



GOVERNMENT OF INDIA

OUTCOME BUDGET

OF

MINISTRY OF POWER

2007 – 2008

Executive Summary

- The Plan Outlay of the Ministry of Power for the year 2007-08 is Rs. 33153.26 crores which includes Internal Extra Budgetary Resources(IEBR) of CPSUs amounting to Rs.27,670.26 crore and Gross Budgetary Support(GBS) of Rs.5483 crore. The Net Non Plan outlay of the Ministry of Power for the year 2007-08 is Rs.69.19 crore.
- The Salient features of the performance during 2006-07 and projected Outcomes of 2007-08 are as under: -
 - **Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY)** - Till 9th February 2007, 28,241 villages have been electrified and 5,04,141 connections to BPL households have been released. The target for the year 2007-08 is for electrification of 40,000 un-electrified villages and offering electricity connections to around 40 lakhs BPL households.
 - **Accelerated Power Development & Reform Programme (APDRP) (State Plan)** - Till Dec.2006, AT&C Losses have been brought below 20% in 212 APDRP towns in the country of which 169 towns have brought AT&C losses below 15%. During the year 2007-08, around 50 more towns are expected to achieve AT&C losses below 20%.
 - **Generation**
Central Sector Electricity Generation is planned and implemented through the various organizations. The details along with their highlights are as under: -
 - (i) **NTPC**
In 2006-07 till February 2007, NTPC has added 710 MW thermal Generation capacity, comprising of 500 MW Unit 9 Vindhyachal TPS-III and 210 MW of Unchahar TPS-II projects. Commissioning of 1660 MW (Sipat-I 1x660 MW, Sipat-II 1x500 MW and Kahalgaon-II 1x500 MW) and 500 MW at Bhilai through joint venture with SAIL will be accomplished in 2007-08. The outlay will also result in substantial physical progress of the projects scheduled to be commissioned during the XI Plan period.
 - (ii) **NHPC**
In 2006-07 till February 2007 NHPC added 130 MW of Dulhasti Project. The capacity addition targeted by NHPC during the year 2007-08 is of 510 MW with the commissioning of Teesta-V project. The activities planned during the year 2007-08 include completion of residual works of Dulhasti Project. Further the construction activities of Teesta Low Dam

Project, Stage-III, Sewa Stage-II, Parbati Stage-II, Teesta Low Dam Project, Stage-IV, Uri Stage-II, Chamera-III, Nimo Bazgo, Subansiri (Lower), Parbati Stage-III & Chutak Project are expected to go in full swing.

(iii) **NEEPCO**

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

(iv) **THDC**

Although no capacity addition will be achieved in 2007-08, however substantial progress will be made for Koteshwar HEP. Further action towards construction of new projects of Tehri PSP and Vishnugad Pipalkoti HEP will also be taken. In 2006-07 THDC has added 750 MW of Tehri Project.

(v) **SJVNL**

During the year 2007-08 the construction activities of Rampur HEP and Luhri HEP will achieve considerable progress. Works being carried out at Nathpa Jhakhri HEP shall lead to greater availability of NJHPS for operation during high flood season.

(vi) **DVC**

Commercial operations of Meija Thermal Power Station Unit 5 and 6(2x 250 MW) will commence in 2007-08. In addition unit 7 & 8(2x250 MW) of Chandrapur Thermal Power Station(Extn.) will also get synchronized. The work on new projects of Koderma StageI, Durgapur Steel TPS, Raghunathpur TPS is also expected to start in the year 2007-08. Substantial progress will also be made in the Joint Venture Maithon RB Thermal Power Station.

➤ **Transmission**

Powergrid till February 2007, has commissioned 3221 circuit Km. of transmission line and achieved 4095 MVA of transformation capacity addition. The overall outcome in the year 2007-08 would be commissioning of 7080 Circuit Kms of transmission lines involving 12405 MVA of transformation capacity. In addition projects involving about 20,000 ckms. & 12000 MVA of transformation capacity are under various stages of implementation and work on these shall go on in full swing for completion progressively from 2008-09 onwards.

- **Monitoring Mechanism**

An intensified monitoring mechanism has been put in place in the Ministry of Power as indicated hereunder :-

- Weekly review by Secretary (P) of the status of investment approval of new projects. Constant follow-up with Finance Ministry and Planning Commission is taken up to expedite the same so as to ensure approval of the Competent Authority and thereby utilization of budgeted expenditure.
- Monthly review by Chairman, CEA of all projects.
- Three-stage approval process of Hydro Projects to ensure adequacy of Survey & Investigation, creation of all essential infrastructure required for commencement of construction before accord of final approval by the CCEA.
- Comprehensive quarterly review by Secretary (P) of status of all ongoing and new projects.
- Periodical reviews with States on Capacity addition/APDRP/Village electrification
- Periodic Inter-ministerial coordination meetings with Ministry of Petroleum & Natural Gas; Ministry of Coal; Ministry of Environment & Forest; Ministry of Water Resources for expeditious clearances for the projects.
- Periodic reviews with Private projects developers
- Periodic visits to States- Comprehensive individual review with the State Governments
- Periodic project visits

- **Public Information System**

Outcome Budget has been posted on the website of the Ministry of Power. Quarterly achievement against the Projected Outcomes will be posted on the Website of the Ministry of Power to disseminate information about the performance every quarter against projected outcome.

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MINISTRY OF POWER

Chapter – I

INTRODUCTION

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

- i) General Policy in the electric power sector and issues relating to energy policy. (Details of short, medium and long-term policies in terms of formulation, acceptance, implementation and review of such policies, cutting across sectors, fuels regions and cross country flows).
- ii) All matters relating to hydroelectric power (except small/mini/micro hydel projects of and below 25 MW capacities) and thermal power and transmission system network.
- iii) Research, development and technical assistance relating to hydro-electric and thermal power and transmission system network.
- iv) Administration of the Electricity Act, 2003 (34 of 2003) the Damodar Valley Corporation Act, 1948 (14 of 1948) and Bhakra Beas Management Board as provided in Punjab Re-organization Act, 1966 (31 of 1966)
- v) All matters relating to Central Electricity Authority and Central Electricity Regulatory Commission.
- vi) Rural Electrification, Power Schemes in Union Territories and issues relating to power supply in the States and Union Territories.
- vii) Administrative control of Public Sector Undertakings, Statutory and Autonomous Bodies functioning under the Ministry.
- viii) Other Public Sector Enterprises concerned with the subject included under this Ministry except such projects as are specifically allotted to any other Ministry or Department.
- ix) All matters concerning energy conservation and energy efficiency pertaining to Power Sector.

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2. Shri SushilKumar Shinde joined as Minister of Power w.e.f. 30.01.06. Shri Anil Razdan is the Secretary of Ministry of Power since 1st February 2007. There are five Joint Secretaries including one Financial Adviser.

3. Various functions and activities of the Ministry under the charge of Joint Secretaries have been grouped as follows: -

- i) Thermal (NTPC & Damodar Valley Corporation), Operation Monitoring, Energy Conservation (Bureau of Energy Efficiency), Training & Research (Central Power Research Institute & National Power Training Institute) and Official Language;
- ii) Transmission (Power Grid Corporation of India Ltd.), Power Trading Corporation, International Cooperation, Reforms & Restructuring and Coordination;
- iii) Hydro (National Hydro Power Corporation, Tehri Hydro Development Corporation, Bhakra Beas Management Board, North-Eastern Electric Power Corporation & Satluj Jal Vidyut Nigam Limited), IPC, Policy & Planning and Vigilance & Security;
- iv) All Financial Matters.
- v) Rural Electrification (RE), Distribution (APDRP), Rural electrification Corporation, Power Finance Corporation, Information Technology and Administration.

4. Apart from the above groups, there is a Principal Accounts Office of the Ministry headed by the Controller of Accounts who reports and works under the supervision of the Financial Adviser in the Ministry of Power.

5. In all technical matters, Ministry of Power is assisted by the Central Electricity Authority (CEA). The CEA is responsible for overall planning and technical coordination as well as supervision of various standards/programmes of entire electricity sector of the whole country. The functions and duties of the Authority are delineated under Section 73 of the Electricity Act, 2003. Besides, CEA has to discharge various other functions as well under Section 3, 7, 8, 53, 55 and 177 of the Act. CEA is headed by a Chairperson who oversees largely the development of Power Sector in the country. Presently, there are six (6) wings namely Planning, Hydro, Thermal, Grid Operation & Distribution, Economic & Commercial and Power System each headed by a Member of the Authority. There are fourteen (14) subordinate outfits of CEA located in various parts of the country.

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

a) STATUTORY BODIES (Non-Commercial) :

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 25th July 1998 under the 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.

Appellate Tribunal for Energy (ATE), New Delhi

By virtue of Section 110 of Electricity Act, 2003, 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 Act of 2003. The Tribunal also has original jurisdiction to hear petitions under Section 121 and of the Act. This Tribunal has been established by the Central Government i.e. Ministry of Power, Govt. of India w.e.f. 7th April, 2004 notified vide S.O. 478 (E). Delhi is the headquarters of the Tribunal. The Appellate Tribunal consists of a Chairperson, one Judicial Member and two Technical Members. Every Bench constituted by the Chairperson includes at least one Judicial Member and one Technical Member.

Bureau of Energy Efficiency, (BEE), New Delhi

The Mission of Bureau of Energy Efficiency (BEE) is to develop policy and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act (EC Act), 2001 with the primary objective of reducing energy intensity of the Indian economy. BEE co-ordinates with designated consumers, designated agencies and other organizations; recognizes, identifies and utilizes the existing resources and infrastructure, in performing the functions assigned to it under the EC Act. The EC Act provides for regulatory and promotional functions.

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b) STATUTORY BODIES (Commercial) :

Damodar Valley Corporation (DVC), Calcutta

Damodar Valley Corporation, the first major Multipurpose 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 the 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 through respective State Electricity Boards. However, other mandated objectives also received due importance as part of DVC's overall responsibilities and commitment. This emphasis on power aspect gained more importance since last two-three years when Ministry of Power, Government of India started advocating for setting up of thermal power plants at or near pit heads and transmit power rather than transporting coal and advised DVC to work towards adequate capacity addition during Eleventh Plan in order to meet the power vision 2012 of Government of India.

Bhakra Beas Management Board (BBMB), Chandigarh

Bhakra Management Board (BMB) was constituted under Section 79 of the Punjab Re-Organisation Act, 1966 for the administration, maintenance and operation of Bhakra Nangal Project w.e.f. 1st October, 1967. BBMB is statutory body under the supervision of Government of India. However, Government of India does not have any financial stake in this Body. 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) w.e.f. 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 Houses and a network of transmission lines and grid sub-stations. The functions of Bhakra Beas Management Board include regulation 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 set up 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

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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 31.03.2006 The authorized share capital of NTPC is Rs.10,000 crores and paid up capital is 8245.50 crores. The Corporation is at present engaged in operating thirteen (13) coal based power projects and seven (7) gas based power projects. Out of the total approved capacity of 32405 MW, NTPC has as on 31st March 2006, commissioned 23935 MW.

