotiations with the contractor and resumption of project work subject to obtaining commitment letter from Govt. of Mizoram for maintaining law & order problem, R&R issue, crop compensation etc. and PPA from State Govt. for purchasing power from the project at tariff fixed by CERC. NEEPCO has already fulfilled these two conditions in July'2010. The recommended revised commissioning schedule of the project is three years from the date of CCEA approval. Finally, CCEA approval was accorded vide MOP's letter dated 14-01-11.	---
5	Ranganadi HEP Stage-II (130 MW), Arunachal Pradesh.	Generation of Hydro Power	0.00	0.00	1.00	Preliminary works	Preliminary works	Mar-11	Govt. of Arunachal Pradesh vide their letter dated 10-05-10 conveyed that in view of award of Panyor HEP (located just at upstream) on the same river to IPP, NEEPCO's proposed Ranganadi Stage-II HEP (130 MW) will not be technically feasible.	---

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-11	Though the project is finalised to be awarded to NEEPCO upon which MOP, GOI has also accorded approval, the MoA is yet to be signed by the State Govt.	---
7	West Khasi Hills Coal Based Thermal Power Project (240 MW), Meghalaya	Generation of Thermal Power	0.00	0.00	1.00	Land acquisition survey, preliminary investigation, EIA/EMP studies etc.(40% completion)	Completion of Land acquisition survey, preliminary investigation, EIA/EMP studies etc.	Mar-11	NEEPCO is pursuing with the Govt. of Meghalaya for conclusion of the MoA for implementation of the project. After constant persuasion by NEEPCO the MoA in respect of the project is yet to be concluded with the State Govt.	---
8	Banskandi Gas Based Power Project (8.50 MW), Assam	Generation of Thermal Power	0.00	0.00	5.00	Land acquisition survey & preliminary investigation.	Completion of Land acquisition survey & preliminary investigation	Mar-11	This Project was planned for setting up based on Gas availability confirmed by ONGC. But ASEB viewed that the available gas should be rather diverted to the existing DLF Plant at Banskandi to operate the same in full capacity. As such, the project proposed by NEEPCO at Banskandi now stands suspended.	---
9	Agartala Gas Turbine Plant - CC Extension Project (40 MW)	Generation of Thermal Power	0.00	0.00	5.00	Preliminary investigation, site development etc.	Completion of Preliminary investigation, site development etc.	Mar-11	Central Ground Water Board has studied the availability of Ground Water for conversion of the existing Plant to Combined Cycle Plant. The Government of Tripura has given consent to draw water from River Haora during the monsoon period (15 May to 15 Nov). The Detailed Project Report (DPR) has been prepared by engaging M/S Tata Consulting Engineers as consultant. Environment Clearance from MoEF, Government of India, received on 08.09.2010. Application for NOC for construction of chimneys submitted to NAAI, Agartala Airport on 03.08.2010 which is under process at AAI, Regional office, Guwahati. The proposal for Investment approval is being submitted to MOP, GOI within Dec' 10. The Hon'ble Power Minister, GOI has been laid the foundation stone of Agartala Gas Turbine Power Plant CC Extension Project (52 MW) on 01.01.2011.	---
10	Survey and Investigation	Preparation of DPR etc.	0.00	0.00	6.00	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-11	Kameng-I HEP: Collection of HM data are continuing. The revised proposal to develop the project with reduced installed capacity of 330 MW in place of 1120 MW was placed by NEEPCO to the State Govt. In the mean time the Govt. of Arunachal Pradesh initiated that the Kameng-I HEP (330 MW) shall be treated as new allotment for which NEEPCO has to pay upfront premium @ ` 2.50 lakhs per MW towards non refundable upfront premium including processing fee, which amount to ` 8.25 Crs. The Corporation is not in a refundable upfront premium	

									as per the prevailing norms. **Mawphu Stage-II HEP:** MOA of the project is awaited. S&I works will be carried out on receipt of MOA from the State Govt.	
						Signing of MOA for Tlawng HEP (54 MW) with the State Govt. of Mizoram	Signing of MOA	Dec-10	NEEPCO forwarded draft MOA to the Govt. of Mizoram for Tlawng HEP & Tut HEP. However, in lieu of the above projects the Govt. of Mizoram has signed MOA with NEEPCO on 26.03.2010, for carrying out S&I and subsequent implementation work for the below mentioned three projects totalling 1526 MW. 1. Lungreng HEP (815 MW) 2. Chhimtuipui HEP(635 MW) 3. Mat HEP (76 MW) As Lungreng HEP & Chhimtuipui HEP involve trans-boarder issue with neighbouring country Myanmar, survey & investigation and preparation of FR, DPR etc. shall be taken up only after obtaining clearances from the Ministry of External Affairs, GOI. **Mat HEP:** During discussions with NEC, Shillong for financial assistance for preparation of FR/DPR, it was gathered that in	
						Submission of PFR of Tlawng HEP (54 MW) to CEA	Preparation of PFR	Mar-11		
						Signing of MOA for Tut HEP (27 MW) with the State Govt.	Signing of MOA	Dec-10		
						Submission of PFR of Tut HEP (27 MW) to CEA of Mizoram	Preparation of PFR	Mar-11		
									respect to Mat HEP, approval to the proposal of S&I works of Mat-Sekawi HEP (Re-location of Power House of Kolodyne HEP, Stage-I has already been given to CWC and also sanctioned release of part payment in favour of CWC. In view of the above, the Secretary (Power), Govt. of Mizoram has been requested vide letter dated 05.05.2010 & letter dated 26.07.10 to advice CWC to update the DPR and handover to NEEPCO for subsequent follow-up action for viability study and obtaining clearances etc. prior to implementation.	
11	Renovation & Modernisation of Kopili Power Station	Renovation & Modernisation	0.00	0.00	33.30	Renovation & Modernisation (75%)	Renovation & Modernisation	Mar-11	The earlier estimate of ₹ 74.95 cr for R&M of Kopili Unit-I & II was prepared on the basis of offer of M/s BHEL The detail scope of works was reviewed later on during a meeting held with BHEL and few items of work as proposed earlier were omitted from the scope. The revised estimated amount works out to ₹ 43.55 cr. The R&M works are planned for execution by Mar' 13.	---
Grand Total			**0.00**	**45.00**	**841.30**					

POWERGRID
ACHIEVEMENTS UPTO 31.12.2010

Annexure-IX

(₹ in crore)

Sl. No.	Name of Projects / Schemes	B.E. (10-11) (Rs. In Cr.)	Objective / Out-comes	Physical Outputs /Quantifiable Deliverables for the year (10-11)		Process / Time-liness	Projected Outcomes	Remarks/ Status/ Risk Factors	Physical Outputs / Quantifiable Deliverables achieved during 3rd Qtr.		Remarks
				Stringing (ckm)	Transformer Erection (no.)		Date of Compln. of Projects		Stringing (ckm)	Transformer Erection (no.)	
	A. ONGOING SCHEMES										
1	Trans.System for Barh	373	Power Evacuation+ Inter Regional Pow-er Transfer	0	6	Dec.'10	Dec.'10	Gen. delayed & now ant. In Oct.'12 as against the original target of Sept.'09. Complete Transmission system along with HVDC Converter Station (Pole-I) planned to complet in Mar.'10.			All elements completed and charged except pole-II of Balia - Bhiwadi HVDC.
2	WR Strengthening Scheme - II (WRSS-II)	567	Grid Strengthening	1244	2	July.'10	Mar.'11	Part of the scheme being imple-mented through JV route likely to be delayed.	300		Work affected in some parts due to RoW. Part system completed / commisisoned. Balance system is likely come upto June.'11
3	ER Strengthening Scheme (ERSS-1)	152	Grid Strengthening	48	0	Sept.10	Sept.10	Part elements are planned to com-plete in 2009-10. Severe ROW prob-lem has affected project completion.	37		Works affected due to severe RoW issues in Jharkhand and Orissa. For Durgapur-Jamshedpur ECL is not allowing construction of line on diverted route due to setting up of Andal airport
4	Transmission System for DVC Project & Maithon RB	1408	Power Evacuation	550		Mar.'11	Aug.'12		138		Work under progress
5	Transmission System Associated with Kudankulam Atomic Power Project	149	Power Evacuation	75		Mar.'11	2011-12	Gen project delayed, Unit - I antic-ipated by Sept.'10. ROW problem being faced in Tirunelveli-Edamon-Muvattupuzha-North Trichur lines.	13		Generation now anticipated by Jun.'11. All works completed ex-cept Edamon-Muvattupuzha-North Trichur line which has critical RoW problem.
6	Strengthening of East West Transmis-sion Corridor	40	Grid Strengthening	NA			Dec.'10	Provision kept for left over works & final payment.	82		400KV D/C Ranchi - Rourkela :- Commissioned in Nov.'11. 400KV D/C Rourkela - Raigarh :-1st stage forest clearance accorded in Oct'09 (100 Kms. stretch involved. MOEF has given permission to work in forest stretch). Final clear-ance awaited. Raigarh - Raipur :- Commissioned in Sept.'10

7	Supplementry Transmission System Associated with Sipat Stage-II project	21	Power Evacuation + Grid Strngthening	NIL	NIL		Nov.'09	All other lines of the scheme commissioned in 2008-09 except 400kV Akola-Aurangabad which is planned in 2009-10. Provision kept for left over works & final payment.			Project completed.
8	Supplementary Transmission System Associated with DVC Project & Maithon RB	486	Power Evacuation + Grid Strngthening	800	2	Mar.'11	Aug.'12		132		Work under progress
9	Transmission System Associated with NLC-II Expansion Project	43	Power Evacuation	NIL	NIL		Feb.'10	Generation delayed and aniticipated by Feb`10. All lines completed except 400kV Udumalpet Arasur , completion of which is expected by Feb`10. Provision kept for left over works & final payment.			Project completed.
10	System Strenghthening-V in NR (NRSS-V)	19	Grid Strengthening	NIL	NIL		Mar.'10	Part elements already completed in 2008-09. Provision kept for left over works & final payment.			Project completed.
11	NR System Strengthening X (NRSS-X)	48	Grid Strengthening	182	NIL	Dec'10	Dec'10		12		Work under progress
12	NR System Strengthening IX	75	Grid Strengthening	250	NIL	July.'11	July.'11		4		Attempts are being made to complete earlier
13	DVC & Maithon RB (STARTUP)	40	Power Evacuation	75	NIL		Jun.'10	Part system planned to be commissioned in 2009-10. Completion of Koderma - Bihashariff affected due to sever ROW problems. Provision kept for left over works & final payment.	20		Clearance for Jharkhand portion received in Sept.'10. Clearance for Bihar portion (13 Ha) is still awaited -Critical. 2 lines completed.
14	Transmission System Associated with Kaiga 3&4	61	Power Evacuation	25	NIL	Mar.'11	2011-12	Part system already completed. Completion of Mysore - Kozhikode line uncertain due to severe ROW problems.			Efforts are being made to sort out severe ROW problem in Kodagu district with MoP's assitance.
15	System Strengthening -VI in NR (Gurgaon S/Stn) (NRSS-VI)	12	Grid Strengthening	NIL	NIL		Feb.'10	Planned to complete in 2009-10. Provision kept for left over works / final payments.			All works completed and commissioned except one ICT is now anticipated in Dec.'11. Suuply of 2nd ICT of BHEL make delayed due to failure in SC test.
16	NR System Strengthening XI (NRSS XI)	41	Grid Strengthening	150		Dec.'10	Dec.'10		1		Works affected due to heavy rain/ flood.
17	Transmission System Associated WITH MUNDRA (UMPP)	810	Power Evacuation	800	2	Mar.'11	Oct'12		290		Work under progress

18	System Strengthening-VII of Southern Regional Grid (SRSS-VII)	1	Grid Strengthening	NIL	NIL	Dec.'09	Dec.'09	Planned to complete in 2009-10. Provision kept for left over works / final payments.			Project work completed
19	Transmission System for Parbati-III	122	Power Evacuation	150		Mar.'11	Jun.'11	Gen project delayed, Unit - I antic-ipated by Jun.'11	40		Works to be taken up as per the generation schedule (anticipated by July`14)
20	System Strengthening in NR-VIII (NRSS-VIII)	31	Grid Strengthening	NIL	NIL		Mar.'10	Planned to complete in 2009-10. Provision kept for left over works / final payments.			Project completed
21	EST OF 400/220 KV GIS Pooling Station NEAR CHAMERA-II	54	Power Evacuation	NIL	2	Mar.'11	Mar.'11				Work in progress
22	WR Strengthening SCHEME - V (Vapi-New Mumbai)	84	Grid Strengthening	75	2	Mar.'11	2011-12	Severe ROW problems.	0		Vapi-Khadoli live test charged on 15/9/2010.
23	System Strengthening-II in ER (ERSS-II)	39	Grid Strengthening	10	NIL	Jun.'10	Oct.'10		8		Severe RoW problem being faced. Matter taken-up with Distt. Admn.
24	NRSS 765kV for NCR and around Part-I	284	Grid Strengthening	300	NIL	Mar.'11	Feb.'12				Stringing planned to start in early fourth qtr.
25	Capacity Enhancement in East-West Corridor in NR	12	Grid Strengthening	NA	NA	Dec.'09	Dec.'09				Project completed
26	System Strengthening FOR NER (MISSING LINK)	7	Grid Strengthening	NIL	NIL		Dec.'10	Provision kept for left over works / final payments.			Kopili-Khandong commissioned on 14 oct.'10. second line LILO is expected to get commissioned by Feb.'11.
27	Transmission System FOR EVACUA-TION OF CHAMERA-III HEP	86	Power Evacuation	150	NIL	Mar,'11	July'11		79		For Chamera-III-Jallandhar 400kV line, stage -I clearance accorded in Sep`10 from MoEF.
28	Transmission System for URI-II	49	Power Evacuation	50	NIL	Mar,'11	May.'11				Work taken up to match generation schedule
29	Transmission System for Koldam H.E.P.(Powergrid)	8	Power Evacuation	NIL	NIL	Dec.'09	Dec.'09	Gen. delayed. ATS almost ready. Provision kept for left over works / final payments.			POWERGRID portion completed and commissioning held up due to delay in generation (anticipated by Sept.'11)
30	System Strengthening In Roorkee Area	3	Grid Strengthening	NIL	NIL			Provision kept for left over works / final payments.			Project work completed
31	System Strengthening in South Western of Northen Grid - Part B(earlier RAPP 5&6 Supplementary	1	Grid Strengthening	NIL	NIL		Jan.'10	Provision kept for left over works / final payments.			Project work completed

32	Transmission System Associated with Koteshwar HEP	54	Power Evacuation	NIL	NIL		Mar.'10	Provision kept for left over works / final payments.			Geneartion proj delayed (Feb.'11)
33	System Strengthening Scheme in Uttaranchal	10	Grid Strengthening	NIL	NIL		Mar.'10	Provision kept for left over works / final payments.		1	Project work completed
34	NR System Strengthening XII (NRSS XII)	45	Grid Strengthening	60	2	Nov'10	Nov'10			1	All elements completed / commissioned .
35	WR Strengthening SCHEME - VI	79	Grid Strengthening	86	5	Nov'10	Dec'10		22	1	Line completed.
36	Transmission System Associated with SEWA-II HEP	5	Power Evacuation	NIL	NIL		Mar.'10	Provision kept for left over works / final payments.			Project completed
37	System Strengthening.-VIII IN SR	12	Grid Strengthening	NA	NA	Nov'10	Sep'10				Project completed and commissioned.
38	System Strengthening in NR-VII (NRSS_VII)	19	Grid Strengthening	Nil	Nil	May.'10	May.'10	Provision kept for left over works / final payments.			Project completed
39	WR Strengthening SCHEME - VII	2	Grid Strengthening	NA	NA	Nov'10	Nov'10				Part system (Ext at Khandwa s/s commissioned)
40	WR Strengthening SCHEME - IX	59	Grid Strengthening	60	2	Jan.'11	Feb'11		10		Work in progress
41	Rihand Dadri convertor Transformer	2	Grid Strengthening					Provision kept for left over works / final payments.			
42	Power Grid Equity (Parbati-ii & Koldam)	18	JV					Release of POWERGRID equity			
43	Power Grid Equity (Karcham Wangtoo Transmission Project)	15	JV					Release of POWERGRID equity			
44	Power Grid Equity (Torrent Transmission Project)	2	JV					Release of POWERGRID equity			
45	Power Grid Equity (Teesta Urja Ltd.)	26	JV					Release of POWERGRID equity			
46	Other New Schemes-Equity	9	JV					Release of POWERGRID equity			
47	NRSS 765kV for NCR and around Part-II	164	Grid Strengthening	Nil		Mar.'11	Feb.'12	Provision kept for initial advance, supply & erection payments.			Work in progress
48	North East - NR/WR Interconnector (Subansiri & Kameng)	1535	Power Evacuation+ Inter Regional Power Transfer	750	NIL	Mar.'11	Aug.'13				Work in progress. Generation project delayed. Lower Subansiri ant. by Dec.2013 and Kameng HEP by mid of 12th plan
49	Transmission System Associated WITH SASAN (UMPP)	1031	Power Evacuation	450	NIL	Mar.'11	Dec.'12		107		Work in progress
50	North Chennai -LILO of 400 KV D/C Almati - Sriperumbudur	3	Power Evacuation	140	NIL	Jan.11	Jan.11	ROW problems being faced. Gen. delayed.	20		Gen. Projects delayed .

51	NRSS-XVIII	126	Grid Strengthening	50	NIL	Mar.'11	Nov.'11				Stringing commenced from Dec`10.
52	NRSS-XV	119	Grid Strengthening	100	NIL	Mar.'11	Nov.'11				Work in progress
53	NRSS-XVII	61	Grid Strengthening	125	NIL	Mar.'11	Aug.'11		40		Work in progress
54	WR Strengthening SCHEME - XI	53	Grid Strengthening	NIL	NIL	Mar.'11	Feb.'12				Tendering under progress.
55	NRSS-XIX	107	Grid Strengthening	25	NIL	Mar.'11	Feb.'12				Work in progress
56	NRSS-XIV	40	Grid Strengthening	NIL	1	Mar.'11	Aug.'11				Work in progress
57	Korba -III(500MW)	57	Power Evacuation	250	NIL	Mar.'11	Jun.'11		70		Works affected due to heavy rain.
58	Transmission System for Rampur	79	Power Evacuation	30	NIL	Mar.'11	Nov'11		32		
59	Transmission System for Farrakka Stage-III	19	Power Evacuation	60		Mar.'11	Jun.'11		11		Work under progress
60	Transmission System for Karcham Wangtoo +System Beyond Abdullapur	88	Grid Strengthening			Mar.'11			107		Work under progress
61	NRSS-XIII	69	Grid Strengthening			Mar.'11					
SUB TOTAL ONGOING SCHEMES (A)		**9035**		**7120**	**26**						
-	**B. NEW SCHEMES**										
1	SRSS X	34	Grid Strengthening			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.
2	Tutucorin (Powergrid Portion)	103	Power Evacuation			Mar.'11			2		
3	Tr. Sys. Asstd with K'patnam UMPP	249	Power Evacuat ion			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project spilt in 3 parts. Part A approved.
4	WR Strengthening SCHEME - X	166	Grid Strengthening			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.
5	Trans. System For Exporst of Power from Different Projects from Sikkim to NR/WR	30	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project split in two parts. Part A approved.
6	ERSS-III	186	Grid Strengthening			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.
7	Transmission System For South West Inter Connector	59	Inter Regional Pow-er Transfer			Mar.'11		Provision kept for Intial advance & infrastructure work.			
8	SR-I&II COMPLEX	24	Infrastructure De-velopment			Mar.'11					
9	Kalpakkam PFBR	32	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.

10	System Strengthening.-IX IN SR	25	Grid Strengthening			Mar.'11			48		Project approved.
11	ER-I RHQ office & township	2	Infrastructure Development			Mar.'11					
12	II nd Spare Converter Transformer for Talcher Kolar	87	Grid Strengthening			Mar.'11					
13	ER-II Headquarter	8	Infrastructure Development			Mar.'11					
14	Interconnetion of of lines from North karanpura STPP to Pooling Station at Ranchi & Gaya	0.1	Power Evacuation			Mar.'11					
15	Transmission System for Sasan Mundra in Northen region	237	Grid Strengthening			Mar.'11					Project approved and work under progress
16	Transmission System for Tehri II PSP	0	Power Evacuation			Mar.'11					
17	Transmission System for Nabhi Nagar- & Barh -II	85	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			
18	NRSSXX	16	Grid Strengthening			Mar.'11					Project approved.
19	Transmission System Associated with Talliya UMPP	0.2	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			
20	SRSS XI	32	Grid Strengthening			Mar.'11					Project approved.
21	Transmission System Associated with Simhadri-II	19	Power Evacuation			Mar.'11					Project approved. Severe RoW porblems. Works stopped.
22	NRSSXVI	64	Grid Strengthening			Mar.'11					Project approved.
23	TS for Kotli Behl	0.10	Power Evacuation			Mar.'11					
24	SubStation Works of Transmission sytem Associated with Pallatana & Bongaigaon	292	Power Evacuation			Mar.'11					Project approved.
25	Syst Strengthening Yelahanka S/s	26	Grid Strengthening			Mar.'11					Project approved.
26	WR Strengthening SCHEME - XII	13	Grid Strengthening			Mar.'11					
27	IIND Spare Converter Transformer For Vizag	9	Grid Strengthening			Mar.'11					
28	Transmission System for Kishen Ganga	0	Power Evacuation			Mar.'11					
29	Other New Schemes	1	Grid Strengthening			Mar.'11					
30	Additional TS for North Chennai	35	Grid Strengthening			Mar.'11					
31	400 KV S/S at Dadar Nagar Haveli	16	Grid Strengthening			Mar.'11					

32	400 KV S/S at Daman & Diu	16	Grid Strengthening			Mar.'11					
33	Barh-II	149	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			
34	Fibre optic communication System in lieu of existing ULDC microwave links in NR	47	Communication			Mar.'11					Project approved.
35	Installation of 125 MVAR Bus reactor at 400 KV Rajgarh S/S	1	Grid Strengthening			Mar.'11					Project approved.
36	Mouda ATS	51	Power Evacuation			Mar.'11					Project approved.
37	NRSS 765kV for NCR and around Part-III	115	Grid Strengthening			Mar.'11					Project approved.
38	NRSS-XXI	163	V			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.
39	NRSS-XXII	15	Grid Strengthening			Mar.'11					Project approved.
40	NRSS-XXIII	22	Grid Strengthening			Mar.'11				1	Project approved.
41	NRTSS	131	Grid Strengthening			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.
42	Raipur Bus Splitting	3	Grid Strengthening			Mar.'11					Project approved.
43	SRSS - XIII	67	Grid Strengthening			Mar.'11					
44	Tr System for development of Pooling Stations in Northern part of West Bengal and Transfer of power from Bhutan	10	Power Evacuation			Mar.'11					Project approved.
45	Transmission System for Jharkhand IPP/WBSEDCL Projects	21	Power Evacuation			Mar.'11					
46	Transmission System for Phase I generation Projects in Orissa -Part A	196	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.
47	Transmission System for Phase I generation Projects in Orissa -Part B	0	Power Evacuation			Mar.'11					Project approved.
48	Transmission System for transfer of Power from generation Projects in Sikkim to NR/WR- DPR -I Part B	181	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			
49	TS Associated with Rihand III & Vindh-IV	150	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project approved.
50	Supplementary TS for Vallur TPS	1	Power Evacuation			Mar.'11					
51	New Telecom-(To Be awarded/under BOD/Planned)	143	Communication			Mar.'11					

52	Long term Open Access (LTOA) for Krishnapatnam Area	15	LTOA			Mar.'11					
53	Long term Open Access (LTOA) for Tuticorin Area	0.1	LTOA			Mar.'11					
54	TS for various IPP projects in Chhattis-garh in different Stages	427	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			Project split in several parts. Part 1 approved.
55	TS Associated IPP Generation projects in MP & Chhattisgarh	57	Power Evacuation			Mar.'11		Provision kept for Intial advance & infrastructure work.			
SUB TOTAL NEW SCHEMES (B)		**3831**									
	C. COMPLETED SCHEMES										
1	Telecom Base Network	13	Communication					Outlay kept for final payments			
2	Trans. System for TALA (Powergrid Portion)	10	Power Evacuation					Outlay kept for final payments			
3	WR System Strengthening-IV	1	Grid Strengthening	NIL	NIL			Outlay kept for final payments			
4	WR System Strengthening-III (WRSS-III)	1	Grid Strengthening	NIL	NIL			Outlay kept for final payments			
5	Strengthening of North West Transmis-sion Corridor	2	Grid Strengthening	NIL	NIL			Outlay kept for final payments			
6	Transmission System Associated with RAPP 5&6	7	Power Evacuation	NIL	NIL			Outlay kept for final payments			
7	Transmission System Associated with Teesta-V(HEP)	0	Power Evacuation	NIL	NIL			Provision kept for left over works / final payments.			
8	Enterprise Wide Converged Information Technology & Communication Network in Powergrid (EWCIT)	0	Communication	Nil	Nil						
	Completed Schemes	**34**									
	Grand Total	**12900**							1625	4	
		2E+06									

Energy Conservatiom
ACHIEVEMENTS UPTO 31.12.2010

Annexure-X

(₹ in crore)

Sl. No.	Name of Scheme/ Programme	Objective/ Outcome	Outlay 2010-11 (Rs. in crores)			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks/ Risk Factors	Achivements as on 31.12.2010
1	2	3	4 (i) BE	4 (ii) RE	4 (iii) Exp. upto 31.12.10	5	6	7	8	9
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.	1.71	1.71	3.47	○ National Awards to industry establishment for achieving energy savings	Enhancement of awareness about energy efficient products Greater proliferation of adoption of energy efficient technologies by industry.	Progressively from April 2010 to March 2011. The Award function held on 14th December, 2010.		592 units participated in the National Award Scheme. Avoided capacity generation achieved through National Award Scheme is 357 MW. EC Day was celebrated on 14th December, 2010 successfully.
	(ii) National Level Painting Competition for School Children	To inculcate in children the relevance of energy efficiency and conservation	1.70	1.70		○ Organization of painting competition for school children all over the country	Awareness in children about need of energy conservation	Organisation of school, state and national level competition in October, November and December, 2010.		15.63 lakhs students participated in the National Level Painting Competition.
	(iii) Awareness & Publicity	To spread the message of energy conservation and efficiency through the media	15.53	15.53	7.00	○ Awareness campaign through print, visual and electronic media	Enhancement of awareness about energy efficient products Greater proliferation of adoption of energy efficient practices by masses.	Progressively from April, 2010 to March, 2011.		Media Campaign carried out successfully through DAVP.
	Total		**18.94**	**18.94**	**10.47**					

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	125.00	108.30	58.38	The provision is for: ¾ Enhancement of corpus of BEE to take up the increased workload ¾ Operationlisation of Perform, Achieve and Trade (PAT) scheme being one of the 4 new initiatives of the NMEEE ¾ Setting up of trading platform for PAT o Specific energy consumption studies for 9 industrial sector initially covered under PAT scheme National Awards to industry establishment for achieving energy savings	Setting up of a trading mechanism for energy efficiency by industrial sectors. PAT trading to commence by April 2010 as per NMEEE Enhancement of awareness about energy efficient products Greater proliferation of adoption of energy efficient technologies by industry.	Progressively from April 2010 to March 2011.	Approval of NMEEE by PM's council on Climate Change - Approval of new scheme by the Government	685 Designated Consumers have been identified from 9 sectors - Production, energy and other related data has been collected from 513 DCs. All other DCs covered by30th November 2010. - 4 consultation workshops and few sector specific workshops have been conducted
	Total		**125.00**	**108.30**	**58.38**					
	Grand Total		**143.94**	**127.24**	**68.85**					

MOP SECRETARIAT
OUTCOME BUDGET 2010-11

Annexure-XI

(₹ in crore)

Sr. No.	Name of Scheme/ Programme/ Projects	Objective/ Outcome	Outlay 2010-2011 Non-Plan (Rs. In Crores)			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Projected Outcomes: Date of completion of the project	Remarks/ Risk Factor	Achievement for the period April, 2010 to 31.12.2010
1.	2.	3.		4.		5.	6.	7	8.	9
			4(i)	4(ii)	4(iii)		!			
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources					
	(c) MOP Secretariat (Main) Office Expenses	(b) To meet the requirement of office expenses i.e. i. Payment of telephone bills ii. House keeping iii. maintenance of IT related, and office automation items iv. Purchase of stationary items. v. Requirements of Central Regi-	2.89		_____	(a) To meet the requirement of office expenses i.e. Payment of telephone bills, Housekeeping stationary items, Maintenance of office equipment, petrol for staff car and other Electric items etc.	_____	Smooth functioning of office		Rs. 1.89 crore has been incurred till date on payment of telephone bills, Housekeeping, stationary, Petrol, office automation etc.

		stry Section vi. variation consumable. vii. maintenance and purchase of petrol for staff cars. Etc. (including O/o Controller of Accounts, Ministry of Power)								
	(c) Office Expenses (Plan)	(b) 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 & moderniza-		₹ 1.00 crore Computerisation & office Automation	_____		_____	Following are the major benefits when the scheme is fully implemented Replacement of computer and other peripherals i.e. Printer, UPS and various software.	Incurred ₹ 0.31 crore	100 % achievement will be made till 31.3.2011

		tion 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)						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		

CENTRAL ELECTRICITY AUTHORITY
OUTCOME BUDGET 2010-11

Annexure-XII

(₹ in crore)

Sl. No.	Name of Scheme / Programme	Objective/ Outcome	Outlay 2010-11 (₹ in crore)	Physical Targets set during the year 2010-11	Reasons for variation	Remarks	Achievement during the year 2010-11 (upto 31st December 2010)
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.	**₹ 3.20 crore**	• 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.	There was no variation in achievement with respect to target.		1. Intensive monitoring through site visits during implementation phase of the R&M activity. 2. Discussion held with utilities for planning, scheduling and finding technical solutions of R&M programme. 3. Under KfW funded EER&M in 7 units, scope of R&M works for U-3 of Nasik TPS have been fixed and DPR has been submitted, however, on Mahagenco's request the final DPR is under preparation as per MERC's (Maharashtra Electricity Regulatory Commission) format and scope of R&M work and draft DPR for Bokaro U-1 to 3 & Kolaghat U-1 to 3 are under finalisation. 4. Under KfW funded project NIT have been floated for development of tendering procedures and model contract for the R&M of fossil fuel based power plants in India with last date as 10th January 2011. 5. 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. 6. Three units have been selected for detailed studies for EER&M under Japan-India cooperation. 7. During 2010-11 upto December 2010 life extension works on 5 units (Obra U-9), Amarkantak Ext U-2, Anta GT U-1 to 3) and remaining works under R&M on 37 units completed by the utilities.