Powergrid Corporation Of India Limited (PGCIL)

Power Grid Corporation of India Limited (POWERGRID) was incorporated as a Government of India enterprise on 23rd October, 1989 under the Companies Act, 1956 with an authorized share capital of Rs.5,000 crore and paid up capital as on 31.03.2006 is Rs.3623.44crores. 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”. POWERGRID, the Central Transmission Utility (CTU) of the country and one of the largest transmission utilities in the world, is playing a strategic role in the Indian Power Sector and is considered as the nerve center of Power Sector. As on Dec., 2006, POWERGRID is operating more than 58,000 ckt km of transmission lines and 99 Sub-stations having transformation capacity of more than 58,500 MVA. The transmission system availability is maintained consistently more than 99% by deploying best Operation and Maintenance practices at par with international utilities. Further, there has been no major grid disturbance in the country during last three years.

National Hydro Electric Power Corporation (NHPC)

National Hydro-electric Power Corporation (NHPC) 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 Rs.15,000 crore and paid up capital as on 31.03.2006 is Rs. 10215.28 crores with an investment base of more than Rs.24,600 crore as on 31.09.2006. NHPC was set up in 1975, and has now become the largest organization for hydro power development in India, with capabilities to undertake all the activities from conceptualization to commissioning of Hydro Projects. The main objects of NHPC include, planning, promoting and organizing an integrated and efficient development of hydroelectric, wind, tidal, geothermal and gas power in all aspects, and transmission, distribution and sale of power generated at power stations.

North Eastern Electric Power Corporation (NEEPCO)

North Eastern Electric Corporation Ltd. (NEEPCO) was constituted in 1976 under the Indian Companies Act, 1956 with the objective of developing the power potential of the North Eastern Region of the country through planned development of power generation projects, which in turn would effectively promote the development of the North Eastern Region. Since then NEEPCO has grown into one of the pioneer Public Sector Undertaking under the Ministry of Power, Govt. of India, with an authorized share

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capital of Rs.3,500 Crs., paid up capital as on 31.03.2006 is Rs.2197.60 crores. NEEPCO is having an installed capacity of 1,130 MW (755 MW hydro & 375 MW thermal) as on 31.12.2006, which meets more than 60% of the energy requirements of the North Eastern (N.E.) 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 power resources of the North Eastern Region.

Rural Electrification Corporation (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 Rs.1200 crore and the Paid-up Capital as on 31.03.2006 stood at Rs.780.60 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 energization, rural households electrification and other related works in rural & urban areas. REC has 17 nos. of Project Offices spread all over the country. Cumulative achievements up to 31.12.2006 with regard to village electrification, Dalit Bastis and Pumpsets energisation under the projects financed by REC are 3.22 lakhs, 1.84 lakhs and 86.88 lakhs respectively.

Power Finance Corporation (PFC)

Power Finance Corporation Limited (PFC) was set-up in July 1986, under the Companies Act to serve the Power Sector exclusively, under the administrative control of the Ministry of Power. PFC was registered as a Non-Banking Finance Company (NBFC) with the Reserve Bank of India in February 1998. PFC is also notified as a Public Financial Institution (PFI) under Section-4(A) of the Companies Act 1956. The authorized share capital of the Corporation is Rs.2000 crores and paid up capital as on 31.12.2006 is Rs.1030.45 crores. Apart from extending financial assistance/ guarantees to power utilities, the Corporation is also playing a crucial role in the institutional development of its borrowers.

d) JOINT VENTURE CORPORATIONS

Tehri Hydro Development Corporation (THDC)

THDC, a Joint Venture Corporation of the Govt. of India and Govt. of U.P., was incorporated as a Limited Company under the Companies Act, 1956, in July '88 to develop, operate and maintain the Tehri Hydro Power Complex and other Hydro Projects. THDC is presently responsible for the implementation of the Tehri Hydro Power Complex (2400 MW), VishnuGad Pipalkoti Project (440 MW) and six other new Hydro

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Electric Projects, with total installed capacity of 695 MW. The Corporation has an authorised share capital of Rs.4000 crores and paid up share capital as on 31.12.2006 is Rs.3050.32 crores. The cost of the Tehri Hydro Power Complex being shared in the ratio of 75:25 (equity portion) by Govt. of India & Govt. of U.P. for Power Component, while the Irrigation Component is being entirely funded by the Govt. of U.P.

Satluj Jal Vidyut Nigam (SJVN)

The **Satluj Jal Vidyut Nigam Limited – SJVN** (formerly Nathpa Jhakri Power Corporation Limited - NJPC) was incorporated on May 24, 1988 as a joint venture of the Government of India (GOI) and the Government of Himachal Pradesh (GOHP) to plan, investigate, organize, execute, operate and maintain Hydro-electric power projects in the river Satluj basin in the state of Himachal Pradesh. The present authorized share capital of SJVN is Rs 4500 crores and paid up share capital as on 31.03.2006 is Rs.4108.81 crores. The debt equity ratio for the Nathpa Jhakri Hydro – Electric Project (NJHEP) is 1: 1 and the equity-sharing ratio of GOI and GOHP is 3:1 respectively. In addition to the financial assistance from the World Bank, SJVN has also been financed loan by a Consortium of European Banks and the Power Finance Corporation (PFC). Nathpa Jhakri Hydro Electric Power Project, the largest underground hydroelectric project was commissioned on 18.05.2004 and has generated already 15795.255 MU up to January 11, 2007. Consequent upon the commissioning of prestigious 1500 MW Nathpa Jhakri Hydro Electric Project, the efforts of SJVN is to become a Multiproject Organization and it allocated the projects of Rampur HEP (412 MW), Luhri HEP (776 MW) and Khab HEP(1020 MW) in the State of Himachal Pradesh and Devsari Dam(300 MW), Jakhol- Sankari(33MW) and Naitwar-Mori (33MW) HEPs in Uttaranchal.

e) AUTONOMOUS BODIES:

National Power Training Institute (NPTI)

National Power Training Institute (NPTI), An ISO 9001 & ISO 14001 organization, is a National Apex body for Training and Human Resources Development in Power Sector with its Corporate Office at Faridabad. NPTI operates on an all India basis through its Units in different power zones of the country located at Faridabad, Neyveli, Durgapur , Badarpur, New Delhi, Nagpur, Centre for Advanced Management and Power Studies (CAMPS), Faridabad , North-Eastern Regional Institute, Guwahati , Power Systems Training Institute (PSTI), Bangalore, Hot Line Training Centre (HLTC) also at Bangalore and Hydro Power Training Institute (HPTI) Nangal. NPTI has shared its engineering and technology expertise with more than 80,000 Power Professionals at various levels besides over 60,000 persons in its mass education programs on Energy Conservation, Power Reforms etc. Duly recognized by the Central Electricity Authority, NPTI serves as a National Certification Authority for the purpose of certification of competence to ensure availability of properly trained personnel to man the Indian Electricity Industry.

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Central Power Research Institute (CPRI)

The Central Power Research Institute (CPRI) was established in Bangalore by the Government of India in 1960. It became an Autonomous Society in the year 1978 under the aegis of the Ministry of Power, Government of India. The main objective of setting up of the Institute was to serve as a National Laboratory for undertaking applied research in electric power engineering besides functioning as an independent National Testing and Certification Authority for electrical equipment and components to ensure reliability and improve, innovate and develop new products. The Institute is headed by a Director General and has several research laboratories and testing facilities and employ about 221 qualified Scientists and Engineers besides other supporting staff. The Head Office of the Institute is at Bangalore and its other units are located at Bhopal, Hyderabad, Nagpur, Ghaziabad and Thiruvananthapuram.

Programmes and Schemes Implemented by the Ministry

1. **Secretariat:** This scheme takes care of Establishment matters for the Secretariat of the Ministry of Power. Ministry of Power has 13 schemes under its administrative supervision as explained hereafter.
2. **Central Electricity Authority:** Provision under the scheme is made to the Central Electricity Authority coordinating the activities of the various agencies in relation to control and utilization of national power resources. It 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 and Development:** Scheme of Research and Development is implemented through for Central Power Research Institute, Bangalore. CPRI serves as a National Laboratory for applied research in the field of electrical power and also functions as an independent authority for testing evaluation and certification of electrical equipment and components.
4. **Training:** This scheme is intended to impart training in various aspects of power stations including operation and maintenance and is implemented through National Power Training Institute's training facilities in the country.
5. **Central Electricity Regulatory Commission:** Under the provision of the ERC Act, 1998, the Central Government has constituted the Central Electricity Regulatory Commission (CERC). The Central Commission is a statutory body with a quasi judicial status. The new Electricity Act, 2003 has come into force with effect from 10th June, 2003. The provision for the scheme is made for incurring expenditure on establishment of CERC and other related costs.

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6. Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY)

This scheme of rural Electricity Infrastructure and Household Electrification has been introduced in April, 2005 for achieving the National Common Minimum Programme objective of providing access to electricity to all rural households over a period of four years. As per Census 2001 only 44% of the rural households have access to electricity. Improvement of rural electricity infrastructure is essential to empower rural India and unleash its full growth potential. Rural Electrification Corporation (REC) is the nodal agency for the programme. Under the scheme, projects can be financed with 90% capital subsidy for provision of Rural Electricity Distribution Backbone (REDB), Creation of Village Electrification Infrastructure (VEI) and Decentralised Distributed Generation (DDG) and Supply. REDB, VEI and DDG would also cater to the requirement of agriculture and other activities including irrigation pumpsets, small and medium industries, khadi and village industries, cold-chains, healthcare, education and IT. Under this scheme un-electrified below poverty line (BPL) households electricity connection free of charge, as per norms of Kutir jyoti Programme in all rural habitations.

7. Accelerated Power Distribution Reform Programme During XI Plan (Under Proposal for Restructuring)

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

8. Consultancy Charges for APDRP Projects: The scheme provides for appointment of Advisor-cum –Consultants under APDRP for studying the utility and effectiveness of APDRP scheme. The scheme is meant for reduction of T&D losses, improvement in billing and revenue realization that require adoption of new technologies in the areas of IT, consumer indexing, GIS mapping, SCADA/DMS, etc., for revival of distribution sector.

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

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

10. Funds for Evaluation Studies and Consultancy: Funds are proposed to be provided in a phased manner for evaluation of specific projects regarding upgradation & strengthening of sub-transmission & distribution network including energy accounting & metering in the distribution circles. It includes regular field visits to the cities/town and circles.