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. 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.	₹ 0.29 crore	Completion of the ongoing study by CMPDI for selection of sites near load centres in Haryana & Madhya Pradesh. Completion of the ongoing study by IIT, Roorkee regarding lowering of MDDL of Rihand Reservoir to the designed level, its impact on the existing power plants & additional water availability. Visit by the teams of the committee to new sites in U.P. & Bihar	Delay in compiling data on water availability. Delay in compiling requisite input data/ existing water allocation from concerned State Govts of M.P., Bihar and Chhattisgarh and power utilities.	Study since completed Study report under finalization in consultation with concerned State Govt. Deptts., power utilities and CWC.	Draft report on the study awarded in February 2009 to CMPDI for selection of coal based power stations sites near load centres in the states of Madhya Pradesh & Haryana was received in January, 2010. Draft report on the Study by IIT, Roorkee regarding lowering of MDDL of Rihand Reservoir to the designed level was received in February, 2010. Visits were made by the teams of the site selection committee to various sites in U.P. & Bihar and new sites finalized.
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	₹ 3.14 crore	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.	Due to court case filed in the city civil court pertaining to land on the western side of staff quarter. As per the information given by CPWD Engineer, office building alongwith staff quarters are likely to be ready by March / April 2011.		1. As per CPWD estimates an expenditure of Rs.29.34 lakhs has been incurred upto December 2010 on account of maintenance of Staff Quarters of SRPC, Bangalore. 2. As per CPWD estimates, an amount of Rs.279.00 lakhs is placed with CPWD for NERPC, Shillong.
4.	Upgradation of IT facilities in CEA (Plan)	To develop Centralized Information Management System (IMS) for all information relating to the power sector.	₹ 0.0113 crore	Acceptance, commissioning & testing of Information Management System (IMS) covering Servers / Networking equipments / application software development.	---		Acceptance test of IMS completed successfully on 29th December 2010.

5.	Upgradation of IT facilities in CEA – Phase-II (Plan)	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 of Planning Model software. Maintenance of IT facilities.	₹ 3.01crore	Submission of the report of the study of existing IT facilities in CEA to suggest requirement of upgradation of those facilities in Phase-II, by the appointed consultant to CEA. Send proposal / SFC Memo based on the report of the consultant for the Plan Scheme 'Upgradation of IT facilities in CEA - Phase-II', 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.	The requirements of power project monitoring being complex, range / type of reports to be generated from the system being substantial in quantity, and very busy schedule of officers of the monitoring Divisions owing to shortage of manpower in CEA, led to long process of consultations between the consultant and CEA, because of which the report could not be finalized by the consultant earlier. Pending finalisation of report of study by the consultant, the proposal could not be sent to MoP for approval by December 2010.	Report is likely to be finalized and accepted by CEA in January / February 2011. Unapproved Scheme	Draft report had been submitted by the consultant and the process of finalisation of the same in consultation with concerned Divisions of CEA was in advanced stage.
6.	Computerization of PTCC process	Computerisation of processing of the PTCC cases for route approval	₹ 1.00 crore	Appointment of the consultant for the scheme	Due to poor response for calling Expression of Interest (EoI), Last date had to be extended.	Due to poor response in Expression of Interest (EoI), the Request for Proposal (RFP) is being invited on open tendering basis.	1. Constituted Consultant Evaluation Committee (CEC) for appointing consultant 2. Expression of Interest was requested through news paper advertisement. 3. Prepared the Request for Proposal (RFP) Document for appointing consultant
7.	Optimisation of National Grid Programme	Development of Plan wise transmission system based on 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	₹ 4.00 crore	Nil	---	MoP has appointed M/s Booz & Co. as consultant for preparation of National Strategy Document for Electricity Transmission sector. The scheme would be reviewed after seeing the recommendation of the consultant.	Nil

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	To carry out studies (through consultant) for identification of barriers for implementation of EER&M projects in Thermal Power Stations in India, Developing markets for implementation of R&M schemes in TPS, Review of experience from Pilot R&M projects, Review of institutional capacity at CEA in the field of R&M and implementation of Strengthening of Institutional capacity at CEA.	₹ 0.34 crore	Selection and appointment of Implementation Support Consultant (ISC). Monthly / Quarterly monitoring reports. Notification of Expression of Interests (EOIs) for the procurement of other four consultants other than ISC for carrying out the studies as mentioned under the column (3). Preparation of draft TOR for the selection of consultant to carry out the studies i.e. "Review of institutional capacity and strengthening of Institutional capacity at CEA" and "Reduction f barriers for implementation of EER&M projects in TPS in India.	- Nil -		Appointment of Implementation Support Consultant (ISC) w.e.f. 28-10-2010.

9.	All India Load Survey Scheme (Non-Plan)	To assess demand of Power over a period of time	1.88			To carry out 18th Electric Power Survey of India. Preparation of Annual Report titled "All India Electricity Statistics – General Review 2010". Preparation of Annual Report titled "Growth of Electricity Sector in India from 1947-2010"	• The Report on "All India Electricity Statistics – General Review 2010" is under printing. • The Report on "Growth of Electricity Sector in India from 1947-2010" is under printing. • 18th Electric Power Survey Committee has been constituted by CEA with consultation of MoP in February 2010. Brain storming session & 1st meeting of 18th EPSC was held on 27-08-2010. • The process of	Continuous process

							collection / compilation of input data for 18th EPS from various States / Utilities is being undertaken.	
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.	32.59			(i) Monitoring of 42 hydro projects (13824 MW) is in progress. During the year 2010-11, 969 MW hydro capacity has been commissioned and 'nil' MW is likely to be commissioned in the remaining period of 2010-11. (ii) Monitoring of 32 thermal power projects (17793 MW) consisting of 55 Units. (iii) Data collection & publication of: - 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	During the year 46 Hydro projects (13675 MW) was in progress, out of which 39 MW hydro capacity has been commissioned. 32 thermal power projects (17793 MW) (55 Units) were monitored out of which 23 projects (32 Units) aggregating to 9500 MW has been commissioned. Data collected & published: - 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)	Due to change in definition of commissioning of the unit. Delay in project execution, supplies and slow progress of civil works.

						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 10 nos. of hydro-electric projects with a total capacity of 7353 MW.	6. Review of Performance of hydro power stations (Annual). 7. Review of Performance of thermal power stations (Annual). Techno-economic appraisal and concurrence to 4 Nos. of HE projects with a total capacity of 1310 MW were accorded. Also, 4 Nos. of HE Projects with total capacity of 1800 MW are likely to be given concurrence during remaining period of Financial year 2010-11.	
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.	15.26			At present 23 Nos. of consultancy projects are in hand.	Consultancy services provided to 23 projects in and outside India.	Continuous process
12.	Studies & Training (Non-Plan)	To improve performance of Engineers / functionaries.	1.35			Imparting training of 900 mandays to CEA employees.	380 mandays training in India to 132 participants were provided.	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).	0.55		Operation and maintenance of computer systems provided in CEA and its sub-offices involving anticipated expenditure of ₹55 Lakh. Facility management and maintenance of IMS anticipated to commence by 31st December 2010 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, which is about 67% of anticipated annual expenditure. Facility management and maintenance of IMS could not commence in December 2010.	Continuous process Facility management and maintenance of IMS is likely to start in January 2011.
14.	Administration of Electricity Laws (Non-Plan)	Statutory inspection in terms of equivalent MV Electrical Installations as per prevailing norms	1.87			195000 MV	150000 MV	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	0.063		Operation and maintenance of computer systems under the NEPSIC scheme in CEA and its sub-offices involving anticipated expenditure of ₹6.3 Lakh.		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 ₹4.73	Continuous process

		collection of vital power system operational data from different Regional Power Committees (RPCs) for use in CEA / Ministry of Power.					Lakh, which is about 75% of anticipated annual expenditure.	
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	4.56			Facilitation of coordinated operation of regional power grids in the country	Facilitation of secured and reliable operation of the Regional Grids.	Continuous process

		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).						
17.	Regional Load Despatching Centres (Non-Plan)	The real time operation of the regional grids is being carried out by the respective	7.09			Facilitation of coordinated operation of regional power grids in the country	Facilitation of secured and reliable operation of the Regional Grids.	Continuous process

		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.						
18.	Apprenticeship Training for Engineers (Non-Plan)	Imparting vocational training to Graduate / Diploma holders under the Apprenticeship Act, 1961.	0.06			Around 35 Vocational / 11 D/Men and 10 Graduate / Diploma Engineers to be trained	Imparted training under Apprenticeship Act 1961 to 1 No. of Engineer, 8 Nos. of Draftsmen and 12 Nos. of vocational apprentices were trained.	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 the year 2011-12 is yet to be renewed.	Continuous process
20.	Departmental Canteen (Non-Plan)	To provide subsidized canteen facilities to the employees of CEA	0.35			Welfare measure	The canteen is functioning as a welfare measure to the staff.	Continuous process
		Total	**65.64**	**15.00**				

COMPREHENSIVE AWARD SCHEME FOR POWER SECTOR
ACHIEVEMENTS UPTO 31.12.2010

Annexure-XIII

(₹ in crore)

Sl No	Name of Scheme/ Programme/ Project	Objective/ Outcome	Outlay 2010-11						
1	2	3	4			5	6	7	8
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Quantifiable/ Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ achievement upto December, 2010
			4 (i)	4 (ii)	4 (iii)				
	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.	-	₹ 0.75 crore	-	Improvement in performance of generation, transmission distribution and environment management	To contribute in achieving reliable affordable and quality power supply to all by 2012	The awards for 2009-10are to be given in a function to be held in Feb- March, 2011	The award Distribution Function for the year 2009-10 is proposed to be held in February-March 2011.

CHAPTER-V

Financial Review

Overall picture of Ministry of Power with reference to XI Plan projection

The Planning Commission assessed an outlay of ₹3,09,231.38 crore during the XI Plan period for the Central Sector comprising of ₹ 2,78,779.47 crore of Internal and 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). Against the total outlay, the performance during the first three years, RE 2010-11 and BE 2011-12 of XI plan period is ₹ 2,15,479.03 crore consisting of ₹ 180047.16 crore as IEBR and ₹ 35431.87 crore as GBS. The CPSU-wise and activity-wise break-up of the amount is as under:-

(₹ in crore)

Sl No.	Activity/ Organization		IEBR	GBS	Total
A	**Investment in PSUs**				
1	NTPC Ltd	Estimates	162701.34	0.00	162701.34
		Achievements	74663.56	0.00	74663.56
2	NHPC	Estimates	28230.93	1000.00	29230.93
		Achievements	17353.50	1812.61	19166.11
3	PGCIL	Estimates	39999.00	0.00	39999.00
		Achievements	55040.52	0.00	55040.52
4	DVC	Estimates	20550.00	0.00	20550.00
		Achievements	25394.75	0.00	25394.75
5	THDC India Ltd	Estimates	4360.34	500.00	4860.34
		Achievements	2819.02	70.74	2889.76
6	SJVNL	Estimates	10209.70	0.00	10209.70
		Achievements	2866.84	0.00	2866.84
7	NEEPCO	Estimates	12728.16	1500.00	14228.16
		Achievements	1908.97	344.85	2253.82
	Total (A)	Estimates	**278779.47**	**3000.00**	**281779.47**
		Achievements	**180047.16**	**2228.61**	**183375.26**

(₹ in crore)

Sl No.	Activity/ Organization		GBS
B	**MoP Schemes**		
1	AG&SP	Estimates	2.00
		Achievement	26.84
2	Rural Electification Scheme	Estimates	26500.00
		Achievement	25413.45
3	NPTI(Training & Human Resource)	Estimates	80.00
		Achievement	82.60
4	CPRI(Research & Testing)	Estimates	320.00
		Achievement	363.34
5	Programme & Infrustructure improvement of CEA	Estimates	75.00
		Achievement	40.10
6	Other MoP Schemes	Estimates	474.91
		Achievement	7276.93
	Total(B)	Estimates	**27451.91**
		Achievement	**33203.26**
		Estimates*	**30451.91**
	Total GBS (A) + (B)	**Achievement**	**35431.87**

The estimates do not include the amount under R-APDRP(₹ 5987.72), NMEEE (218.65) and National Electricity Fund (Interest Subsidy Scheme) (₹ 249.57).

Performance during the first four years of XIth plan period :

The actual expenditure vis-à-vis Budget Estimates/Revised Estimate during the year 2007-08, 2008-09, 2009-10, 2010-11 and Budget Estimates for year 2011-12 are given in the table below:-

(₹ in crore)

S. No.	Schemes/ Organiztions		2007-08	2008-09	2009-10	2010-11*	BE 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	0.00
		Actuals	8751.92	13224.51	10467.13	7850.05	0.00
2	NHPC	BE	2501.95	4385.19	4667.99	4889.34	5090.00
		RE	2769.07	3450.00	3762.74	4088.00	0.00
		Actuals	2568.01	3677.85	3523.25	2646.64	0.00
3	Power Grid	BE	6500.00	8040.00	11510.00	12900.00	17700.00
		RE	6504.00	7624.00	10500.00	11900.00	0.00
		Actuals	6655.84	8167.23	10617.45	7730.00	0.00
4	DVC	BE	4271.38	6612.65	8313.34	8539.78	5890.59
		RE	4288.21	5120.69	8109.45	4311.49	0.00
		Actuals	2754.14	5149.21	7289.32	3723.06	0.00
5	THDC	BE	420.99	804.92	535.18	856.83	389.85
		RE	736.21	554.26	629.89	615.56	0.00
		Actuals	656.95	616.89	610.51	502.99	0.00
6	SJVNL	BE	642.80	556.84	580.06	525.17	1133.13
		RE	399.87	417.76	466.85	545.45	0.00
		Actuals	219.23	561.87	407.16	474.75	0.00
7	NEEPCO	BE	1258.70	772.50	824.70	886.30	1037.27
		RE	260.29	447.58	446.67	488.31	0.00
		Actuals	206.88	227.40	293.96	371.82	0.00
8	**Total-A**	**BE****	**28387.82**	**34760.10**	**44131.27**	**50947.42**	**57640.84**
		RE**	**26575.65**	**30284.29**	**38675.60**	**37768.81**	**0.00**
		Actuals**	**21812.97**	**31624.96**	**33208.78**	**23299.31**	**0.00**

* Actual in respect of 2010-11 is upto January, 2011.
** Includes GBS also 2011-12.

(i) **NTPC Limited :** The reasons for shortfall are rescheduling of projects; projects not taken up yet; and spillover and price changes.

(ii) **NHPC Limited :** The main reasons for shortfall in financial targets during 11th plan period are mainly on account of rescheduling 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 Kotli Bhel-IA, IB & II, Dibang, Vyasi, Teesta-IV, Pakal Dul etc. not come up under construction stage. Lakhwar Vyasi ,Subansiri Middle & Upper Projects having been allotted to other developers by State Govts and delay in starting S&I works for FR/DPR preparation of projects namely Chungar Chal, Garba Tawaghat and Kharmoli Lumti Tulli projects. As such the outlays got reduced during XI plan.

(iii) **THDC India Ltd :** Rescheduling of projects due to reasons beyond the control of THDCIL

(iv) **SJVN Limited :**SJVN has planned the commissioning of Rampur Hydro Electric Project (412 MW) in the state of Himachal Pradesh by March 2012. However, the project is now proposed to be commissioned by September 2013, due to various reasons, mainly poor geology. Further, expenditure on Khab Hydro Electric Project could not be incurred as it was withdrawn by the Govt. of Himachal Pradesh. Further, proposed expenditure planned to be made on remaining schemes viz. Luhri Hydro Electric Project, Devsari Hydro Electric Project , Naitwar-Mori Hydro Electric Project and Jakhol Sankri Hydro Electric Project could not be incurred due to changes in the proposed schemes for optimization of the capacities. SJVN has generated 6402.545 MUs of energy till December 31, 2010 against the MOU target of 6700 MUs for the year 2010-11 which is well in line with the set target.

(v) **NEEPCO :** The reason for negative variation in expenditure during the XI plan period is mainly attributable to the factors - major change in layout and design parameters in respect of Kameng HE Project(600MW); adverse geological condition encountered in HRT boring, Power House Excavation etc. under Kameng HE Project; delay in award of packages under PareHE Project(110MW); delay in CCEA clearance of revised cost for Tripura Gas Based Project(101MW) and Turial HE Project(60MW); withdrawal of Kameng-I HE Project (330MW), Khangten HE Project and Ranganadi HE Project,Stage-II (130MW)by the Govt. of Arunachal Pradesh; delay in signing of MOA with Govt. of Meghalaya for implementation of Mawphu Stage-II HEP(85MW) and Garo Hills Thermal Power Project(500MW).

(₹ in crore)

S.N.	Schemes/ Organiztions		2007-08	2008-09	2009-10	2010-11*	BE 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	0.00	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	0.00
		Actuals	3913.45	5500.00	5000.00	3211.41	0.00
3	NPTI(Training & HR)	BE	28.13	20.00	20.00	20.00	16.89
		RE	14.40	18.75	20.00	17.00	0.00
		Actuals	8.71	20.00	20.00	13.89	0.00
4	CPRI (Research &Testing)	BE	67.81	50.00	55.00	78.18	163.40
		RE	40.00	30.00	41.50	61.52	0.00
		Actuals	67.81	29.11	41.50	23.11	0.00
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	0.00
		Actuals	6.22	3.74	5.48	2.35	0.00
6	Other MOP Schemes	BE	607.94	114.99	1905.00	4163.98	2545.37
		RE	105.66	457.98	1521.13	2785.43	0.00
		Actuals	78.47	444.19	1423.47	1437.62	0.00
	Total-B	**BE**	4765.53	5700.00	8995.00	9804.00	8741.89
		RE	4114.73	6022.18	6594.00	7899.22	0.00
		Actuals	4074.66	5997.04	6490.45	4688.38	0.00
		***Actuals in respect of 2010-11 upto Jan'2011**					

Details of Plan outlay 2011-12 :

An amount of ₹ 66382.73 crore is the approved outlay by the Planning Commission for the year 2011-12 comprising of ₹ 56740.73 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	10250.00	13699.38	2450.62	0.00	**26400.00**	0.00	**26400.00**
2	N.H.P.C.	1350.21	2078.67	0.00	848.51	**4277.39**	812.61	**5090.00**
3	POWERGRID	3927.00	12073.00	1700.00	0.00	**17700.00**	0.00	**17700.00**
4	D.V.C.	486.59	1000.00	0.00	4404.00	**5890.59**	0.00	**5890.59**
5	T.H.D.C.	164.85	0.00	0.00	225.00	**389.85**	0.00	**389.85**
6	S.J.V.N.	810.25	0.00	0.00	322.88	**1133.13**	0.00	**1133.13**
7	NEEPCO	150.67	0.00	144.50	654.60	**949.77**	87.50	**1037.27**
	TOTAL (A)	**17139.57**	**28851.05**	**4295.12**	**6454.99**	**56740.73**	900.11	**57640.84**
B.	**MOP Schemes**							
1	Rural Electrification Schemes	0.00	0.00	0.00	0.00	0.00	6000.00	6000.00
2	NPTI(Training & HR)	0.00	0.00	0.00	0.00	0.00	16.89	16.89
3	CPRI(Research &Testing)	0.00	0.00	0.00	0.00	0.00	163.40	163.40
4	Programmes & Infrastructure Improvement of CEA	0.00	0.00	0.00	0.00	0.00	16.23	16.23
5	Bureau of Energy Efficiency	0.00	0.00	0.00	0.00	0.00	123.80	123.80
6	MOP other schemes	0.00	0.00	0.00	0.00	0.00	**2421.57**	**2421.57**
	Total (B)	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**8741.89**	**8741.89**
	Total (A+B)	**17139.57**	**28851.05**	**4295.12**	**6454.99**	**56740.73**	**9642.00**	**66382.73**

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:

a) Central Power Research Institute (CPRI)

b) National Power Training Institute (NPTI)

Statutory Bodies:

Non-Commercial:

a) Appellate Tribunal for Electricity (APTEL)

b) Central Electricity Regulatory Commission (CERC)

c) Bureau of Energy Efficiency (BEE)

Statutory Bodies:

Commercial:

a) Damodar Valley Corporation (DVC)

b) Bhakra Beas Management Board (BBMB)

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

1. Central Power Research Institute

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. CPRI is not only under taking research projects of importance to the power sector and is also managing R&D activities through RSoP and NPP schemes pooling various R&D implementing agencies . CPRI has been conducting numerous, conferences / workshops / seminars / tutorials and customized training programmes for the benefit of engineers from Utilities and Industries. A brief overview of the performance in terms of outputs is presented year-wise below:

Sl. No	Performance Parameters	Performance 2007 – 08	Performance 2008 – 09	Performance 2009 – 10	Performance 2010-11 (Upto 31st Jan 2011)
1.	Revenue Earnings (Testing & Consultancy) [₹ in Crores]	52.15	77.41	96.00	101.00
2.	Research Papers National International	43 42	29 59	48 59	86 15
3.	Research projects [Completed]	8	14	12	14
4.	Continuing Education programmes **	32	19	12	39
5.	Filings of Patents /Technology Transfers / Commercialization of Technologies	6	02	5	2
6.	Utilization of Capital Budget %	60.16% ₹40.80Cr	80 % ₹ 71.60Cr	92 % ₹ 90.18 Cr	70 % ₹ 70.65 Cr

The details of the scheme and achievement upto 31.12.2010 are given in Annexure-I.

2.0 National Power Training Institute (NPTI)

1,65,000 personnel of various levels from different organizations were imparted training by the training Institute of NPTI upto March, 2010.

The annual targets for the year 2010-11 in terms of number of trainees trained and trainees weeks were decided as 14000 and 1,25,000 respectively. The achievement vis-à-vis targets are as under:-

Sl. No.	Performance Parameters	2010-11	
		Target for Excellent Rating	Actually Achieved Upto Dec, 2010
1	No. of Trainees in Regular Programs	14,000	9,296
2	No. of Trainee Weeks (T-W)	1,25,000	94,976
3	Revenue Earnings (₹ in Lacs.)	3800.00	3300.16
4.	Non-Plan Expenditure (₹ in lacs)	3800.00	3300.16

The physical progress and actual expenditure upto 31.12.2010, R.E. 2010-11 and B.E. 2011-12 under different projects is as under:-

Sl. No.	Name of the Scheme	Cumulative Exp up to 31.12.2010	R.E. 2010-11	B.E. 2011-2012	Physical Progress
1	2	3	4	5	6
1	Setting up of HPTC at Nangal	1425.00	260.00	0	Revised cost for the scheme has been approved. in April 2010 with the cost of ₹1625.00 lakhs . During this year Grant has been released under this scheme to ₹150.00 lakhs and ₹ 60.00 lakhs which has been utilized up to December, 2010. Hydro Simulator is being installed & other work is to be completed. This scheme will be closed on 31.03.2011.
2	Modernization & Up gradation of Training Facilities at PSTI & HLTC Bangalore	1236.68	427.00	00	PSTI & HLTC Bangalore R.C. for time over has been approved by Mop. A grant of ₹ 427.00 lakhs has been released by MOP in the month of December,2010 and ₹187.65.00 lakhs has been utilized up to Decemder2010 Balance amount will be utilized up to March, 2011. i) Dispatcher Training Simulator has been installed in the Institute and fine tuning is in progress. (ii) Other activities are as per schedule and likely to be completed by March, 2011. B. HLTC, Bangalore i) Hot line tools & other equipment procured. (ii) Other activities are as per schedule. This scheme will be closed by 31.03.2011.
2	Modernization & Up gradation of training Facilities at RPTI's- NR,ER,SR, WR	2038.06	723.67	0	Most of the work like civil and procurement work have been completed. ₹316.73 lakhs has been utilized up to December, 2010. A Grant of ₹313.00 lakhs has been released by MOP in December 2010 which will be utilized up to Feb, 2011. Balance amount of ₹ 85.67 lakhs will be utilized in March, 2011 and the scheme will be closed by March, 2011.

3	Modernization & Up gradation of Training Facilities at Corporate office Faridabad	570.46	289.33	1689.21	Infrastructure development work is in progress. Energy audit lab & Environment Management Cell work has been started. IT/ Computer Lab & GIS Lab work have been completed. CPWD has started the execution of enabling works but main package could not be started due to non availability of clearance from HUDA (Haryana) Urban Development Authority). Matter is being pursued with HUDA and necessary documents as asked for have also been furnished to HUDA. An appeal to Administrators HUDA has also made to resolve the issue on urgent basis. The matter for setting up of super critical simulator, the replica plant was taken up with NTPC authority who has suggested that since, NTPC has already established 660MW super critical simulator, NPTI may consider to install 800 MW super critical simulator. The matter has again been taken up to identify replica plant.
TOTAL		**5360.20**	**1700.00**	**1689.21**	

The details 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 31.12.2010, 1236 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 and 206 in the year 2010) have been registered. Of which, 968 have already been disposed of by the Tribunal. Apart from the above appeals, 1488 other IAs, Petitions etc. have been received in the Tribunal, out of which 1098 have been disposed of by the Tribunal.

4. Central Electricity Regulatory Commission (CERC)

CERC is Non-commercial Statutory Body. The Commission performs the statutory functions under the Electricity Act, 2003.

The regulations issued by CERC upto December, 2010 are:-

(i) Indian Electricity Grid Code Regulations, 2010

These regulations consist of a set of technical and commercial rules for all entities taking part in grid operation. The Regulations were in place since the year 2000. They were replaced by a new Indian Electricity Grid Code (IEGC) in 2006 and again in 2010. The new Regulations have come into effect w.e.f. 3.5.2010.

(ii) CERC Unscheduled Interchange charges and related matters (Amendment) Regulations, 2010

The CERC (Unscheduled Inter-change charges and related matters) Regulations, 2009 were formulated for the special dispensation of the UI charges portion of the Availability Based Tariff (ABT) in existence. In spite of the deterrent measures in the CERC (Unscheduled Inter-changed charges and related matters) Regulations, 2009, some states were still over drawing power at low frequency thereby threatening grid security. As such, the charges were further modulated in the CERC (Unscheduled Inter-changed charges and related matters) (Amendment) Regulations, 2010, taking into consideration the cost of generation from the highest cost generation, which are traditionally generation based on liquid and gas fuels.

(iii) Procedure, Terms and Conditions for grant of Transmission License and other related matters (Amendment) Regulations, 2010

Through this amendment regulation, the scope of regulation 13 of the principal regulations has been extended. Regulation 13 deals with the terms of licence. Through the amendment, provisions have been made relevant relating to the mechanism for fixation of tariff in respect of the transmission assets beyond the period of 25 years.

(iv) Central Electricity Regulatory Commission (Power system Development Fund) Regulations, 2010.

This regulation provides a mechanism for the upkeep and accounting accruals from congestion charge account, Unscheduled Interchange charges, RLDC reactive energy charges, etc. Various provisions of the regulation lay down the scheme for establishment of a managing committee, its functioning, accountability etc. of the funds. The regulation also reiterates that the fund is to be utilised for the purpose being permissible under the relevant regulations viz. Congestion Revenue Regulation, Power Market Regulation, UI Charges Regulation etc.

(v) CERC (Sharing of Inter State Transmission Charges and Losses) Regulations, 2010.

The CERC has issued new regulations for determination of Inter-State Transmission Charges and losses. These regulations specify the methodology for sharing of Inter State Transmission charges and losses based on usage of the transmission system, i.e. based on distance of transmission system used, direction of power flow and quantum of power flow.