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

12. Comprehensive Award Scheme; The scheme for awarding shields / certificate is introduced by the Ministry of Power for outstanding performance of the Thermal Power Stations and Utilities.

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

14. Energy Conservation Related Activities: Provision under the scheme would be utilized for carrying out the Energy Conservation related activities i.e National level awareness campaign, National Energy Conservation awards and National level painting competition for school children.

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

Chapter II

Outcome Budget 2007-08

Outcome focused budgeting has been introduced as a tool to improve the quality and accountability of Government's expenditure programmes. This is to ensure that we get better value for money we spend.

The Plan Outlay of the Ministry of Power is Rs.33153,26 crores and in addition to this Rs.411.19 crores of Non-Plan. The details are given below: -

Annual Plan 2007-08

(Rs. in crores)

		INTERNAL & EXTRA BUDGETARY RESOURCES (IEBR)						
SL. NO.	ORGANISATION / SCHEMES	INTERNAL RESOURCES	BONDS/DEB ENTURES	ECB/ SUPPLIER CREDIT	OTHERS	TOTAL (IEBR)	GBS	TOTAL PLAN OUTLAY
1	2	3	4	5	6	7	8	9
A. CENTRAL PLAN								
1.	N.T.P.C.	4998.00	5279.00	2515.00	0.00	12792.00	0.00	12792.00
2.	N.H.P.C.	740.99	1730.61	29.35	0.00	2500.95	1.00	2501.95
3.	POWERGRID	1104.00	3802.00	1594.00	0.00	6500.00	0.00	6500.00
4.	D.V.C.	1733.14	500.00	0.00	2038.24	4271.38	0.00	4271.38
5.	T.H.D.C.	6.34	0.00	0.00	404.56	410.90	10.00	420.90
6.	S.J.V.N.	220.07	0.00	0.00	422.73	642.80	0.00	642.80
7.	NEEPCO	11.35	0.00	2.35	538.53	552.23	706.47	1258.70
8.	MOP(OTHER)	0.00	0.00	0.00	0.00	0.00	4765.53	4765.53
	A.TOTAL CENTRAL PLAN	8813.89	11311.61	4140.70	3404.06	27670.26	5483.00	33153.26

B. MOP SCHEMES							
Rural Electrification Scheme	0.00	0.00	0.00	0.00	0.00	3983.00	3983.00
N.P.T.I. (Training & HR)	0.00	0.00	0.00	0.00	0.00	28.13	28.13
C.P.R.I. (Research & Testing)	0.00	0.00	0.00	0.00	0.00	67.81	67.81
Programme & Infrastructure improvement of CEA	0.00	0.00	0.00	0.00	0.00	78.65	78.65
Consultancy charges for APDRP Projects	0.00	0.00	0.00	0.00	0.00	217.50	217.50
Scheme for Equity Gap Funding	0.00	0.00	0.00	0.00	0.00	289.49	289.49
Bureau of Energy Efficiency	0.00	0.00	0.00	0.00	0.00	69.40	69.40
Other MOP Schemes	0.00	0.00	0.00	0.00	0.00	31.55	31.55
Total -B	0.00	0.00	0.00	0.00	0.00	4765.53	4765.53
GRAND TOTAL	8813.89	11311.61	4140.70	3404.06	27670.26	5483.00	33153.26

NON PLAN 2007-08

(Rs. in crores)

Sr.No.	ORGANISATION/ SCHEMES	Non Plan Budget
1.	B.T.P.S.	342.00
2.	MOP Secretariat	12.10
3.	CERC	6.40
4.	NPTI	2.00
5.	Appellate Tribunal for Electricity	5.00
6.	Central Electricity Authority	40.87
7.	Setting Up for JERC for UTs except Delhi	2.82
	Grand Total	411.19

For the above Plan Outlay, the outcome have been divided broadly into the following categories on which allocation of resources are made by the Ministry to its various CPSUs and other units either from the Budget or from the internal resources and borrowings of each of the concerned entity :-

- (a) Rural Electrification / Rajiv Gandhi Grameen Viduytikaran Yojana
- (b) Accelerated Power Development Reform Programme
- (c) Generation Scheme & Programmes
 - i) NTPC
 - ii) NHPC

- iii) NEEPCO
- iv) DVC
- v) SJVNL
- vi) THDC
- (d) Creation of Transmission Network by Powergrid.
- (e) Energy Efficiency
 - (i) Bureau of Energy Efficiency
 - (ii) Energy Conservation Schemes of MOP
- (f) Research & Testing by CPRI
- (f) Training and skill improvement by NPTI
- (g) Capacity Building and Programme Assessment
 - (i) Ministry of Power Secretariat
 - (ii) Central Electricity Authority

While the outcomes for each of the above categories in detail have been tabulated ahead, some of the major highlights are: -

- **Rajiv Gandhi Gramin Vidyutikaran Yojana (RGGVY)** - Rajiv Gandhi Gramin Vidyutikaran Yojana is major Village Electrification Scheme of the Government of India for attainment of the National Common Minimum Programme of providing access to electricity to all Rural Households in four years. The target for the year 2007-08 is for electrification of 40,000 un-electrified villages and offering electricity connections to around 40 lakhs BPL households.
- **Accelerated Power Development & Reform Programme (APDRP) (State Plan)** - The scheme promotes distribution reforms to bring about efficiency and commercial viability into Power Sector. During the year 2007-08, around 50 more towns are expected to achieve AT&C losses below 20%.
- **Generation**
Central Sector Electricity Generation is planned and implemented through the various organizations. The details ahead along with their highlights are as under: -

(i) **NTPC**

The outlay of Rs.12792 crores during 2007-08 would result in commissioning of 1660 MW (Sipat-I 1x660 MW, Sipat-II 1x500 MW and Kahalgaon-II 1x500 MW) and 500 MW at Bhilai through joint venture with SAIL. Thus, the total capacity addition by NTPC during 2007-08 will be 2160 MW. The outlay will also result in substantial physical progress of the projects scheduled to be commissioned during the XI Plan period.

(ii) **NHPC**

The capacity addition targeted by NHPC during the year 2007-08 is of 510 MW with the commissioning of Teesta-V project. The activities planned during the

year 2007-08 include completion of residual works of Dulhasti Project. Further the construction activities of Teesta Low Dam Project, Stage-III, Sewa Stage-II, Parbati Stage-II, Teesta Low Dam Project, Stage-IV, Uri Stage-II, Chamera-III, Nimo Bazgo, Subansiri (Lower), Parbati Stage-III & Chutak Project are expected to go in full swing. The work on new projects like Kishanganga, Kolibhel 1A, 1B & II, Vyasi Projects etc. is expected to start in the year 2007-08.

(iii) [NEEPCO](#)

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

(iv) [THDC](#)

Although no capacity addition will be achieved in 2007-08, however substantial progress will be made for Koteshwar HEP. Further action towards construction of new projects of Tehri PSP and Vishnugad Pipalkoti HEP will also be taken.

(v) [SJVN](#)

During the year 2007-08 the construction activities of Rampur HEP and Luhri HEP will achieve considerable progress. Works being carried out at Nathpa Jhakhri HEP shall lead to greater availability of NJHPS for operation during high flood season.

(vi) [DVC](#)

The outlay of Rs.4271.38 crore during 2007-08 would result in commercial operations of Meija Thermal Power Station Unit 5 and 6(2x 250 MW). In addition unit 7 & 8(2x250 MW) of Chandrapur Thermal Power Station(Extn.) will also get synchronized. The work on new projects of Koderma StageI, Durgapur Steel TPS, Raghunathpur TPS is also expected to start in the year 2007-08. In addition works on replacement /extension projects of Bokaro 'A' TPS and Meija Phase II will gather momentum. Substantial progress will also be made in the Joint Venture Maithon RB Thermal Power Station.

- **Transmission**

The overall outcome in the year 2007-08 considering IEBC of Rs.6500 crores of Powergrid would be commissioning of 7080 Ckms. of transmission lines involving 12405 MVA of transformation capacity. In addition projects involving about 20,000 ckms. & 12000 MVA of transformation capacity are under various stages of implementation and work on these shall go on in full swing for completion progressively from 2008-09 onwards.

OUTCOME BUDGET 2007-08
Rajiv Gandhi Grameen Vidhyutikaran Yojana (RGGVY)

(Rs. in crore)

Sr. No	Name of Scheme/ Programme	Objective /Outcome	Outlay 2007-08			Quantifiable Deliverables/ Physical Outputs (2007-08)	Processes/ Timelines	Projected Outcomes	Remarks/Risk Factors
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4 (iii)	5	6	7	8
1.	Rajiv Gandhi Grameen Vidhyutikaran Yojana (RGGVY)	Electrifying all villages and providing access to electricity all rural households in four years		Rs.3983 crore		Electrification of 40,000 unelectrified Villages and offering electricity connections to around 40 lakhs BPL households	Over a period of 4 years, the scheme will electrify one lakh villages and will provide access to electricity to 7.8 crore rural households	Will facilitate overall rural development, employment generation and poverty alleviation	The target can be fulfilled subject to the availability of total subsidy of Rs.8500 crore required for electrification of 40,000 villages including the provision of Rs. 3983 crore and also the approval of CCEA for continuation of the scheme and enhancement of funds.

OUTCOME BUDGET 2007-08 (Under Demand No. 35 of Min. of Finance)

	Name of scheme/ Programme	Objective outcome	Outlay 2007-08			Quantifiable Deliverable/Physical Output (2007-08)	Projected Outcomes	Process/ Timelines	Remark/ Risk factor
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
	APDRP (Addl. Central Assistance to States)	Carrying out distribution reforms through APDRP scheme to bring about efficiency and commercial viability into Power sector	-	800 Crore	Utilities have to arrange counterpart fund from Financial Institutions/own resources to the tune of 75% of project cost. (Special category states to arrange 10% of project cost)	To complete ongoing projects under investment component for reduction of AT&C loss in urban areas and to release incentive for cash loss reduction by state power utilities	Reduction of AT&C loss in the project areas covered under the programme	Majority of the ongoing projects to be completed by March 2008	The completion of the ongoing schemes will depend on smooth & timely implementation by State Utilities

OUTCOME BUDGET 2007-08

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2007-08			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)	Carrying out distribution reforms through APDRP schemes to bring about efficiency and commercial viability into power sector.	-	A token provision of Rs. 1.00 Cr. has been made. The same will be revised at RE stage to reflect the decision of the Cabinet.	The scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised. The funding pattern of the scheme will be known only after the approval of the scheme.	Reduction of Aggregate Technical and Commercial (AT&C) losses through strengthening & up gradation of Sub-Transmission and Distribution network and adoption of Information Technology in the areas of energy accounting & auditing.	The scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised. The projected outcomes are reduction of Aggregate Technical and Commercial (AT&C) losses through strengthening & up gradation of Sub-Transmission and Distribution network and adoption of Information Technology in the areas of energy accounting & auditing. However, the deliverables/ physical outputs	The scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised.	The scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised.

							in a quantifiable manner will be known only after the approval of the scheme.		
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CONSULTANCY CHARGES FOR APDRP PROJECTS

OUTCOME BUDGET 2007-08

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2007-08			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				
	Consultancy Charges and enabling activities for APDRP projects.	For validation of base line data and other enabling activities relating to revised APDRP scheme	-	217.50 Cr.	-	To validate the base line data and to undertake other enabling activities for implementation of the revised Accelerated Power Development and Reforms Programme (APDRP) scheme during the 11 th Five Year Plan.	The APDRP scheme is being restructured for implementation during the 11 th Five Year Plan and is yet to be finalised. The projected outcomes will be known after the approval of the scheme.	The APDRP scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised.	The APDRP scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised.