(vi) CERC (Rates, Charges and Terms and Conditions for use of Intervening Transmission Facilities) Regulations, 2010

Section 36 of the Electricity Act, 2003 requires the framing of regulations to provide for rates and charges and terms and conditions for use intervening transmission facilities. Accordingly CERC has notified the Regulations for Rates, Charges and Terms and Conditions for use of Intervening Transmission Facilities. The rates and charges as specified under these regulations are applicable for short-term, medium term and long term usage of intervening transmission facilities.

(vii) Terms and Conditions for recognition and issuance of Renewable Energy Certificate for Renewable Energy Generation (First Amendment) Regulations, 2010:

It clarifies the eligibility of renewable energy (RE) based captive power plants and eligibility of RE generator after termination of PPA for REC mechanism.

5. Bureau of Energy Efficiency

The major achievements of BEE are highlighted briefly hereunder:

- PoA was registered with UNFCCC on 29 April, 2010. DSM programmes in Agriculture and Municipal sectors approved by MOP.
- Action Plan of 31 State Designated Agencies (SDAs) prepared. 46 demonstration projects in 24 States with investment of Rs. 17.86 crores approved and 16 demonstration projects have been completed successfully.
- Out of 33 projects, 8 projects have been commissioned successfully under LED village campaign and the implementation of rest of the villages is under progress.
- Labeling for air conditioners, refrigerators, fluorescent tube light, distribution transformers being made mandatory. 6 new equipments added in Voluntary phase – motors, agricultural pumps, LPG Stoves, ceiling fans, colour TVs and geysers.
- Savings of about 358.6 MW of electric power, as equivalent avoided capacity, achieved during 2009 through National Energy Conservation Award Scheme alone. 2179 MW reported in Labeling programme.
- 317 buildings compliance with ECBC already commenced construction.
- 89 ESCOs accredited and rated by CRISIL/ICRA/CARE.
- The response to the programme was very encouraging and BEE has conducted 9 National Certification Examinations till 2009. Till 9th examination, 5328 Energy Managers have been certified out of which 3344 can also undertake Energy Audit Status.

- 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.
- Energy audit studies initiated in over 500 Government buildings in 24 States and DPRs of 314 buildings have been completed.
- Cabinet approved National Mission for Enhanced Energy Efficiency in May, 2010.
- Baseline study on SEC in Designated Consumers of 8 industrial sectors initiated for target setting. Platform (EEFP) launched. Energy Efficiency Financing MOU with PTC signed and 6 large Govt. buildings taken up. MOU with SIDBI under finalization.

The details of the schemes and achievements upto 31.12.2010 are given in Annexure-III.

5.2 Ministry of Power reviews the progress of work in BEE by way of Quarterly Review Meetings chaired by Secretary (Power). Further, the Executive Committee, chaired by Secretary (Power) too involves itself in regular monitoring of deliverables by BEE.

6. Damodar Valley Corporation (DVC)

DVC being Central Sector power-generating organization has already been covered under previous Chapters. The details of performance are given in the Annexure-IV.

7. Bhakra Beas Management Board (BBMB), Chandigarh

During the year 2010-11 (upto 31.12.2010), the generation from BBMB Power Houses has been 9020 MUs against the target of 7681 MUs. The Power House-wise plant availability of BBMB for the year 2010-11 (upto 31.12.2010) has been, Bhakra Left Bank 98.63%, Bhakra Right Bank 99.37%, Ganguwal 69.35%, Kotla 67.12%, Dehar 90.44% and Pong 99.35%. The overall availability of BBMB Power Houses is 95.80%. The power generation at BBMB Power Houses is being evacuated through BBMB power evacuation system running into 3,705 circuit kilo meters length of 400, 220, 132 and 66 kv transmission lines and 24 substations. The Bhakra Beas Management Board power evacuation system operates in an integrated manner in the Northern Grid with its transmission network spreading over the States of Himachal Pradesh, Punjab, Haryana and Delhi. The system is interconnected with transmission system of POWERGRID and the States of Uttar Pradesh, Rajasthan and Delhi. The availability of transmission system during the year 2010-11 (upto 31.12.2010) was 99.11%.

8. The achievements with reference to the schemes, JERC (Mizoram & Manipur), Forum of Regulators are given at Annexures-. V & VI.

An amount of ₹4.00 crore has been kept under the scheme JERC for Union Territories Goa except Delhi (Non-Plan) and a provision of ₹ 6.95 crore has also been kept under the scheme APTEL (Non Plan) and are indicated at **Annexures VII & VIII** respectively.

CENTRAL POWER RESEARCH INSTITUTE
ACHIEVEMENTS UPTO 31.12.2010

Annexure-I

(₹ in crore)

Sl No.	Name of Scheme/ Programme	Objective/ Outcome	Annual Plan 2010-11	Quantifiable Deliverables	Projected Outcome	Process/ Timelines	Remarks	Achievements upto 31/12/2010
1	2	3	4	5	6	7	8	9
1.	Modernisation and augmentation of switchgear test facilities at CPRI, Bangalore Outlay: ₹ 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	10.57	Supply of equipments for capacitor current switching & inductive current switching tests, completion of civil works, commissioning of test facility	On completion of the project switchgear testing facility will be augmented to meet the requirements of the electrical industries.	Apr-10 to Mar-11	Project is extended upto Sept 2011 due to delay caused in procurement of specialized equipment.	Synchronous Test Processor, Circuit Breaker analyzer, Endurance controller, Load cells, High speed Recorder, Current Transformers/Potential Transformer (CT/PT), CB Analyser, Isolation transformer, Static excitation system & Static Frequency Converter (SFC) for synchronous motor (₹.3.80 cr.) etc. are procured. Purchase order placed and LC opened for Post insulator, Resistor bank, Air core reactors, Impulse test system ,14 kV & 15kV current limiting reactors, etc. Procurement of Making device, HV capacitors, Impulse unit, Data Acquisition System (DAS) spares etc. is in advanced stage. Civil works for STF (Switchgear Test Facility) building, supplementary building completed. Expenditure upto 31st March 2010 : ₹8.81 Cr Expenditure during 2010-11 upto 31st Dec 2010 : ₹ 7.16 Cr Total Expenditure: ₹ 15.97 Cr Committed Expenditure: ₹ 8.65 Cr

2.	Modernization of short circuit test facilities and Augmentation of power transformer test facilities Outlay: ₹ 23.60 Cr	Establishment of i)Facility for loss measurement of transformers upto 50 MVA ii) facility for type test on OLTC iii) Instrument transformer calibration test facility	4.16	Procurement of Power Transformer loss facility, OLTC test facility, Instrument Transformer, Calibration facility etc, completion of civil works, commissioning of test facilities.	On completion of the project, facility for loss measurements of transformers upto 50 MVA rating & facility for type test on Online tap changers and instrument transformer calibration test facility would be established	Apr-10 to Mar-11	Project is extended upto Sept 2011.	Procurement of Transformer turns ratio meter, static motor device, vacuum contactor, power analyzer, control card for motor, elevating platform, Data Acquisition System (DAS) etc. CT/PTs Generator coupling shaft, multi function calibrator, Auto transformer, make switch, Circuit Breaker spares, Sweep Frequency Response Analyser, Drive motor etc. 24 channel transient recorder completed. Purchase order placed for HV bushings, master breakers, Centre break disconnector, reactors. Power Transformer and reactors for On Load Tap Changer facility, No load loss test equipment, Make switch spares. Procurement of Coaxial disconnector, IP duct, Vibration 2nalyzer , coaxial shunt, etc. are in progress. Construction of supplementary lab and Annexe building completed and civil works for EOT Crane is in progress. Expenditure upto 31st March 2010: ₹8.72 Cr Expenditure during 2010-11 upto 31st Dec 2010 : ₹3.73 Cr Total Expenditure: ₹12.45 Cr Committed Expenditure: ₹ 6.96 Cr

3.	Establishment of mobile diagnostic facility for power plant specific equipment for improving performance Outlay: ₹ 4.10 Cr	To establish mobile diagnostic facility for conducting performance test on in thermal power plants	1.90	Supply if balance of equipments for Diagnostic and evaluation commissioning of equipments and operation	With this a mobile field testing facility for diagnostic and evaluation of performance of thermal power plants would be established.	Apr-10 to Dec -10	The project is extended upto Dec 2010 and progress is as per revised schedule.	Corrosion mapping equipment, residual stress equipment, pipe stress software, Magnetic Particle Inspection facility, Fuel sampler, Data Acquisition System, Non Destructive Testing equipments, Coal dust measuring system, Temperature & power module, flue gas 3nalyzer, Flow measuring unit are procured. The progress of the project is as per revised time schedule and is completed by Dec 2010 Expenditure upto 31st March 2010 : ₹ 0.95 Cr Expenditure during 2010-11 upto 31st Dec 2010 : ₹ 2.49 Cr. Total Expenditure: ₹ 3.44 Cr. Committed Expenditure: ₹ 0.55 Cr.

4.	Centre for Advanced Energy Research in the Area Energy Efficiency & Energy Audit Outlay: ₹ 1.98 Cr	To establish center for excellence for study on energy efficiency & energy audit	0.00	Procurement of remaining equipments identified for energy efficiency studies for cooling towers, Thermal power plants, electrical networks, Hydro power station, coal mills, Electrostatic precipitation, Low energy devices Execution of civil works.	The facility for study on energy efficiency and energy audit will be augmented into a full pledged centre of excellence.	Apr-10 to Jan-11	Progress of the project is as per schedule	Instruments & equipment like multi function data logger, Digital oscilloscope, power analyzer, Flue gas 4nalyzer, Fuel sampler has been completed. Orders have been placed for CTI tool kit S/W, transit based flow meters, etc. Progress of the project is as per schedule and would be completed by end Jan 2011. Expenditure incurred so far is ₹1.68 cr Expenditure upto 31st March 2010 : ₹1.61 Cr Expenditure during 2010-11 upto 31st Dec 2010 : ₹0.15 Cr Total Expenditure: Rs.1.76 Cr Committed Expenditure: ₹0.04 Cr

5.	Augmentation of test facilities for optimization of 800kV AC /DC transmission system Outlay: ₹ 38.00 Cr	To augment test facilities for conducting optimization studies & transmission systems of 800kV AC & 800kV DC ratings	1.201	Procurement & Establishing of in-door laboratory, DC & AC test facility, material handling etc. Civil works for indoor laboratory.	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 ratings beyond 400 KV.	Apr-10 to Feb-11	-	1200 kV indoor AC test and delivery in Nov'10, DC test system set up has been ordered & LC opened. Civil works of indoor laboratory is in progress, work order to be placed for erecting steel structure for indoor lab (worth ₹ 7.8 Crores). Order placed for aerial platform, mobile crane etc. Project is likely to be extended beyond Feb 2011. Expenditure upto 31st March 2010 : ₹ 9.07 Cr Expenditure during 2010-11 upto 31st Dec 2010 : ₹ 11.18 Cr Total Expenditure: ₹ 20.25 Cr Committed Expenditure: ₹ 7.14 Cr

6.	Setting up of test facilities for pre-qualification test on 400 kV XLPE cable system Outlay: ₹ 14.80 cr	To set up test facility for testing for pre-qualification test on 400kV XLPE cable system	1.2045	Preparation of building plan, inviting tender for civil & electrical equipment and instruments, Placement of order and commencement of construction work. Commencement of erection & commissioning of equipment and facility	On completion of the project, all the test facilities under pre-qualification test for cable system for 400 class will be established to serve the cable industries.	Apr-10 to Mar-11	Project is as per schedule.	Loading coil procured, Purchase Order is placed for 600 kV AC test system, 2.4 MV Impulse generator & anticipated delivery by Feb 2010, Pick& carry crane, Profile projector have been ordered.. Procurement of Partial Discharge (PD) measuring System, Capacitance &Tan (C&Tan) delta system are in progress. NIT for Civil works for the Pre-qualification (PQ) laboratory is prepared. Progress is as per schedule. Expenditure upto 31st March 2010: ₹ 6.82 Cr Expenditure during 2010-11 upto 31st Dec 2010 ₹ 0.91 Cr Total Expenditure: ₹ 7.73 Cr Committed Expenditure: ₹ 1.93 Cr

7.	Mechanical Strength Test Facility Outlay: ₹ 6.50 Cr	To automate tower erection facility & also to augment vibration test facility with higher capability	0.00	Commissioning of tower crane procurement & commissioning of vibration test system	Automation of the tower test facility enables easy and quick erection and dismantling of towers upto 800 KV class and beyond.	Apr-10 to Jan-11	Project is as per schedule	Tower crane procured, commissioned and is put to use. Purchase order placed and LC opened for the procurement of 90 kilo Newton (kN) vibration analyzer. Pre-dispatch inspection is under way. The progress of the project is as per schedule and would be completed by end Jan 2011. Expenditure upto 31st March 2010 : ₹ 5.90 Cr Expenditure during 2010-11 upto 31st Dec 2010 ₹ 0.03 Cr Total Expenditure: Rs.5.93 Cr Committed Expenditure: ₹ 0.43 Cr

.	Centre of Excellence for Life Cycle Management and Condition Assessment of High Voltage Substation and Power Plant Electrical equipment Outlay: ₹ 11.98 Cr	To create adequate R&D infrastructure for functional evaluation simulation, ageing studies & diagnostic monitoring of specimens/models power apparatus insulation	4.7835	Procurement of balance equipment/ instruments Preparation for Construction and commencement of laboratory building & electrification	R & D and diagnostic infrastructure for functional evaluation, simulation, ageing studies and diagnostic monitoring of specimens / models of power apparatus insulation would ultimately reduce break downs and enhance reliability of power supply.	Apr-10 to Mar-11	Project is as per schedule.	Equipments like portable Acoustic Emision Partial Discharge Detection device , Insulation Resistance- polaristion Index testers, CT/PT primary test kit, Leakage current monitor, Portable Sweep Frequency Response Analyser, Surge tester, DC hipot test source, Turns ratio meter, Dielectric spectroscope, Coupling Capacitor, High Voltage (HV) source, Recovery voltage meter, ELCID are procured. Purchase Order placed for current signature 8nalyzer, PD- free transformer, Automatic CB tester, Testing transformer etc., Civil works for Lab-building is in progress. Progress is as per schedule. Expenditure upto 31st March 2010 : ₹ 3.29 Cr Expenditure during 2010-11 upto 31st Dec 2010 : ₹ 6.01 Cr Total Expenditure: ₹ 9.30 Cr Committed Expenditure: ₹ 2.68 Cr

9.	Centre of Excellence for Di-electric Studies Outlay: ₹ 7.68 Cr	To set up centre of excellence for di-electric studies wherein several laboratories will come up under one roof with additional testing & research facilities in the areas of di-electric materials and material technologies	2.1509	Procurement and commissioning balance equipment like FTIR UV spectro photometer HPLC, GC-ECD etc	Procurement of WDXRF, LT viscometer, oxidation. Placing PO for Mercury Analyzer, Proximate Analyzer, Bomb calorimeter	Apr-10 to Mar-11	Project is as per schedule	Equipments like pour point apparatus, Wave length Dispersive X-ray Flourescence Spectrophotometer (WDXRF), Low Temperature viscometer, Refractometer, Thin Layer Chromatograph, Oxidation Stability Apparatus, Gassing cell& High Voltage source, Fourier Transform Infra-red Spectrophotometer (FTIR), High Performance Liquid Chromotograph, Spectrophotometer, Carbon-Hydrogen-Nitrogen-Sulphur (CHNS) analyzer, Mercury Analyzer, Proximate Analyzer, Bomb calori meter are procured. GC – ECD equipment is under procurement. The progress is as per schedule. Expenditure upto 31st March 2010 : ₹ 3.95 Cr Expenditure during 2010-11 upto 31st Dec 2010 ₹ 1.48 Cr Total Expenditure ₹ 5.43 Cr Committed Expenditure ₹ 0.69 Cr
10.	Centre for Creep & Mechanical Testing Total Project outlay R₹ 2.40 Cr	To establish testing facility for carrying out mechanical tests & creep test on boiler components.	1.40	Ordering and procurement for creep testing machine and DG set Civil works for setting up lab for creep testing facility	Placing PO for Creep test facility	Apr-10 to Mar-11	Project approved in Sept-09.	Procurement of Creep test facility is in progress and Purchase Orders are going to be released shortly. Procurement of Creep and fatigue S/W, DG set, Stress rupture test machine, Image Analyzer Initiated. The progress of the project is as per schedule.

11.	Collaborative research on Emerging Technologies. Total Project outlay ₹1.60 Cr	To conduct collaborative advanced research involving utilities, academia and industries on demand driven projects.	0.38	Taking up of Collaborative research projects in emerging new technologies such as: High Temperature Superconducting technology, Energy Storage devices, Smart Grid, Development of controls for FACTS devices etc.	Continuation of short term course, taking up collaborative projects etc.	Apr-10 to Mar-11	-	CCAR has signed MoU with: Indian Institute of Technology – Roorkee, Indian Institute of Technology – Madras, Chennai Banaras Hindu University Jadavpur University Bengal Engineering and Science University National Institute of Technology – Surathkal National Institute of Technology – Warangal University of Sasketchewan, Canada. The Recruitment of I phase of SRF completed progress of the project is as per schedule. Expenditure upto 31st March 2010 : NIL Expenditure during 2010-11 upto 31st Dec 2010 : ₹ 0.04 Cr Total Expenditure: ₹ 0.04 Cr Committed Expenditure: ₹ 0.13 Cr

12.	Quality accreditation for new facilities and business development for CPRI Total Project outlay ₹. 1.20 Cr	To enhance the market reach of CPRI in the global perspective & to realize higher business turnover	0.55	• Identification of countries and prioritization • Visit to SE Asian, SAARC countries • Obtaining international accreditations	Enhancement in out reach of test facilities and brand image of CPRI. Increase in test revenue and services.	Apr-10 to Mar-11	Obtaining of accreditation from Intertek, ASTA, STL, NABL for new facilities	ASTA accreditation of HV Lab completed and renewed, Upgradation of calibration lab completed. NABL and STL membership renewed. Road shows and business development visits are planned in North East and abroad. The progress of the project is as per schedule Expenditure upto 31st March 2010 : NIL Expenditure during 2010-11 upto 31st Dec 2010 : ₹ 0.25 Cr Total Expenditure: ₹ 0.25 Cr Committed Expenditure: Rs.NIL
3.	Plan R&D Outlay: ₹ 3.00 Cr	Inhouse R&D plan of CPRI aimed at product/ process development, augmentation of test facilities, improvement of standards etc.	1.20	Completion of 6 projects and continuation of implementation of 19 R&D project at CPRI including the 10 projects commenced from Dec 2009	Inhouse projects would help in solving power system problems, improve operational efficacies and also produce new products / process.	Apr-10 to Mar-11	-	17 projects are under various stages of implementation. Expenditure incurred so far: ₹ 2.34 Cr. Expenditure upto 31st March 2010 : NIL Expenditure during 2010-11 upto 31st Dec 2010 : ₹ 1.12 Cr Total Expenditure: ₹ 1.12 Cr Committed Expenditure: ₹ 0.39 Cr

14.	RsoP Schemes Outlay: ₹ 2.00 Cr	Ministry of Power sponsored programmes on Research for Indian Power Sector	1.5121	Six projects would be completed, commencement of 18 projects	Projects would help in solving power system problems, improve operational efficacies and also produce new products / process by pooling in resources / talents from other organizations .	-	13 projects are under implementation at various organizations.
15.	National Perspective Plan projects Total Project outlay 5 ongoing projects : ₹ 5.67 Cr Now approved 6 projects : ₹ 6.99 Cr	Undertaking projects identified under National Perspective Plan report as approved by Standing Committee on R&D and Ministry of Power	0.40	Completion of the 5 ongoing projects. Implementation of 6 approved NPP projects at IIT-Roorkee, NHPC, C&G, CDAC, TNEB, CPRI	Development of STATCOM lamp for IT park, steel plant, better silt erosion material, HTS and optical CT	-	6 projects are under implementation IIT-Roorkee, Crompton & Greeves, CDAC, CPRI etc. Progress as per schedule.

New Schemes under XI Plan projects (awaiting approval)

16.	On-line test facility for large power transformer test Total Project outlay ₹ 298.64 Cr (Proposed MoP / CPRI share ₹ 24 Cr)	To establish on-line test facility for testing power transformers in the range of 100-315 MVA	0.00	Finalization of project by Technical consultant.	Apr-10 to Mar-11	-	Equity participation of CPRI / MoP to the extent of ₹ 24 Cr is under consideration.
17.	National Perspective Plan projects Phase-2 (SFC of 3 proposals submitted)	Undertaking projects identified under National Perspective Plan report as approved by Standing Committee on R&D and Ministry of Power	0.00	-	-	-	SFC proposal of 3 projects is under consideration
18.	Augmentation of High Voltage, Diagnostic, Relay, Vibration, LED test facilities and Infrastructure protection. (₹ 62.65 Lakhs)	Upgradation of High Voltage facilities at Bangalore and Bhopal units and establish EMI / EMC & LED test facilities	30.10	-	-	-	SFC proposal has been approved.
		Total	**78.18**				

NATIONAL POWER TRAINING INSTITUTE (NPTI)
ACHIEVEMENTS UPTO 31.12.2010

Annexure-II

(₹ in crore)

SL NO	Name of the Scheme	Objective/ Outcome	Outlay 2010-2011			Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/Risk Factors
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	Setting up of Hydro Power Training Centre at Nangal	Training/ 794 Trainees per year		260.00		Revenue of Rs 108.60 lakhs per year will be generated after completion of the Scheme.	Scheme sanctioned	31.03.2011	Revised cost for the scheme has been approved. in April2010 with the cost of ₹ 1625.00 lakhs . During this year Grant has been released under this scheme to₹150.00 lakhs and ₹60.00 lakhs which has been utilized up to December,2010. Hydro Simulator is being installed & other work is to be completed. This scheme will be closed on 31.03.2011.
2	Modernization & Up gradation of Training Facilities at PSTI & HLTC Bangalore	Training/ 680 Trainees per year		427.00	N.A	Revenue of Rs 365.00 lakhs per year will be generated after completionof the Scheme in the year 2009-10	Scheme sanctioned by MOP	2010-2011	**A. PSTI & HLTC Bangalore** R.C. for time over has been approved by Mop. A grant of ₹427.00 lakhs has been released by MOP in the month of December,2010 and ₹187.65.00 lakhs has been utilized up to Decemder2010

									Balance amount will be utilized up to March, 2011.i) Dispatcher Training Simulator has been installed in the Institute and fine tuning is in progress. (ii) Other activities are as per schedule and likely to be completed by March, 2011. B. HLTC, Bangalore i) Hot line tools & other equipment procured. (ii) Other activities are as per schedule. This scheme will be closed by 31.03.2011.
3	Modernization & Up gradation of training Facilities at RPTI's-NR,ER,SR,WR	Training/ 800Trainees per year		723.67		Revenue of Rs 295.80 lakhs per year will be generated after completionof the Scheme in the year 2010-2011	Scheme sanctioned by MOP	2010-2011	Most of the work like civil and procurement work have been completed. ₹316.73 lakhs has been utilized up to December, 2010. A Grant of ₹313.00 lakhs has been released by MOP in December2010 which will be utilized up to Feb,

									2011. Balance amount of ₹ 85.67 lakhs will be utilized in March, 2011 and the scheme will be closed by March, 2011
4	Modernization & Up gradation of Training Facilities at Corporate office Faridabad			289.33	N.A	Revenue of Rs 477.40 lakhs per year will be generated after completion of in the year 2011-2012.	Scheme is yet to be sanctioned by MOP	2011-2012	Infrastructure development work is in progress. Energy audit lab & Environment Management Cell work has been started. IT/ Computer Lab & GIS Lab work have been completed. CPWD has started the execution of enabling works but main package could not be started due to non availability of clearance from HUDA (Haryana) Urban Development Authority). Matter is being pursued with HUDA and necessary documents as asked for have also been furnished to

									HUDA. An appeal to Administrators HUDA has also made to resolve the issue on urgent basis.
5	Non-Plan		640.00						On release of Non-Plan Fund,the amount will be deposited in Pension fund.
	TOTAL		**640.00**	**2000.00**					

Annexure-III

BUREAU OF ENERGY EFFICIENCY
ACHIEVEMENTS UPTO 31.12.2010

(₹ in crore)

Sl N	Name of the Scheme/ Programme	Objective/ Outcome		Outlay 2010-11			Quantifiable/ Deliverables Physical Output	Projected Outcomes	Process/ Timelines	Remarks/ Risk Factors	Achievement upto 31.12.2010
1	2	3		4(ii) BE	4(ii) RE	4(iii) Exp. upto 31.12.10	5		6	7	
1	**Standards & Labeling Programme**	- To reduce end use consumption by applying standards/ labeling for equipments/ appliances - Mandatory labeling		9.00	9.00	0.00	Continuation of awareness campaign Check testing- Independent Agency Finalizing of rating plan for Vehicles, UPS/Inverters, batteries, Office Automation products and other large refrigeration systems.	Enhancement of awareness about energy efficient products Market transformation towards energy efficient products in the market	Progressively from April 2010 to March 2011.	- Building awareness in masses on the need to use energy efficient devices -Inclusive participation of industry -Balanced & effective implementation	- Technical committee meetings were held for Air Conditioners, Refrigerator, Agriculture Pump sets, distribution transformers. Methodology for enhancement of the present labeling program. The draft schedule for voluntary S&L programme and recommendations are under circulation. - The programme for Washing- Machines is finalized and has been launched after the approval from MOP. The programme for energy efficiency labeling of motor vehicles is finalized and the programme is likely to be launched soon. - The online filling S&L portal has been updated and is a continuous process. The SFC for the expansion of the project is under circulation by IFD. - Approval taken for

											conducting the label verification, process of check testing is under progress. - The data collection exercise is currently being done for other appliances for inclusion under the S&L program. Data collection exercise for standby power of various appliances has been completed. Methodology for including inverters, batteries, computer monitors and office automation equipments is under discussion. - ISB Hyderabad has been involved in the market study. - Capacity building workshop conducted with various NABL registered laboratories. - Training program conducted alongwith Emersons and ICPCI at Mumbai, Pune, Hyderabad, Chennai, Bangalore and Bhopal.- Market Study for measurement of standby power in various electrical appliances is in progress.
2	**Energy Conservation**	To reduce energy		2.80	2.80	2.80	Enhancing the pool of ECBC expert Architects	ECBC implementat	Progressiv ely from	-Availability of trained	Draft Guidelines for incorporation of ECBC

	Building Codes (ECBC)	consumption in commercial buildings.					– EOI Training material for various stakeholders Simplified compliance procedures for state & local bodies Capacity building of state & local government personnel Strengthening of testing labs Promotion of ESCOs Innovative financial products Setting up of partial risk guarantee fund for risk mitigation	ion on voluntary basis Enhancing capacity and awareness of stakeholder s	April 2010 to March 2011.	personnel in ECBC -Compliance procedure & requirement s -Availability of ESCOs & their financial credibility -Availability of finance to ESCOs bases projects	into Municipal byelaws of Chandigarh, Haryana have been prepared. Capacity Building Workshops on ECBC were conducted at Bangalore, Chennai , Ahmedabad and Jaipur successfully. 14 eligible applications have been received under the star labelling scheme. First Stakeholder consultation on window labeling held and technical committee constituted. Draft bandwidths developed and discussed for finalization . Schedule for check testing finalized and checktesting started. Completed. Total Number of ESCOs now empanelled with BEE stands at 89 including fresh empanelment. - Draft Bandwidths have been prepared. - Cool roof manual has been prepared.
3	**Bachat Lamp Yojana -**	To promote energy efficient & high quality CFLs as replacement for incandescent		6.00	6.00	6.00	Coverage of entire country in a phased manner based on DISCOM areas. An estimated 100 CPAs expected in 2010-11.	Estimated replacement of about 400 million incandescen t light bulbs	Progressiv ely from April 2010 to March 2011.	- Subject to registration by CDM Executive Board by June, 2010.	- BLY got registered as SSC-PoA at UNFCCC on 29th April 2010 - Visits to DISCOMs to facilitate the

		bulbs in households					35 major CFL investors have agreed to participate in CPAs. 10 States have commenced project preparation. Other states in the process Estimated 5.0 crores CFLs to be distributed	in household sector Market transformation in favour of energy efficient CFLs in the household sector by high scale volumes & lower retail price.		(POA Document submitted to UNFCCC for registration on completion of Validation in December, 2009. Registration expected by June, 2010)	implementation of BLY. - Following states have initiated BLY in their states :GOA, Gujrat, Punjab phase II, Karnatka, Haryana, Andhra Pradesh, Chattisgarh, Himachal Pradesh, Madhya Pradesh, West Bengal. Orissa, Rajasthan, Kerala, UP, Uttarakhand, Delhi - BEE has got the legal arrangements, i.e. Tripartite Agreements, Bi-Lateral Agreement BEE-Investor and Bi-Lateral Investor-DISCOM. - Organized BLY Investor's Facilitation Workshop. - Till now BEE has signed 13 TPAs, 2 New TPAs signed with NDPL in Delhi and WBSEDCL of West Bengal recently. - Approx 200 lakhs CFL distributed. - Empanelment procedure has been reviewed. - Floated RFP for engagement of Designated Operational Entities (DOEs) for inclusion of CDM Project Activities (CPAs).