FUNDS FOR EVALUATION STUDIES AND CONSULTANCY

OUTCOME BUDGET 2007-08

S. No	Name of the Scheme/ Programme	Objective/ outcome	Outlay 2007-08			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				
	Funds for evaluation studies and consultancy	Evaluation of the projects sanctioned under revised APDRP scheme	-	Rs. 0.40 cr.	-	The evaluation of APDRP will bring out whether the programme is being implemented properly, desired results beings achieved or not and suggesting changes in the programme for achieving the desired results	The APDRP scheme is being restructured for implementation during the 11 th Five Year Plan and is yet to be finalised. The projected outcomes will be known after the approval of the scheme.	The APDRP scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised.	The APDRP scheme is being restructured during the 11 th Five Year Plan and is yet to be finalised.

OUTCOME BUDGET 2007-08
FutureGen Project

S.No.	Name of scheme/ programme/ project	Objective / Outcome	Outlay 2006-07			Quantifiable Deliverables/Physical Outputs	Processes/ Timelines	Projected Outcomes (date of completion of the project)	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				
10.	FutureGen Project initiative by the USA	To design, build and operate the first coal-fired emission-free power plant. This basically is a research project which will benefit the Indian power sector experts/scientists	Nil	Rs.10 crores	Nil	Participating in the Government Steering Committee meetings of the Project/Site visits.	March 2008	2015	It is a research project in which India is contributing about 1% of the cost.

OUTCOME BUDGET 2007-08

Sl. No.	Name of Scheme/ Programme/ Projects	Sanctioned cost/ Cumulative expenditure from beginning till 31.12.2006	Objective/ Outcome:	Outlay 2007-2008			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Projected outcomes	Remarks/ Risk Factor
1.	2.	3.		4.			5.	6.	7.	8.
		3(i)	3 (ii)	4(i)	4(ii)	4(iii)				
				Non-Plan Budget (Amount Rs/lacs)	Plan Budget (Amount Rs/lacs)	Complementary Extra-Budgetary Resources				
13	Joint Electricity Regulatory Commission (JERC) for Union Territories except Delhi	Sanctioned Cost : Not Applicable Cumulative expenditure : Nil	To meet the statutory requirement for setting up Electricity Regulatory Commission	282	Nil	Nil	The Commission would regulate tariff for supply of electricity in UTs resulting in efficiency improvements.	This will be a permanent institution.	Chairperson/ Member of the Commission will be appointed and the Commission would be operationalised.	The Cabinet, in its meeting held on 21.12.2006, has approved creation of one post each of Chairperson, Member and Secretary in the JERC. Deptt of Expenditure has also approved creation of 13 additional posts. Action for selection to the posts of Chairperson and Member has been initiated.
14	Joint Electricity Regulatory Commission (JERC) for Manipur and Mizoram	Sanctioned Cost : Rs.6.60 crore Cumulative expenditure : Nil	To fulfill the commitment of the Government of India for assisting the States fo North-Eastern region in the initial 5 years in setting of Commission. It would help in regulating tariff for supply of electricity in the States of Manipur & Mizoram	Nil	150	Nil	The Commission would regulate tariff for supply of electricity in UTs resulting in efficiency improvements.	Government of India will meet the expenditure during the initial 5 years from the date of constitution thereafter Government of the two States will share the cost.	Chairperson/ Member of the Commission will be appointed and the Commission would be operationalised.	The proposal for providing financial assistance by the Central Govt for operationalising the Joint Commission has been approved and necessary orders issued. The Selection Committee for selecting the Chairperson/ Member of the JERC has been constituted by the Central Government, under the chairmanship of Justice H.K.K. Singh, a retired Judge of the Guwahati High Court, in accordance with provisions of the Memorandum of Agreement (MoA) signed by the Participating States i.e. Manipur and Mizoram with Ministry of Power. A reference has been made to the Selection Committee for recommending a panel each of two persons for the posts of Chairperson and Member. Chief Secretary, Govt of Mizoram is the Member-

										Convenor of the Selection Committee. The Committee is going to meet shortly for recommending the persons for appointment to the posts of Chairperson and Member.
15	Appellate Tribunal for Electricity (ATE)	Sanctioned Cost: Not applicable Expenditure from 1.4.2006 to 31.12.2006 : Rs.221.38 lakhs	To facilitate expeditious resolution of disputes in the power sector at the appellate level. The Tribunal will also function as appellate authority under Petroleum and Natural Gas Regulatory Board Act.	500	Nil	Nil	Total appeals filed and pending final disposal as on 1st January, 2007 are 193 Judgements in respect of 31 cases have been reserved. 162 appeals are pending at hearing level. These are likely to be disposed off along with fresh appeals being filed during 2007-08. Apart from the above, appeals, petitions, etc. under the Petroleum and Natural Gas Regulatory Board Act will also be heard.		Spread throughout the year	
16	Central Electricity Regulatory Commission (CERC)	Sanctioned Cost: Not applicable Expenditure from 1.4.2006 to 31.12.2006: Rs.507.63 Lakhs	Following are the objectives of CERC:- <ul style="list-style-type: none"> To improve the operations and management of the regional transmission systems. To formulate an efficient tariff setting mechanism To facilitate open access in inter-State transmission To facilitate inter-State trading To promote development of power market To improve access to information for all 	640	Nil	Nil	100 petitions are likely to be disposed during the year 2007-08. The petitions include the tariff petitions for the Tariff Period 2004-09, miscellaneous applications etc. Facilitating setting up and operationalisation of a Power Exchange. It is targeted to set up the Exchange in 2007.	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 issues highlighted in column-5. The targets as indicated in column-5 are expected to be achieved during	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. Power exchange will facilitate the buyers and sellers to have a common platform for purchase and sale of electricity. The power exchange would result in better resources optimization,	As per the past trend, 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, for instance in the evolution of the concept of power exchange wherein wide consultation with the stake holders is required.

			<p>stakeholders</p> <ul style="list-style-type: none"> To facilitate technological and institutional changes for the development of competitive markets. 				<p>Issue of Regulation on Terms & Conditions for inter-State Transmission Licence.</p> <p>Development of framework for National transmission Tariff</p>	the year 2007-08	<p>generate strong investment signal and make power trading transparent and efficient.</p> <p>Issue of Terms & Conditions of inter-State Transmission Licence will bring in greater certainty and clarity for the prospective transmission licensees</p> <p>This would promote effective utilization of assets across the country and accelerated development of the new transmission capacities.</p>	
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**MINISTRY OF POWER SCHEME
OUTCOME BUDGET 2007-08**

(Rs.in lakhs)

S.No	Name of scheme/ programme/ project	Sanctioned Cost/Quantitative expenditure from beginning till 31.12.2006	Objective / Outcome	Outlay 2006-07			Quantifiable Deliverables/ Physical Outputs	Processes / Timelines	Projected Outcomes (date of completion of the project)	Remarks/ Risk Factors
1	2	3	4	5			6	7	8	9
				4(i)	4(ii)	4(iii)				
				Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
11.	Assistance to Forum of Regulators for Capacity Building and Consultancy	Sanctioned Cost : Rs.10 crores (to be approved) Expenditure from 01.04.2006 to 31.12.2006 : NIL	1.Capacity building by way of training/reorientation of personnel of Regulatory Commissions 2. Enabling the Forum to engage necessary consultancy support for discharge of various obligations assigned to it in the Tariff Policy.		200	Nil	50 regulators and 100 staff will be trained in a year	These funds will be spent during the 11 th Plan period	These funds will be spent during the 11 th Plan period	1. Regulatory Commissions will have trained personnel. 2. Implementation of provisions of Tariff Policy.

CENTRAL POWER RESEARCH INSTITUTE

Sl N o.	Name of Scheme	Objective/ Outcome/ Sanctioned Cost/ Cumulative Expenditure(till 31.12.2006)	Outlay 2007-08 Rs. In lakhs			Quantifiable Deliverables	Process/ Timelines	Projected Outcomes/ Date of completion of project	Remarks/ Risk factors
			Non Plan Budget	Plan Budget	CEBR				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
1	Plan R&D	Inhouse R&D plan of CPRI aimed at product/ process development, augmentation of test facilities, improvement of standards etc.		300.00		<ul style="list-style-type: none"> ➤ Contribution to improvement of standards ➤ Establishment of test facilities ➤ Development of products/processes 	April 2007 – March 2008	Continuous	Nil
2	RSoP Schemes	Ministry of Power sponsored programmes on Research for Indian Power Sector		200.00		<ul style="list-style-type: none"> ➤ Study of power sector problems by utilities & Industry 	April 2007 – March 2008	Continuous	Nil
3	Capacitor Current Switching Facility at STDS, Bhopal	<p>To meet new requirements of National & International Standards by switchgear and transformer manufacturers call for augmentation and upgradation of existing facility of the following three areas:</p> <ul style="list-style-type: none"> ➤ Capacitive current interruption for MV Switchgear, which helps us in study of behaviour of interruptive currents upto 400Amps. ➤ Transformer loss and impedance measurement at 50Hz and ➤ EMI / EMC test upgradation for Energy meters 				<ul style="list-style-type: none"> ➤ Pre-commissioning tests and commissioning of the project 	April 2007	April 2007	Nil
4	National & International accreditation of CPRI laboratories	Accreditation for laboratories of CPRI from National Accreditation Board of laboratories, IEECEECB, STL & ASTA. Improvement of client		44.00		Renovation of Customer Reception Centre STL – Calibration with STL shunt &	April 2007 – March 2008	Aug 2008	Nil