4	**SDA Strengthening Programme**	To empower the SDAs as partners of BEE at state level to implement EC Act.		12.00	12.00	0.00	To enhance institutional capacity of the SDAs so that they have a common understanding of the issues related to energy conservation activities & are able to implement the EC Act in their respective states SDAs are expected to have a minimum understanding of nuances of energy conservation & efficiency like implementing performance contracting projects, ECBC, IT based monitoring & evaluation etc. Demonstration projects to be implemented Energy Conservation Action Teams (ECATs) are being encouraged in the states	○ To strengthen SDAs as partners of BEE at state level ○ Effective proliferation of the awareness and promotional programmes in states.	Progressively from April 2010 to March 2011.	- Subject to approval of SFC	- SFC Note for expansion of the programme has been circulated by IFD.
5	**Designated Consumers and SMEs Programme**	Targeted energy consumption reduction of Designated Consumers and SMEs. Capacity building of Energy Auditors		6.49	5.25	5.25	Investment grade energy audits (bankable DPRs). 15 DPRs per cluster in each of the 25 clusters will be prepared. Template for DPR preparation for the balance units in clusters, given their	○ Creation of trained manpower to undertake this job ○ Implement data collection/ collation and analysis in respect of	Progressively from April 2010 to March 2011.	-Lack of data on energy consumption including measurement & verification available with SMEs. -Lack of	Completion of the Energy Audit and Technology gap Assessment in 20 Clusters • 78 DPRs prepared & Reviewed. • 17 Cluster Manual prepared. • 23 Dissemination Workshops

		and Managers					similarities Adequate provision of expertise for the local service providers to help reach out to the units Availability of financing by capacity building of banking personnel in matters like project appraisal of performance contracting	Designated Consumers as mandated by EC Act. o Develo pment and marketing of energy efficient products and services for SMEs		project development capability & the ability to translate energy efficiency benefits into savings -Lack of standardized contracts, audit & M&V protocols, annual performance reports & so on	• 9 small group activities under Indo Japan energy cooperation • Addition of 3 New Clusters completed • Continuation of 10 energy audits in 16 clusters (10 Each) - Completed in 5 SMEs clusters • RFP for Brick cluster was issued • 3rd Coordination Committee Meeting • Capacity building programme on Small Group Activities (SGA)/Total Energy Management (TEM) in Japan for various Stakeholders held. • Continuation of energy efficiency interventions in 04 new clusters (Allepe, Firozabad, Mangalore and Tirupur).

6	**Agriculture DSM & Mu DSM**	To reduce the overall power consumption, improving efficiencies of ground water extraction & reducing the subsidy burden of the states To reduce energy cost & improve energy overall incurred by the municipalities		8.37	3.66	3.66	Business model linked to subsidy reduction being evolved Shelf of bankable DPRs to be prepared – 91 ULBs for Mu DSM. In Ag DSM, 5 pilot projects (1 each in the States of Maharashtra, Gujarat, Rajasthan, Punjab & Haryana) will be implemented through Discom to stimulate the market. Pilot project for preparation of 5 more DPRs in 5 more States will be taken up. Baseline development, conducive regulatory regime & payment security mechanism being worked out Awareness & outreach to local & municipal bodies Manual for Mu DSM being developed with standard contract documents to enable easier implementation Risk mitigation measures for encouraging PPP being evolved CDM benefits for the scheme being put in	○ To demonstrate by setting example the benefits and business models for energy conservation projects to other government/ semi-government and other 7organizations	Progressively from April 2010 to March 2011.	-Regulatory, financial, political and technological risk - Baseline formulation and monitoring - Incentive to farmers - Awareness and capacity - Subsidy linked approach.	**Agricultural** •Contract awarded for preparation of 2 DPRs in Madhya Pradesh •Technical evaluation completed for preparation of 2 DPRs in Andhra Pradesh and 1 DPR in Karnataka. • 5 programmes for DISCOMS completed **Municipal** - Investment Grade Audit for MuDSM Phase-II is completed. - Total Nos. of Phase II DPR Received till date: 44 - This DPRs are reviewed by TUV-SUD and are in advanced stage of Finalisation. - For 1st Phase Total No. of DPR received are 21 that are reviewed by Tuv-SUD are in advanced stage of finalisation. - Review of Data collected online for 2nd phase are being reviewed and comments are being sent to all ULBs under 2nd Phase. - For MuDSM Phase- IV tender was floated under 22.04.2010 for 15 clusters;Total 16 Bids were received. Technical Evaluation was completed on 30.06.2010

											and Financial Opening on 2.07.2010. Financial Evaluation of Phase- IV is done on 02.07.2010. LOI are issued. Work order is still to be issued. - A meeting for consultation on implementation of DPR is being held at BEE office to discuss on strategy of Implementation programme. – Completed. Model RFP to be prepared
7	**Contribution to SECF**	SECF is a statutory requirement and under EC Act. It is also one of the deliverables of SDAs ECAP.		22.26	22.26	10.00	The scheme will provide contribution to SECF after it is notified by states.	o The effort will be to create a pool of financially sustainable activities for SDAs which can augment the fund.	Progressively from April 2010 to March 2011.	-Notification of SECF by States -Sustainable business model for SECF	Preparation of sector specific energy savings plan on the basis of assessment study report. **– in Progress** Preparation and implementation of WHR policy in the state. **– in Progress** Sanction of funds to 4 states are in progress
	Total			**66.92**	**60.97**	**27.71**					

DAMODAR VALLEY CORPORATION
ACHIEVEMENTS UPTO 31.12.2010

Annexure-IV

(₹ in crore)

Sl. No.	Name of Project	Objective/ Outcome	Outlay BE 2010-11 (Rs. Cr.)	Expenditure upto 12/10 (Prov.)	Quantifiable Deliverables /Milestones /Outcomes (Targets)	Processes / Timelines	Projected Outcomes	Remark	Achievement w.r.t. Col (5)
1	2	3	4(i)	4(ii)	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	**72.83**	13.36	To Complete balance works & Contract Closing	by 03/2011	Capacity addition of 500 MW	Completion of balance work incl. contract closing under progress.	Around 20% achieved. Balance expenditure anticipated to be incurred during 4th quarter.
2	Chandrapura TPS Extn. Unit# 7 & 8 (2x 250 MW)	Capacity addition of 500 MW	**110.02**	141.28	1] Completion of balance EPC & Non-EPC works	by 03/2011	Capacity addition of 500 MW	Completion of balance EPC and Non-EPC work under progress.	Balance work after commissioning of both units are under progress towards declaration of COD presently anticipated in Unit-7: April-11 (subject to avaiability of Gen. Rotor) and Unit-8 in Mar-11
3	Mejia TPS Phase-II: Unit1&2 (2x 500 MW)	Capacity addition of 1000 MW	**639.33**	511.53	**Unit-1:** 1] Completion of balance EPC & Non-EPC works	by 03/2011	Capacity addition of 1000 MW	Work in balance areas under progress.	Unit Coal Syn. on 5.08.10 and commissioned on 30.09.2010. Balance work under progress towards declaration of COD now anticipated in Mar-11.
					Unit-2: 1] Full load operation	by 05/2010		Due to delay in supply and execution of work, target could not be achieved.	Oil synchronisation done on 11.11.10. Work is going on in full swing towards achieveing full load operation in Mar-11 to be followed by declaration of COD.
					2] COD of unit-2	by 06/2010		Due to delay in supply and execution of work, target could not be achieved.	
4	Koderma Stage-I:U# 1 & 2 (2x500 MW)	Capacity addition of 1000 MW	**1762.59**	716.46	**Unit-1:** 1] Turbine Box-up	by 04/2010	Capacity addition of 1000 MW	Due to delay in supply, TG Box up delayed	TG Box up done on 7.01.11
					2] BOILER LIGHT UP	by 05/2010		Due to delay in supply incl. C.C. pump and slow execution of work, BLU delayed	BLU achieved on 30.12.10.
					3] TG on Barring Gear	by 07/2010		Due to delay in execution, TG on Barring gear delayed	Done on 14.1.11
					4] Synchronisation	by 08/2010		Due to delay in preceeding activities, Synchonisation delayed.	Anticipated in 03/2011 in commensuration with present progress.
					5] Full Load Operation	by 09/2010		Due to delay in preceeding activities, full load operation delayed.	Full load operation now rescheduled in 03/2011in commensuration with present progress.
					Unit-2: 1] Turbine Box-	by 05/2010		Due to delay in supply &	Work is going on TG Box up

					up			execution, TG Box up delayed	now anticipated in Aug-11.
					2] BOILER LIGHT UP	by 07/2010		Due to delay in supply and execution of work, BLU could not be achieved as scheduled.	Work going on towards achieveing the target by 04/2011
					3] TG on Barring Gear	by 08/2010		Due to delay in supply & execution in TG area machine could not be put on barring gear.	Subsequent upon TG Box up and completion of balance work TG is anticipated to put on barring gear in Sept-11
					4] Synchronisation	by 10/2010		Due to delay in preceeding activities, Synchonisation delayed.	Synchronisation now rescheduled in 10/2011 in commensuration with present progress.
					5] Full Load Operation	by 03/2011		Due to delay in preceeding activities, full load operation delayed.	Full load operation now rescheduled in 11/2011 in commensuration with present progress.
5	Durgapur Steel TPS U# 1&2 (2x500 MW)	Capacity addition of 1000 MW	**1533.90**	833.88	**Unit-1:** 1] Turbine Box-up	by 04/2010	Capacity addition of 1000 MW	Due to delay in supply, TG Box up delayed	TG Box up achieved on 12.11.10
					2] BOILER LIGHT UP	by 06/2010		Due to delay in supply incl. C.C. pump , laying of water pipe line corridor and. slow execution of work, BLU delayed	BLU to be achieved in 02/2011
					3] TG on Barring Gear	by 07/2010		Due to delay in execution, TG on Barring gear delayed	TG Box up achieved, balance work going on at full swing. TG on Barring gear now anticipated in mid 03/2011 commensurate with present progress.
					4] Synchronisation	by 08/2010		Due to delay in preceeding activities, Synchonisation delayed.	Synchronisation now rescheduled in 03/2011 commensurate with present progress.
					5] Full Load Operation	by 09/2010		Due to delay in preceeding activities, full load operation delayed.	Full load operation now rescheduled in 03/2011 commensurate with present progress.
					Unit-2: 1] Turbine Box-up	by 06/2010		Due to delay in supply & execution, TG Box up delayed	Work is going on TG Box up now anticipated in Apr-11.
					2] BOILER LIGHT UP	by 08/2010		Due to delay in supply and slow execution of work, BLU delayed	BLU to be achieved in 05/2011
					3] TG on Barring Gear	by 08/2010		Due to delay in supply & execution in TG area machine could not be put on barring gear.	Subsequent upon TG Box up and completion of balance work TG is anticipated to put on barring gear in June-11

					4] Synchronisation	by 10/2010		Due to delay in preceeding activities, Synchonisation delayed.	Synchronisation now rescheduled in 07/2011 in commensuration with present progress.
					5] Full Load Operation	by 01/2011		Due to delay in preceeding activities, full load operation delayed.	Full load operation now rescheduled in 09/2011 in commensuration with present progress.
6	Raghunathpur TPS Ph-I: Unit# 1&2 (2x 600 MW)	Capacity addition of 1200 MW	**2086.44**	949.52	**Unit-1:** 1] BOILER HYDRO TEST	by 04/2010	Capacity addition of 1200 MW	Due to initial delay and problem of W.W. Bottom ring headers in material identification, Boiler Hydro Test delayed.	Work under progress and Hydro test now rescheduled in 05/2011
					2] BOILER LIGHT UP	by 10/2010		For cummulative delay on account of previous activities/ milestones, BLU delayed	Work under progress and BLU now reschedule in 11/2011
					3] Synchronisation	by 12/2010		Though activities are under progress, and since synchronisation is dependent on completion of water package and Rail corridor etc.for which acquisition of land is not yet complete, target will be finalised in consultation with erection agencies.	Work under progress in all fronts. However, target for synchronisation will be finalised in consultation with M/s RIL after acquisition of land.
					Unit-2: 1] BOILER HYDRO TEST	by 06/2010		Due to initial delay in start of Boiler columns/structure erection by R-Infra which resulted in Drum lifting by 9 months from schedule, Boiler Hydro Test also delayed.	Due to initial delay in start of Boiler columns/structure erection by R-Infra which resulted in Drum lifting by 9 months from schedule, Boiler Hydro Test also delayed and now rescheduled in 08/2011
					2] BOILER LIGHT UP	by 12/2010		BLU, Synchronisation & Commissioning targets will be finalized after complete acquisition of land.	Work under progress in all fronts. However, target for synchronisation will be finalised in consultation with M/s RIL after acquisition of land.
7	Bokaro 'A' TPS: (1x 500 MW)	Capacity addition of 500 MW	**651.14**	103.05	1] Order placement for CHP package	by 04/2010	Capacity addition of 500 MW	Preparation of NIT is under progress.	Techno-commercial spec. submitted by consultant and file under process for issuance of NIT
					2] Order placement for Water package	by 06/2010		Preparation of NIT is under progress.	Techno-commercial spec. submitted by consultant and file under process for issuance of NIT

					3] DRUM LIFTING	by 07/2010		Boiler Erection work was started on 25.11.09. Civil & Erection work is under progress. Work slowed down considering difficulty in execution of Main Plant package due to requirement of dismantling of some of the existing structures including solid concrete CW trench of old units and shifting of existing switchyard. Removal of duct is complete while shifting of switch yard is likely to be completed by early Mar-11. Activities are being rescheduled in consultation with BHEL.	2012.109 MT Boiler erection completed compleetd upto Dec-2010. Power house fabrication and erection 84.46% and 71.80% respectively completed. TG Raft & Columns: RCC work under progress. Bar binding 56% completed.
					4] Condenser erection start	by 03/2011			
8	Raghunathpur TPS Ph-II: Unit# 1&2 (2x 660 MW)	Capacity addition of 1320 MW during 12th plan	**420.75**	0.00	1] Order placement for SG & STG package	by 08/2010	Capacity addition of 1320 MW during 12th plan	Agencies for STG package under bulk tendering finalised and BHEL has got RTPS Ph-II project. For SG package techno-commercial evaluation is complete and price bid to be opened in Mar'11.	Order to be placed after MOE&F clearance and financial closure, work for which are under progress.
					2] Placement of order for different studies and other packages.	by 03/2011		Under progress.	Order for DPR placed on NTPC and NTPC submitted DPR. Order placed for consultancy services for preparation of Tech. Spec. etc. for BOP package. Upon finalisation of Tech. Spec., Bid documents etc. NIT for BOP package will be placed. Now anticipated in Mar-11. Preparation of tender for Soil investigation work under progress.