		related services				participation in STL meetings ASTA- Coverage of CPRI Labs at Bangalore and Hyderabad under ASTA Accreditation. ASTA meets – Organise & participation CB- Accreditation of CPRI Laboratories for enhanced scope of accreditation ISO 9001: Certification of activities and Training of CPRI personnel.			
5	Comprehensive energy efficiency testing facilities for Refrigerators up to 300 Ltrs. and Air Conditioners (AC) upto 3TR to support the implementation programme & Standards of BEE”	The Indian Energy Conservation Act 2001(ECA) has made mandatory display of label on electrical equipment indicating the energy consumption and also developing testing and certification procedures & promote testing facilities. Towards meeting this requirement The BUREAU OF ENERGY EFFICIENCY was formulated by the Govt. of India in 2002 with a mission to institutionalize the energy efficiency services to enable delivery mechanisms in the country to provide leadership to energy efficiency in all energy intensive industry sectors of the country. CPRI being the only third party test house in the government sector to test & certify the		-		<ul style="list-style-type: none"> ➤ Completion of all Civil & Electrical works ➤ Commissioning of Air Conditioner Test facility 	April2007 – Nov2007	Nov 2007	Nil

		electrical equipment was requested to setup the necessary test & certification facilities for Refrigerators & Air conditioners. This proposal envisages to set up these facilities at Bangalore							
6	Establishment of Test facility for Eastern/North Eastern Region	<p>Under this proposal it is planned to create</p> <ul style="list-style-type: none"> • Dielectric tests facility and • Mobile transformer oil testing facility <p>To start with Diagnostics of Power/Distribution Transformers through oil tests is planned, which will help the power utility to maintain the transformers and also know the health of transformers. Some remedial action depends on the nature of fault also can be carried out. The Mobile laboratory so established would be able to cover vast area in West Bengal, Orissa, Bihar, Assam, Manipur, Meghalaya, Arunachal Pradesh etc. Approximately, 1500 Transformers could be monitored in one year. Later based on the demand and also the requirement of the power utility other facilities would be planned in a phased manner.</p>		-		➤ Commissioning of Regional Test facility at Guwahati and Mobile Van for testing Transformer Oil	April 2007 – Aug 2007	Aug 2007	Nil
7	Augmentation of Engineering Services for Plant Performance Monitoring and Improvement (PMI),	Keeping the various requirements of the Power Generation Sector, it was proposed to strengthen and consolidate the facility and capability for Plant Performance Monitoring &		-		➤ Commissioning of all equipments of augmentation of Plant Performance Monitoring and Improvement	April 2007 – July 2007	July 2007	Nil

	Renovation and Modernisation (R&M), and Life Extension (LE)	Improvement (PMI), Renovation & Modernisation and Life Extension (RM & LE) and through this CPRI will provide a more focused and meaningful service to the power plants.				(PMI), Renovation and Modernisation (R&M), and Life Extension (LE) schemes			
8	Augmentation & Modernisation of CPRI Laboratories	<p>Augmentation & Modernisation through facility addition for the laboratories</p> <p>In order to create good work environment in the laboratories, it is proposed to give a face lift to the laboratories for interiors, modernization of electrical works, installation of fire safety devices, providing air conditioning facility.</p> <ol style="list-style-type: none"> 1) Instrumentation Division 2) High Voltage Laboratory 3) Mechanical Engineering Division 2. Short Circuit Laboratory 3. Electrical Appliances & Technology Division 4. Diagnostics Cable & Capacitors Division 7) Dielectric Materials Division 8) Materials Technology Division 9) Library 		800.00		<ul style="list-style-type: none"> ➤ Procurement of equipments identified for Augmentation of the following laboratories: <ul style="list-style-type: none"> ➤ High Voltage Laboratory ➤ Mechanical Engineering Division ➤ Short Circuit Laboratory ➤ Switchgear Testing & Development Station, Bhopal ➤ Diagnostics Cable & Capacitors Division ➤ Dielectric Materials Division ➤ Continuation of building interiors works 	April 2007 – March 2008	Sept 2008	Nil
9	<p>Yet to be approved X plan Schemes</p> <ol style="list-style-type: none"> 1) Relocation of RTL 2) Online 			570.00		➤			Yet to be approved schemes

	Mobile Transfor mer test facility			1220.00					
	3) Upgradat ion of the static frequenc y converter for 1500 MVA Short Circuit Generato r at Bhopal			60.00					
	4) Rotor System with excitor for Motor of 2500 MVA Short Circuit Generato r			82.00					
10	XI plan schemes including National Perspective Plan schemes			3505.00		➤			New schemes to be proposed
	TOTAL			6781.00		➤			

MINISTRY OF POWER SCHEMES

Outcome Budget 2007-08

Sl. No.	Name of Scheme/ Progra-mme/ Project	Sanctioned Cost/Cumulative Expenditure from beginning till 31.12.2006	Objective/ Outcome	Outlay 2007-08			Quantifiable Deliverables/ Physical Outputs	Projected Outcomes	Processes/ Timelines	Remarks/ Risk Factors
				Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3(a)	(b)	4			5	6	7	8
				4(i)	4(ii)	4(iii)				
17.	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, environment performance, community development and safety records. However, the expected returns can not be quantified.		-	Rs.65 lakhs	-	Improvement in performance of generation, transmission and distribution segments.	To contribute in achieving reliable, affordable and quality power supply to all by 2012	-	-

MINISTRY OF POWER SCHEME
OUTCOME BUDGET 2007-08
BUREAU OF ENERGY EFFICIENCY (BEE)

(Rs. Crores)

S.No	Name of Scheme/ Prog	Objective/ Outcome	Outlay 2007-08			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks/ Risk Factors
			Non- Plan Budget	Plan Budget	Compleme ntary Extra- Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
8.	<u>BUREAU OF ENERGY EFFICIENCY (BEE)</u>					○	○		
(i)	Standards & Labeling Programme	To reduce end use consumption by applying standards/ labeling for equipments/ appliances	-	11.50	-	<ul style="list-style-type: none"> ○ Institutionalize check and challenge test process ○ Outreach to enhance label awareness ○ Regulation for mandatory labeling ○ Mandatory labels for Frost Free Refrigerator, Tubular fluorescent Lamps, ACs, Direct Cool Refrigerator ○ Voluntary label for Ceiling fans, CFL, Distribution Transformers 	<ul style="list-style-type: none"> ○ Enhancement of awareness about energy efficient products ○ Market transformation towards energy efficient products in the market 	Progressively from April 2007 to March 2008	Standards for CFL are subject to BIS timings of revision of standards. The expenditure is subject to approval of the scheme by Competent Authority.
(ii)	Energy Conservation Building Codes (ECBC)	To reduce energy consumption in commercial buildings.		2.00		<ul style="list-style-type: none"> • Initiate training and capacity building of architects/developers officials • Implement ECBC on voluntary basis • Review activities and work programme • Initiation of 5 pilots • Strengthening of labs 	<ul style="list-style-type: none"> • ECBC implementation on voluntary basis • Enhancing capacity and awareness of stakeholders 	Progressively from April 2007 to March 2008	The expenditure is subject to approval of the scheme by Competent Authority.

						<ul style="list-style-type: none"> • Outreach 			
(iii)	Energy Efficiency Programme in Buildings	To reduce energy consumption in commercial buildings-particularly government buildings		1.00		<ul style="list-style-type: none"> ➤ Promote new ESCOs ➤ Initiate 10 ESCO projects ➤ Disseminate information about ESCOs including performance contracts. 	<ul style="list-style-type: none"> ➤ Initiation of market transformation in favour of energy conservation by retrofits. ➤ Demand driven enhancement of capacity of ECSOs 	Progressively from April 2007 to March 2008	The expenditure is subject to approval of the scheme by Competent Authority.
(iv)	Demand Side Management (DSM)	To help Utilities manage peak load crisis better.		3.40		<ul style="list-style-type: none"> ➤ Draft National Policy and strategies ➤ Pilot projects CFL, Street lighting ➤ Case studies, best practices/ guidelines on regulatory orders to promote utility DSM and Municipality DSM ➤ Promote DSM projects in states/ municipalities 	<ul style="list-style-type: none"> ○ Engagement with ERCs to incentivise DSM ○ Awareness/ Outreach to electricity consumers 	Progressively from April 2007 to March 2008	The expenditure is subject to approval of the scheme by Competent Authority.

S.No	Name of Scheme/ Prog	Objective/ Outcome	Outlay 2007-08			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks/ Risk Factors
			Non- Plan Budget	Plan Budget	Compleme ntary Extra- Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
8.	<u>BUREAU OF ENERGY EFFICIENCY (BEE)</u>					○	○		
(v)	SDA Strengthening Programme	To empower the SDAs as partners of BEE at state level to implement EC Act.		22.50		<ul style="list-style-type: none"> ➤ Infrastructure/ manpower/ funding in position ➤ Adequate material/ speakers ➤ Templates for advertisements ➤ Guidelines/ protocols/ procedures adoption ➤ Organisation website ➤ Identification, listing and notification for DCs ➤ Software for input collection/ collation and validation for DCs ➤ Enable online reporting for DCs ➤ Adoption of BEE accredited Energy managers and Auditors. 	<ul style="list-style-type: none"> ○ To strengthen SDAs as partners of BEE at state level ○ Effective proliferation of the awareness and promotional programmes in states. 	Progressively from April 2007 to March 2008	The expenditure is subject to approval of the scheme by Competent Authority.
(vi)	Designated Consumers and SMEs Programme	Targeted energy consumption reduction of Designated Consumers and SMEs. Capacity building of		7.00		<ul style="list-style-type: none"> ➤ Initiate comprehensive energy consumption norm studies in 15 sub-sectors ➤ Development of specific energy consumption norms for 3 sectors ➤ Initiate comprehensive 	<ul style="list-style-type: none"> ○ Creation of trained manpower to undertake this job ○ Implement data collection/ collation and analysis in respect of Designated 	Progressively from April 2007 to March 2008	The expenditure is subject to approval of the scheme by Competent Authority.

		Energy Auditors and Managers				<p>studies in 25 clusters of SMEs</p> <ul style="list-style-type: none"> ➤ Initiate studies to establish specific fuel consumption norms in Transport sector ➤ Initiate online reporting system for energy data 	<p>Consumers as mandated by EC Act.</p> <ul style="list-style-type: none"> ○ Development and marketing of energy efficient products and services for SMEs 		
(vii)	Institutional Strengthening of BEE	To equip BEE to implement its mandate under EC Act.		20.00		<ul style="list-style-type: none"> ➤ Capacity building of existing staff by training/ retraining ➤ Development of verifiable reporting templates for Designated Consumers (DCs) ➤ Establishment of policy research and analysis wing in BEE ➤ Initiating establishment of Energy Conservation Information Centre (ECIC) for collecting/collating information 	<ul style="list-style-type: none"> ○ Enhance human and organisational capacity ○ IT based platform for data collection/ collation and analysis. 	Progressively from April 2007 to March 2008	The expenditure is subject to approval of the scheme by Competent Authority.
(viii)	Promoting Energy Conservation Efforts by linkages with other MOP Programmes	To integrate energy conservation and efficiency measures in all MOP programmes		2.00		<ul style="list-style-type: none"> ➤ Policy amendment to include energy efficient lamps (CFL/ LED) and other equipments under RGGVY. ➤ Initiating 6 pilots for reducing losses in agricultural feeders under APDRP in ESCO mode. <ul style="list-style-type: none"> ➤ Identification of blocks, preparation of sustainable revenue generating models ➤ RfP for ESCO Award ➤ Initiate augmentation of 	<ul style="list-style-type: none"> ○ To demonstrate by setting example the benefits and business models for energy conservation projects to other government/ semi-government and other organisations 	Progressively from April 2007 to March 2008	The expenditure is subject to approval of the scheme by Competent Authority.

						manufacturing capacity of CFLs/ LEDs in Public Sector.			
	Total			69.40					

OUTCOME BUDGET 2007-08

ENERGY CONSERVATION

(Rs. Crores)

S.No	Name of Scheme/ Prog	Objective/ Outcome	Outlay 2007-08			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks/ Risk Factors
			Non- Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5	6	7	8
9.	<u>ENERGY CONSERVATION</u>					○			
(I)	National Energy Conservation Awards	To recognize the efforts of industrial consumers to adopt energy conservation measures which may become models for others to emulate	-	1.50	-	○ National Awards to industry establishment for achieving energy savings by proactive measures	Enhancement of awareness about energy efficient products Greater proliferation of adoption of energy efficient technologies by industry.	Progressively from April 2007 to March 2008. The Award function is scheduled for 14 th December, 2007.	
(II)	National Level Painting Competition for school children	To inculcate in children the relevance and importance of energy efficiency and conservation.		2.00		○ Organisation of painting competition for school children all over the country.	Awareness in children about need of energy conservation	Organisation of district, state and national level competition in October, November and December, 2007.	
(III)	Awareness and Publicity	To spread the message of energy conservation and efficiency through the media.		11.50		○ 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 2007 to March 2008	
	Total			15.00					

MINISTRY OF POWER SCHEMES
OUTCOME BUDGET 2007-08.

(Rs. in crore)									
Sr. No.	Name of Scheme/ Programme/Projects	Objective/ Outcome: Sanctioned cost/ Cumulative expenditure from beginning till 31.12.2006.	Outlay 2007-2008			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Projected Outcomes: Date of completion of the project	Remarks/ Risk Factor
1.	2.	3.		4.		5.	6.		8.
			4(i)	4(ii)	4(iii)		!		
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
18	(a) MOP Secretariat (Main):- Salary, wages and other establishment expenditure including over-time allowance, medical treatment, domestic travel expenses, foreign travel expenses, publications, other administrative expenditure, advertising and publicity profession services and subsidies.	(a) To meet the salary wages and other incidental expenses for support services. Total sanctioned cost: Rs.5.00 crores. Cumulative Expenditure incurred upto 31.12.2006: Rs.4.88 crores.	9.51			(a) The expenditure is incurred on salary and other support services and hence outputs are not measurable in quantitative/ qualitative terms.		(a) Under these provisions, salary, wages and other establishment expenses are met for all the officials of M/o Power. These are basically support services to facilitate personnel involved in framing overall policies and their implementation. Through various publications and publicity campaigns, the programmes, policy initiatives of the Ministry are disseminated to the general public in an effective manner.	_____

	(b) Departmentalized Accounting Set up of Ministry of Power	To maintain all Financial /Accounting matters of Ministry of Power	1.09	NA	NA	All the requisite documents e.g. Finance Accounts , S.C.T., Appropriation of Financial transactions of Ministry of Power to be laid before Parliament through O/o the Controller General of Accounts.	-	Items at Sr.No. 5 will be furnished by due date.	-
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	(c) Office Expenses	(b) A Plan scheme with duration of 5 years (2002-03 to 2006-07) was initiated to upgrade data, collection, sharing and dissemination of information through computerization, renovation & modernization of offices in the Secretariat of the Ministry. This is basically intended to enable quick and prompt decision making.	1.50	1.00	_____	---do---	_____	<p>Following are the major benefits when the scheme is fully implemented</p> <p>(i) availability of versatile and developed centralized on-line technical data base system.</p> <p>(ii) Development of a well inter-connected local area network and remote connection with various power utilities.</p> <p>(iii) Enhanced skill of manpower in the M/o Power in the field of Information Technology.</p> <p>(iv) Conducive environment & aesthetic ambience created through renovation/office automation is facilitating smooth and effective discharge of official work.</p> <p>The project will be completed on 31.3.2007</p>	_____
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**CENTRAL ELECTRICITY AUTHORITY
OUTCOME BUDGET 2007-08**

(Rs. in lakhs)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
5.	CENTRAL ELECTRICITY AUTHORITY	To assess demand of Power over a period of time	113.77	-	-	Collection of Annual Power Survey Data from about 60 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 Annual Electric Power Survey Reports / Reviews once in 5 years.	The report of 17 th Electric Power Survey of India has been approved by the 17 th Electric Power Survey Committee. The report is likely to be submitted to the Authority in Jan 2007.
(I)	All India Load Survey Scheme								

(Rs. in lakhs)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
(II)	Renovation & Modernisation (R&M) of Thermal Power Stations including Project Maintenance and PAGER Scheme (Plan)	To arrest the deterioration in performance of thermal power stations by renovation & modernisation and life extension works.	-	227.50	-	Coordination and monitoring work for implementation of R&M works on 9 units of 5 thermal stations and Life Extension (LE) works on 16 units of 7 thermal stations and the balance LE works of 4 units of 2 thermal stations on which LE works have already started during 2006-07.	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. As such, the LE works on some of the units started during 2007-08 may be completed in the year 2008-09.	The works are being implemented by 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.

(Rs. in lakhs)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			Quantifiable Deliverables / Physical Outputs	Projected Outcomes	Processes / Timelines	Remarks / Risk Factors
1	2	3	4			5	6	7	8
			4(i) Non-Plan Budget	4(ii) Plan Budget	4(iii) Complementary Extra-Budgetary Resources				
(III)	Standing Committee for selection of sites for Thermal Power Stations	To create a shelf of feasible sites for thermal power stations to meet the power requirement of the country upto the year 2011-12 and beyond.	-	30.50	-	Identification and selection of sites for location of coastal and pithead thermal power projects in different states.	Shelf of potential sites for pit head and coastal thermal projects would be available for investment by prospective investors for expeditious thermal capacity addition in the country.	Approved term is 5 years beginning from the first year of 10 th Plan. Proposal being sent to Ministry of Power for extension of terms of the committee for another 5 years beginning from the first year of 11 th Plan.	-
(iv)	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	-	322.30	-	Construction of boundary wall of SRPC (western side) and NERPC.	Creation of housing infrastructure of SRPC, Bangalore and creation of Office-cum-residential complex for NERPC, Shillong.	The construction work is being done by CPWD. The work is likely to be completed by 2011-12.	-

(Rs. in lakhs)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(v)	Technology Improvement Programme in Thermal Wing	Comprehensive study, analysis and assessment of implication of various design changes in major equipments / systems to reduce installation and operation costs of thermal power stations.	-	69.06	-	Procuring of GIS software for prioritization of identified sites for setting up of large thermal power projects.	The software shall result in optimum site selection for thermal power projects.	The scheme is to be completed in 2007-08.	The scheme will be continued in 2007-08 also since the procurement of the software (GIS) is time consuming and the Terms of reference are still under preparation.

(Rs. in lakhs)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(vi)	Technology Improvement Programme in Grid Operation	The objective of the Scheme is to update knowledge of CEA engineers in Grid Operation and Distribution Wing of CEA to enable them to perform their functions in a more efficient manner.	-	61.70	-	1. Training of 27 nos. engineers from CEA, Power Transmission Utilities and Planning Commission. 2. Purchase of software related to PTCC (Power Telecom Coordination Committee). 3. Purchase of hardware (measuring instruments) for PTCC work.	More effective advice on grid management to the Central & State Govts., Central & State Regulatory Commissions for efficient and coordinated operation of power system in the country.	To be completed during 2006-07 (January to March 2007) Delayed (to be completed by 2007-08) Delayed (to be completed by 2007-08)	More market study needs to be done for purchase of software for calculation of electro-magnetic induction and frequency spectrum allocation

(Rs. in lakhs)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(vii)	Upgradation of IT facilities in CEA	To develop Centralized Information System for all information relating to the power sector.	-	227.00	-	(i) Furnishing of data by the various stake holders in power sector electronically and formation of data bank. (ii) Acceptance, commissioning & testing of Information Management System covering 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 the stake holders in power sector.	Centralized Database and information system of power sector in CEA to be made available to all stake holders in power sector.	Expected to be completed by 2007-08	-

(Rs. in lakhs)

Sl.No	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(viii)	Technical Control Planning & Monitoring	Review of power sector performance, long-term & short-term planning, assessment of manpower & materials, long-term system planning studies including management studies of RPCs, concurrence to hydro power development schemes, monitoring construction of generation & transmission projects, monitoring of rural electrification and distribution planning, etc.	2222.16	-	-	(i) Monitoring of 38 hydro projects (13485 MW) is in progress, out of which 6 projects (2372 MW) are likely to be completed during 2007-08. (ii) Monitoring of 64 thermal projects (26932.32 MW), out of which 29 projects (10678 MW) are likely to be completed during 2006-07. (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 stations (Annual). g) Review of Performance of thermal power stations (Annual). (iv) Techno-economic appraisal and concurrence to 12 nos. of hydro-electric projects with a total capacity of 6740 MW.	(i) Reduction of gap between demand & supply of power in optimum time. (ii) Availability of statistics for public / inferences for planning and policy / decision making for the Indian Electricity Sector. (iii) Economical cost of generation of electricity.	Continuous process	-

(Rs. in lakhs)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(ix)	Design & Consultancy	To provide technical support in Design & Engineering of power projects to power utilities and adoption of state-of-the-art technologies.	824.61	-	-	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	-
(x)	Studies & Training	To improve performance of Engineers / functionaries.	47.00	-	-	Training of 1500 mandays to CEA employees.	Increase in productivity as a result of enhancement in knowledge and skill of CEA engineers.	Continuous process	-
(xi)	Electronic Data Processing & Support System	Operation and maintenance of computer systems provided in CEA and its sub-offices	45.00	-	-	Maintenance of IT facilities (non-quantifiable)	Proper data management leading to increased efficiency	Continuous process	-
(xii)	Departmental Canteen	To provide subsidized canteen facilities to the employees of CEA	21.05	-	-	Welfare measure (not quantifiable)	Employees satisfaction contributing to increased productivity	Continuous process	-

(Rs. in lakhs)