	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 1050 MW	**102.00**	92.41	Provision kept for providing equity to M/s MPL for construction of the project.	by 03/2011	Capacity addition of 1050 MW	Construction work under progress by M/s MPL and equity is provided as per their requirements.	BLU of Unit-1 done on 5.12.10 and Hydro test of Unit-2 achieved on 23.10.10. Commissioning is anticipated in Mar-11 and July-11.
10	Bokaro Steel TPS *[Equity Contribution @50% from DVC to BPSCL, Joint Venture of DVC &SAIL]*	Capacity addition of 500 MW	**25.00**	0.16	Provision kept for providing equity to M/s BPSCL for pre-project activities towards construction of the project	by 03/2011	Capacity addition of 500 MW	This project is implemented by M/s BPSCL Considering little progress no equity has been required so far.	This project is implemented by M/s BPSCL Considering little progress no equity has been required so far.
11	A3] Investigation / Feas. Studies / DPR etc. for future projects, if any.		**2.00**	0.11	Provision for expenditure towards Investigation / Feas. Studies / DPR etc. for new projects, if any.	by 03/2011		Expenditure is incurred as per requirement.	Expenditure is incurred as per requirement.
	Total: A : [1 to 11]		**7405.99**	**3361.76**					
B.	**Dam/Hydel Projects**								
1	Belpahari Dam/Hydel	Study by Consultant (M/s CWC)	**0.00**		-------	------	Study by Consultant (M/s CWC)		-------
	Total :Dam/Hydel Projects :		**0.00**						
C.	**T& D schemes**								
	TSC Schemes: T & D		**536.96**		Please Refer to Appendix-T&D-2			Please Refer to Appendix-T&D-2	Please Refer to Appendix-T&D-2
	R&A of T&D		**39.44**		Please Refer to Appendix-T&D-2			Please Refer to Appendix-T&D-2	Please Refer to Appendix-T&D-2
	Total T& D schemes	To facilitate T&D of power	**576.40**	**206.92**			To facilitate T&D of power		
D.	**Communication schemes**		**5.9135**	**0.51**					
	1] Power Line Carrier Communication (PLCC)	1) Speech and data Communication for 132 KV Jamuria Sub-station	**3.9313**		-----	…..	1) Speech and data Communication for 132 KV Jamuria Sub-station		Already Commissioned.
		2) Speech and data communication between existing CTPS 220 KV (CTPS A) & New CTPS 220 KV (CTPS B).			-----	……	2) Speech and data communication between existing CTPS 220 KV (CTPS A) & New CTPS 220 KV (CTPS B).		Erection completed.

		3) Speech and data communication between Mejia-Ramgarh and in upcoming Dhanbad sub-station.			-----	.....	3) Speech and data communication between Mejia-Ramgarh and in upcoming Dhanbad sub-station.	Balance work under progress	Procurement of materials completed.
		4) Speech and data communication between Kalyaneswari and Pithakiyari (Power Grid)			-----	.....	4) Speech and data communication between Kalyaneswari and Pithakiyari (Power Grid)		Already Commissioned.
		5) Speech and data communication between Dhanbad and Electro steel sub-station			Erection & Commissioning	by 03/2011	5) Speech and data communication between Dhanbad and Electro steel sub-station	Balance work under progress	Procurement of materials completed.
		6) Speech and data communication at 220 KV Koderma sub-station			Erection & Commissioning	by 03/2011	6) Speech and data communication at 220 KV Koderma sub-station	Balance work under progress	Erection completed.
		7) Speech and data communication at 400 KV Durgapur Steel TPS, Raghunathpur TPS			Procurement, Erection & Commissioning	by 03/2011	7) Speech and data communication at 400 KV Durgapur Steel TPS, Raghunathpur TPS	Balance work under progress	Speech and data communication established at 400 KV Durgapur Steel TPS.
	2] Satellite Communication (VSAT)	Augmentation of VSAT bandwidth for relay retrofitting.	**1.2567**		-----	.....	Augmentation of VSAT bandwidth for relay retrofitting.		Work in progress.
		Establishment of VSAT stations at upcoming Power Houses.			Erection & Commissioning	by 03/2011	Establishment of VSAT stations at upcoming Power Houses.		.....
	3] Very High frequency communication (VHF)	Speech communication at Jamuria, Barjora, Biada, Burnpur sub-stations.	**0.0400**		Erection & Commissioning	by 06/2010	Speech communication at Jamuria, Barjora, Biada, Burnpur sub-stations.		Application for Frequency clearance sent to WPC (GOI)
	4] Unified Load Despatch & Communication scheme (ULDC)	Integration of CTPS B (U# 7,8) with SLDC Maithon, DVC HQ Kolkata and RSCC Tollygunge.	**0.6855**		------	.....	Integration of CTPS B (U# 7,8) with SLDC Maithon, DVC HQ Kolkata and RSCC Tollygunge.	Balance work under progress	U#7 already integrated. Cable laying completed for U#7.
		Integration of Mejia TPS B (U# 7,8) with SLDC Maithon, DVC HQ Kolkata and RSCC Tollygunge.			Erection & Commissioning	by 05/2010	Integration of Mejia TPS B (U# 7,8) with SLDC Maithon, DVC HQ Kolkata and RSCC Tollygunge.	Balance work under progress	Availability of MODEM confirmed.

	5] Carrier Replacement	Establishment of carrier protection of HV line through replaced PLCC equipment for 220 KV DTPS – Bidhannagar (WBSETCL) line section	**0.0000**		-----	…..	Establishment of carrier protection of HV line through replaced PLCC equipment for 220 KV DTPS – Bidhannagar (WBSETCL) line section		…..
E.	**R&M Schemes**								
	PHS U#1 R&M	RMU/LE	0.50		Engagement of Consultant for R&M job.	by 03/2011	RMU/LE	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.
	MHS U-1&3 MHS U-2	RMU/LE	0.75 1.00		Engagement of Consultant for R&M job. Provision for balance payment to the consortium of M/s Alstom & M/s BHEL.	by 03/2011	RMU/LE	NHPC was approached for submission of offer towards Consultancy services of R&M/LE. However, in view of exigency of other works they did not submit the offer so far. As no alternate consultant could be found, DVC is again persuading NHPC to make them agreeable to provide Consultancy Services. (ii) Unit # 2 is running at up-rated load of 23.2 MW subject to availability of sufficient water head.	(i) Proposal for R&M/LE of Unit 1&3 initiated.
	Others (Phase II & III)	Improved performance	0.54		Completion of balance work of 9th plan activities & closing of 8th & 9th plan contracts.		Improved performance		Closing/ short closing of contracts.
	Sub Total R&M :		**2.7935**	**0.00**					
F.	**Pollution:**	For Environmental compliance	**133.010**		Dry Ash Disposal Sys. for BTPS 'B': Part completion of supply & erection of Dry Ash sys. For other plants requirement for various works relating to environmental compliance.	by 03/2011	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 (3x 210 MW)		**2.00**	0.47	For settlement of final bills.	by 03/2011		Work under progress.	Work under progress.
	[2] Mejia TPS Extn. U# 4 (1x 210 MW)	**Under Commercial Operation since 13.02.2005**	**0.44**		For settlement of final bills.	by 03/2011	**Under Commercial Operation since 13.02.2005**	Work under progress.	Work under progress.
H.	**Refurbishment/Extension/Improvement**	To improve performance of Generating units with improved infrastructural network	**329.98**	32.34	Completion of refurbishment programme	by 03/2011	To improve performance of Generating units with improved infrastructural network	Balance Work under progress.	Procurement of Generator Rotor for BTPS 'B' Unit-3 completed.
I.	**R&D Centre**	to serve the requirement of DVC power stations and Transmission & Distribution system	**40.00**	0.02	1) Setting up of laboratories and testing of samples to serve the requirement of DVC power stations and Transmission & Distribution system, 2) Study on the problems of DVC power stations and Transmission & Distribution system.	by 03/2011	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 compleetd.
J.	**SLDC scheme**		**25.00**			by 03/2011			Agreement under finalisation.
K.	**Equity participation NHPTL**		**18.25**	1.76		by 03/2011			Equity contribution made as per request.
	Grand Total in Rs. Cr. :A to K		***8539.77***	***3603.78***					

Joint Electricity Regulatory Commission for Manipur & Mizoram

Annexure-V

ACHIEVEMENTS UPTO 31.12.2010

(₹ in crore)

Sl. No	Scheme/ Programme/ Projects	Sanctioned cost/ Cumulative expenditure from 1.4.2010 till 31.12.2010	Objective/ Outcome:	Outlay 2010-11			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks/ Risk Factor	Achievements upto 31st December, 2010
1.	2.	3.		4.			5.	6.	7.	8.	9
		3(i)	3 (ii)	4(i) Non-Plan Budget (Amount Rs/lacs)	4(ii) Plan Budget (Amount crore	4(iii) Complementary Extra-Budgetary Resources					
	Joint Electricity Regulatory Commission for Manipur & Mizoram	Sanctioned cost : Rs.660.0 lakh Cumulative Expenditure from 1.4.2010 till 31.12.2010: ₹ 72.0 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	-	1.25	-	Targets for the year 2011-12 are as below: 1. Making 5(five) new Regulations (including Multi-year Tariff). 2. Conducting 4 (four) public hearings on various issues. 3. Conduct of 8 (eight) State Advisory Committee	1..	1. This will improve the quality of powr supply. 2. These are new regulations required for proper functioning of the Comission. 3. It wil help taking important decisions. 4. To decide important		12 Regulations were notified by the Joint Commission. Two meetings of the State Advisory Committee held. Two meetings of State Coordination Forum held. One Workshop on Electricity Consumer

			tariff for supply of electricity in the States of Manipur and Mizoram.				meetings and 4(four) nos. of State Coordination Forum Meetings. 4. Organise 4 (four) State level Workshop on important issues. 5. Training of officers and staff of the Joint Commission 6. Issue Retail Tariff of Mizoram and Manipur for financial year 2010-11		issues facing in management of power supply in the States of Manipur and Mizoram 5. To provide public and private relationship amd bromg awaremess / 6. This will enhance the efficiency of officers and staff. 7. To acquire basic information and the ground realities of projects.		Awareness held in Mizoram. Public hearing for determination of tariff for Mizoram Power & Electricity Department held.

FORUM OF REGULATORS
ACHIEVEMENTS UPTO 31.12.2010

Annexure-VI

(₹ in crore)

S. N	Scheme/ Programme/ Projects	Sanctioned cost/ Cumulative expenditure from 1.4.2010 till 31.12.2010	Objective / Outcome :	Outlay 2010-11			Quantifiable Deliverables/ Physical Outputs	Projected outcomes	Processes / Timelines	Remarks/ Risk Factor	Achievements from 1.4.2010 to 31.12.2010
1.	2.	3.		4.			5.	6.	7.	8.	
		3(i)	3 (ii)	4(i) Non-Plan Budget (Amount Rs/lacs)	4(ii) Plan Budget (Amount ₹ in crore)	4(iii) Complementary Extra-Budgetary Resources					
	Assistance to Forum of Regulators for Capacity Building and Availing Consultancy	Sanctioned cost : ₹1000 lakh Cumulative Expenditure from 1.4.2010 to 31.12.2010: ₹ 80.0 lakh	Capacity building by way of training/ re-orientation of personnel of regulatory commissions and availing consultancy to evolve best regulatory	-	2.00	-	• Regulatory Commissions will have trained personnel • Study reports will be finalized for suitable actions by the Regulatory Commissions.	• 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 2010-11 for the desired objective.		i) Four residential training/ capacity building programmes were conducted by FOR which were attended by 91 officers of State Electricity Regulatory Commissions (SERCs). ii)One Orientation programme was conducted

			practices.								for the Chairpersons/ Members of Regulatory Commissions which was attended by 19 participants. Following studies were conducted during this period: a)Analysis of Triff Orders & other Order of SERCs. b)Assessment of various Renewable Energy Resource Potential in different states determining RPO Trajectory and its impact on tariff. c) Assignment on Implementation

											& Impact Analysis of Time of Day (TOD) tariff in India. d)Standardisation of Distribution Franchise model. e) Financial Viability of Distribution Licensee. f) Instituti-onalising Energy Efficiency & demand side management in utility sector in India.

JOINT ELECTRICITY REGULATORY COMMISSION FOR GOA AND UNION TERRITORIES

Annexure-VII

Achievements upto 31.12.2010

(₹ in crore)

Sl. No	Scheme/ Programme/ Projects	Sanctioned cost/ Cumulative expenditure from 1.4.2010 till 31.12.2010	Objective/ Outcome:	Outlay 2010-11			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes / Timelines	Remarks/ Risk Factor	Achievements upto 31st December, 201
1.	2.	3.		4.			5.	6.	7.	8.	
		3(i)	3 (ii)	4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources					
	Joint Electricity Regulatory Commission for Goa and Union Territories	Sanctioned cost : Not applicable Cumulative Expenditure from 1.4.2010 to 31.12.2010:: ₹2.52 crore	To meet the statutory requirement under the Electricity Act 2003	4.00	-	-	The Commission would regulate tariff for supply of electricity in he State of Goa and UTs except Delhi.	This will result in efficiency improvements.	This will be a permanent institution.		The Commission has notified the following Regulations during April 2010 to December 2010: i) JERC (Electricity Supply Code) Regulations 2010; ii) JERC (State Grid Code) Regulations 2010; iii) JERC (Electricity Trading)

											Regulations 2010; iv) JERC (Procurement of Renewable Energy) Regulations 2010. The Commission has heard 8 petitions during April 2010 to December 2010.

APPELLATE TRIBUNAL FOR ELECTRICITY

Annexure-VIII

Achievements upto 31.12.2010

(₹ in crore)

Sl. No	Scheme/ Programme/ Projects	Sanctioned cost/ Cumulative expenditure from 1.4.2010 till 31.12.2010	Objective/ Outcome:	Outlay 2010-11			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes / Timelines	Remarks/ Risk Factor	Achievements upto 31st December, 2010
1.	2.	3.		4.			5.	6.	7.	8.	
		3(i)	3 (ii)	4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources					
	Appellate Tribunal for Electricity	Sanctioned cost : Not applicable Cumulative Expenditure from 1.4.2010 to 31.12.2010: ₹ 419.95 lakh	To facilitate expeditious resolution of disputes in the power sector at the appellate level Further, the Tribunal will also function as Appellate	6.95	-	-	Total number of appeals pending for final disposals as on 1st January, 2010 is 195. Apart from this, 248 las/ Petitions are also pending for disposal/ admission.	N.A.	Spread throughout the year.		Following were disposed of during April – December 2010: Appeals – 100 las - 127 Others - 17

			Tribunal under Petroleum and Natural Gas Regulatory Board Act.				These are likely to be disposed off along with fresh appeals being filed during 2010-11. The above details are inclusive of cases under the Petroleum and Natural Gas Regulatory Board Act.				