Sl.No	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(xiii)	Contribution to International Bodies	Membership of CIGRE for engineers of CEA to keep themselves abreast of global technological developments in power sector.	0.35	-	-	Continuation of membership of CEA with CIGRE	Updating of knowledge of CEA engineers in power system.	Annual event	-
(xiv)	Administration of Electricity Laws	Statutory inspection of HT installations of Central Sector and UTs.	104.40	-	-	Inspection of electrical installations totaling to 1,60,000 equivalent MV.	Assured safety of electrical installations and personnel.	Continuous process	-
(xv)	Upgradation of IT facilities in CEA – Phase-II	Setting up of disaster data recovery center for second backup of data. Building redundancy in data center for higher availability. Maintenance of IT facilities.	-	551.94	-	Procurement of servers & associated system software for disaster data recovery center. Ensure security, reliability of the data & reduce the risk of data loss due to disaster or any other unforeseen reasons. Higher availability of IT facilities.	Development of sound and upto date centralized database system for Power Sector of the country.	2011-12	Project yet to be approved

(Rs. in lakhs)

Sl.No	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(xvi)	National Load Despatch Center	Collection of vital power system operational data from different Regional Power Committees (RPCs) for use in CEA / Ministry of Power through a 64 Kbps communication system. It is also used for on-line coal monitoring and inter / intra-regional exchange of power.	9.00	-	-	Collection & analysis of power system operational data from different Regional Power Committees (RPCs).	Facilitation of secured & reliable power supply.	Continuous process	-
(xvii)	Regional Coordination	Operation of five (5) Regional Power Committees (RPCs) (erstwhile REBs) for efficient and integrated operation of power system in the country	233.69	-	-	Facilitation of coordinated operation of regional power grids in the country	Integrated operation of the Regional Grids for efficient grid management and optimum utilisation of power generated.	Continuous process	-
(xviii)	Regional Load Despatching Centres	The scheme helps in coordinated operation of the Regional Grids through functioning of various committees such as Operation Coordination Committee, Protection Committee, System Studies Sub-Committee, etc.	461.24	-	-	Facilitation of coordinated operation of regional power grids	Integrated operation of the Regional Grids	Continuous process	-

(Rs. in lakhs)

Sl.No	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(xix)	Optimisation of National Grid Programme	Development of plan wise transmission system based on capacity addition, demand growth projection and corresponding transmission needs for next the three five year plan taking the services of international experts in the field of transmission planning.	-	200.00	-	Review the transmission programme, make assessment of the adequacy and reliability of the proposed transmission network, evaluate cost effectiveness investment and suggest optimization and suggest factoring in state of art developments.	Adequate, optimized, reliable transmission network. Effectiveness of the investment.	2008-09	Project yet to be approved
(xx)	Survey Report on Base Data & Requirement Analysis for Coordinating Development of State Grid Programme	Well coordinated development of state grids based on detailed survey, creation of reliable data and systematic analysis for enabling optimum, cost effective reliable and less loss transmission of power from generation sources upto the distribution point network.	-	100.00	-	Development of base data and identification of the health of the various elements and health of the transmission network.	Coordinated development of state network for optimum utilisation investment made in generation, national grid and distribution network accelerated participation of private sector in transmission.	2009-10	Project yet to be approved

(Rs. in lakhs)

Sl.No	Name of Scheme / Programme	Objective / Outcome	Outlay 2007-08			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	Complementary Extra-Budgetary Resources				
(xxi)	Preparation of Detailed Project Reports of New Hydro Electric Schemes	Creation of shelf of DPRs for hydro-electric projects under 50,000 MW Hydro initiative.	-	6075.00	-	Acceleration of Hydel Generation in the country.	A shelf of projects in the form of bankable DPRs would be available for investment by prospective investors to give thrust to expeditious Hydro Power Development in the country.	Once approved the scheme will last for 2 years.	Scheme dropped
(xxii)	Apprenticeship Training for Engineers	Imparting vocational training to Graduate / Diploma holders under the Apprenticeship Act, 1961.	5.00	-	-	Around 35 Vocational / 12 D/Men and 6 Graduate / Diploma Engineers to be trained	Availability of trained technical manpower in the country	Continuous process	-
TOTAL			4087.27	7865.00	-				

NATIONAL THERMAL POWER CORPORATION (NTPC)

OUTCOME BUDGET MILESTONES FOR 2007-2008

Sl.No.	Name of Scheme / Programme/Project	Objective Outcome	Outlay 2007-08 (Rs.in crores)			Quantifiable Deliverables/Physical Milestones	Projected Outcome	Processes /Timelines	Remarks / Risk factors
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5		6	7
1	Sipat-I (3x660 MW)	Addition of 1980 MW of generation Capacity			1984.27	U#2 Boiler Hydro Test	Addition of 1980 MW of generation Capacity	10/07	
						U#3 Commencement of Condenser erection		12/07	
						U#3 Boiler Hydro Test		03/08	
2	Sipat-II (2x500 MW)	Addition of 1000 MW of generation Capacity			646.00	U#5 TG Barring Gear	Addition of 1000 MW of generation Capacity	11/07	
						U#5 Synchronisation		12/07	
3	Barh STPP (3x660 MW)	Addition of 1980 MW of generation Capacity			2014.72	U#2 Completion of TG Pedestal	Addition of 1980 MW of generation Capacity	03/08	
						U#3 Commencement of Structural steel fabrication		10/07	
						U# 3 Commencement of Boiler erection		01/08	
4	Koldam HEPP (4x200 MW)	Addition of 800 MW of generation Capacity			678.26	Commencement of Rotor Assembly in service Bay U#1	Addition of 800 MW of generation Capacity	12/07	
						Commencement of erection of MIV U#1		01/08	
5	Loharinag Pala HEPP (4x150 MW)	Addition of 600 MW of generation Capacity			280.10	Completion of top adit excavation to desilting chamber	Addition of 600 MW of generation Capacity	10/07	
						Commencement of river diversion		03/08	
6	Korba III	Addition of 500 MW of generation Capacity			672.45	Commencement of Structural steel fabrication	Addition of 500 MW of generation Capacity	04/07	
						Commencement of Boiler Erection		06/07	
7	Farakka III	Addition of 500MW of generation Capacity			117.41	Commencement of Piling & Foundation Work	Addition of 500MW of generation Capacity	04/07	
						Commencement of Structural steel fabrication		08/07	
						Commencement of Boiler Erection		11/07	
						Award of Ash Handling Package		12/07	
8	NCTPP II	Addition of 980 MW of generation Capacity			146.98	U#5 Commencement of Structural Steel fabrication	Addition of 980 MW of generation Capacity	06/07	
						U#5 Commencement of Boiler erection		08/07	
						U#5 Boiler Drum lifting		02/08	
9	Tapovan Vishnugad	Addition of 520 MW of generation Capacity			232.41	Commencement of Barrage & de-silting chamber work	Addition of 520 MW of generation Capacity	04/07	
						Commencement of Power House package work		06/07	
	Sub Total (i)				6772.60				

Sl.No.	Name of Scheme / Programme/Project	Objective Outcome	Outlay 2007-08 (Rs.in crores)			Quantifiable Deliverables/Physical Milestones	Projected Outcome	Processes /Timelines	Remarks / Risk factors
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5		6	7
1	Simhadri II	Additon of 1000 MW of generation Capacity			251.17	Main Plant Package Award	Additon of 1000 MW of generation Capacity	06/07	Tieup of all inputs and availability of all clearances is essential prior to placement of main Plant Award
2	Barh II	Additon of 1320 MW of generation Capacity			370.20	Main Plant Package Award	Additon of 1320 MW of generation Capacity	05/07	Tieup of all inputs and availability of all clearances is essential prior to placement of main Plant Award
3	Bongaigaon	Additon of 750 MW of generation Capacity			225.15	Main Plant Package Award	Additon of 750 MW of generation Capacity	08/07	Tieup of all inputs and availability of all clearances is essential prior to placement of main Plant Award
4	Darlipalli	Additon of 3200 MW of generation Capacity			1175.20	Main Plant Package Award	Additon of 3200 MW of generation Capacity	09/07	Tieup of all inputs and availability of all clearances is essential prior to placement of main Plant Award
5	Mauda	Additon of 1000 MW of generation Capacity			277.12	Main Plant Package Award	Additon of 1000 MW of generation Capacity	11/07	Tieup of all inputs and availability of all clearances is essential prior to placement of main Plant Award
6	Badarpur IV	Additon of 980 MW of generation Capacity			254.70	Main Plant Package Award	Additon of 980 MW of generation Capacity	04/07 (On Best Effort Basis)	Tieup of all inputs and availability of all clearances is essential prior to placement of main Plant Award
7	Other New Projects				35.19				
	Sub-Total (ii)				2588.73				
	Renovation & Modernization Schemes				615.07				
	Other Misc. Schemes				2815.60				
	Sub Total (iii)				3430.67				
	GRAND TOTAL				12792.00				

NATIONAL HYDROELECTRIC POWER CORPORATION

Outcome Budget 2007-08 :

1	2	3	4			5		6	7	8
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2007-08 (Rs. in Crores)			Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors
		Sanctioned Cost (Rs. in crores)	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Physical Activity	Targets / Achievements			
A	Completed Scheme									
1	Dhauliganga-I	1578.31	-		2.00	Settlement of pending liabilities.	-	Project Completed in Oct./ Nov. 05	Mar.'08	-
2	Dulhasti	3559.77			38.00	Settlement of pending liabilities.		Schedule Completion date of Project Mar.'07		-
B	Scheme Under Execution									
1	Teesta-V HE Project 510 MW, Sikkim	2198.04	-		200.00	HRT Benching (m)	500	Scheduled Project completion Feb.'08	June'07	Bad geology in HRT and LSG
						HRT Overt Lining (m)	900		Sept.'07	
						HRT Invert Lining (m)	7000		Oct.'07	
						Lower Surge Gallery Overt Lining (m)	400		July'07	
						Commissioning of Unit- 1	Job		Jan.'08	
2	TLDP-III 132 MW, WB	768.92	-		250.00	Cellular wall Concreting (cum)	9300	Schedule Project Completion date Sept.'08	Jan.'08	Slope failure in Power House area.
						Excavation of Barrage blocks I & 2 (cum)	70000		Feb.'08	
						Concreting of Barrage Blocks I & 2 (cum)	24000		Mar.'08	
						E&M Works (%)	60		Mar.'08	
3	Sewa-II 120 MW, J&K	665.46	-		180.00	Dam Concreting (cum)	36,000	Scheduled Project Completion Dec.'08	Nov.'07	Bad geology in HRT
						Excavation of HRT (m)	2500		Mar.'08	
						Excavation of Desilting Chamber (cum)	4000		Mar.,08	
						Lining of Surge Shaft (m)	111		Dec.'07	
						Erection of Liner Lower Hor. Pressure Shaft (m)	350		Mar.'08	
						Lining of HRT	3900		Mar.'08	
						E&M Works (%)	60		Mar.'08	
4	Parbati-II 800 MW, HP	3919.59	-		400.00	Dam & Spillway Concreting (cum)	1,00,000	Scheduled Project Completion Sept.'09	Mar.'08	Bad geology and rock bursting in HRT
						PH Concreting (cum)	25000		Mar.'08	
						HRT Excavation (m)	3100		Mar.'08	
						HRT Lining (m)	8000		Mar.'08	
						Erection of Distributor Unit-1 (Job)	100%		Jan.'08	

NATIONAL HYDROELECTRIC POWER CORPORATION

Outcome Budget 2007-08 :

1	2	3	4			5		6	7	8
SL. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2007-08 (Rs. in Crores)			Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors
			Sanctioned Cost (Rs. in crores)	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Physical Activity	Targets / Achievements		
1	2	3	4			5		6	7	8
SL. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2007-08 (Rs. in Crores)			Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors
			Sanctioned Cost (Rs. in crores)	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Physical Activity	Targets / Achievements		
5	TLDP-IV 160 MW , WB	1061.38				110	Excavation for Power Dam & Spillway (cum)	5,30,000	Scheduled Project Completion Sept.'09	Delay in transfer of forest land at the start of the Project
							Concreting in Power Dam & Spillway (cum)	1,50,000		
							Excavation in TRC (cum)	2,90,000		
							Excavation in Power House (cum)	2,81,000		
							Concreting in Power House (cum)	23,000		
							Cellular Wall excavation (cum)	55,000		
							Cellular Wall concreting (cum)	20,000		
6	Uri-II HE Project, 240 MW, J&K	1724.79				150.00	Dam Concreting (cum)	60000	Scheduled Project Completion Sept.'10	Restoration work in progress after earthquake in Oct.'05
							Excavation of HRT heading (m)	1600		
							Excavation of TRT heading (m)	3000		
							Excavation of Power House (cum)	1,00,000		
							HRT Excavation (m)	5500		
7	Chamera-III, 231 MW, H.P.	1405.63				150.00	Power House Excavation (cum)	72000	Scheduled Project Completion Aug.'10	
							Surge Shaft excavation (cum)	12000		
							Dam & Intake excavation (cum)	1,00,000		
							Excavation of Desilting Chamber (cum)	50,000		

NATIONAL HYDROELECTRIC POWER CORPORATION

Outcome Budget 2007-08 :

1	2	3	4			5		6		7		8	
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2007-08 (Rs. in Crores)			Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors			
		Sanctioned Cost (Rs. in crores)	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Physical Activity	Targets / Achievements						
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2007-08 (Rs. in Crores)			Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors			
		Sanctioned Cost (Rs. in crores)	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Physical Activity	Targets / Achievements						
8	Nimoo Bazgo, 45 MW, J&K	611.01			70.00	Excavation of Open Channel (cum)	2,40,000	Scheduled Project Completion Aug.'10	Aug.'07				
						Excavation of Dam foundation (cum)	50,000		Mar.'08				
						Excavation of Power House (cum)	10,000		Mar.'08				
						Construction of stage-I embankment for River Diversion (cum)	1,60,000		Dec.'07				
9	Subansiri Lower HE Project 2000 MW,Ar. Pradesh	6285.33	1.00		449.00	Power House Excavation (cum)	3,50,000	Scheduled Project Completion Sept.'10	Sept.'07	Non signing of MOU by state Govt., agitation by local people			
						Lining of Diversion Tunnels (m)	2938		Sept.'07				
						Intake excavation (cum)	5,00,000		Mar.'08				
						Concreting in PH Machine Hall (cum)	1,20,000		Mar.'08				
10	Parbati-III 520 MW , HP	2304.56			203.00	Dam excavation (cum)	1,50,000	Scheduled Project Completion Nov.'10	Mar.'08				
						Const.of U/s & D/s coffer Dams (cum)	52,000		May'07				
						HRT Excavation (m)	3000		Mar.'08				
						TRT Excavation (m)	1200		Mar.'08				
11	Chutak, 44 MW, J&K	621.26			50.00	Power House excavation (cum)	30,000	Scheduled Project Completion Feb.'11	Mar.'08				
						HRT Excavation (m)	2500						
						Excavation of HRT (m)	2000						
						Excavation of Barrage (cum)	60000						
C. S&I Schemes													
1	Siyom	-	-		1.00				Mar.,2008	Work suspended since the Project transferred to private agency by State Govt. Estt. Cost only.			
2	Kishanganga	Not yet sanctioned			40.00	Excav.of Diversin Tunnel (m)	400	To be completed in 7 years after Govt. sanction	Mar. 2008	Budget utilization is subject to Govt. sanction during 2006-07.			
						Diversion Tunnel concreting (m)	600						
						PH Excavation (cum)	10000						

NATIONAL HYDROELECTRIC POWER CORPORATION

Outcome Budget 2007-08 :

1	2	3	4			5		6	7	8
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2007-08 (Rs. in Crores)			Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors
			Sanctioned Cost (Rs. in crores)	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Physical Activity			
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome	Outlay 2007-08 (Rs. in Crores)			Quantifiable deliverables / Physical Output		Projected Outcomes	Process/ Timelines	Remarks/ Risk factors
			Sanctioned Cost (Rs. in crores)	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Physical Activity			
3	Loktak Downstream	Cost under revision	-		5.00	Approach Roads (Km)	2		Mar. 2008	Estt. Cost only. Project under review, parameter under finalisation.
4	Kotli Bhel Stage- I A	Not yet sanctioned	-		40.00	Const. of perm. Buildings (sq.m)	400		Mar.'08	Subject to CCEA clearance by March'07
						Const. of temp. Buildings (sq.m)	200			
						Const. of perm. road (km)	5			
						Excavation of Diversion Tunnel (m)	100			
5	Kotli Bhel Stage- I B	Not yet sanctioned	-		40.00	Const. of perm. Buildings (sq.m)	400		Mar.'08	Subject to CCEA clearance by March'07
						Const. of temp. Buildings (sq.m)	200			
						Const. of perm. road (km)	4			
						Excavation of Div. Tunnel (m)	100			
6	Kotli Bhel Stage- II	Not yet sanctioned			25.00	Const. of perm. Buildings (sq.m)	200		Mar.'08	Subject to CCEA clearance by March'07
						Const. of temp. Buildings (sq.m)	200			
						Const. of perm. road (km)	2			
						Excavation of Div. Tunnel (m)	100			
7	Pakal Dul	Not yet sanctioned	-		15.00	Maintenance of G&D sites, security expenses, estt. Expenses only			Mar-08	Govt. sanction awaited.
8	Dibang	Not yet sanctioned	-		10.00	Land Acquisition (Ha)	20		Mar-'08	Project to be taken up through JV with State Govt.
						Resi.& non-resi.buildings (Sq.m)	600			
9	Bav II	Not yet sanctioned	-		2.00	Provision kept for estt. Expenses and priliminary works to be decided after review of the project.			Mar.'08	Project under review. Subject to clearance of project for execution.
10	Vyasi	Not yet sanctioned	-		15.00	Repair & black topping of road (Km)	5		Mar-08	DPR submitted. Clearances are in progress. Budget utilisation subject to CCEA clearance.
						Repair. of buildings (No.)	20			
11	Siang (Lower)	Not yet sanctioned	-		1.00				Mar-08	Project transferred to private agency by State Govt.Estt.
12	Bursar	Not yet sanctioned	-		10.00	DPR submission	100%		Mar-08	Law & order is the risk factor.
13	Subansiri(Middle)	Not yet sanctioned	-		2.00				Mar-08	DPR submission is subjected to Hon'ble Supreme Court decision on the review petition. Estt. Cost only
14	Subansiri (Upper)	Not yet sanctioned	-		2.00				Mar.'08	
15	Siang (Upper)	Not yet sanctioned	-		2.00				Mar.'08	Projects under review. Estt. expenses only
16	Siang (Intermediate)									
D.	New Schemes									
1	Chungar Chal		-		2.00	Preparation of DPR	100%		Mar.'08	Resistance from local people
2	Garba Tawaghat		-		1.00	Preparation of DPR	100%		Mar.'08	Resistance from local people
3	Karmoli Lumti Tulli		-		0.52	Preparation of FR	100%		Mar.'08	Resistance from local people
4	Lachen	-			3.00	Topographical survey (ha)	400		Mar'08	Work badly hampered due to local resistance.
						Exploratory drilling (m)	300		Mar.'08	
						Exploratory drifting (m)	200		Mar.'08	
	Teest-IV				5.00	Exploratory drilling (m)	500		Mar.'08	Work badly hampered due to local resistance.
						Exploratory drifting (m)	350		Dec.'07	
6	Tawnag- I&II		-		6.00	Nominal provision for estt. expenses and investigation works to be firmed up				
E.	Other New Schemes		-		5.00					Provision is for S&I works for preparation of FR/DPR for
G.	Mini Hydro Schemes									
	Kambang		-		5.00	Provision for pending liabilities			Mar-08	These 2 small hydro schemes in Ar.Pr. are on deposit basis. Both Projects expected to be completed in 2006-07; Delay due to law & order problem and agitation by local people
	Sippi									
H.	R&M Of Power Houses		-		10.00					Provision is for Renovation and modernisation of Loktak
I.	R&D Works		-		1.43					
	Total		5.00		2500.95					

NEEPCO LTD.
OUTCOME BUDGET 2007-08.

SL. NO.	NAME OF THE SCHEMES / PROGRAMMES	OBJECTIVE / OUTCOME	Sanctioned Cost/Latest Cost (Rs. in Crs.)	Cumulative Expenditure from beginning till 31.12.2006 (Rs. in Crs.)	Allocation Outlay (2007-08-BE) (Rs. in Crs.)			Quantifiable Deliverable /Physical Outputs		Process / Timeliness/Commissioning Date (Date of Completion of Project)	Activity/ Status	Projected Outcomes	Remarks/ Risk factors
					Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources	Physical Activity	Targets/Achievements.				
1	2	3(a)	3(b)	3 (c)	4(i)	4(ii)	4(iii)	5	6	7	8	9	10
1	Tuirial HEP (60 MW), Mizoram	Generation of Hydro Power	687.80	237.65	—	11.88	2.35	----	Works held up	March'09	Works held up since 09/06/04	Works held up.	Subject to resumption of the Project works after review.
2	Kameng HEP (600 MW), A.P.	Generation of Hydro Power	2496.90	477.06	—	162.08	540.69	Concreting of Bichom Dam (CUM)	90,000	Dec' 07	To continue beyond Dec' 07	Commissioning Schedule : Nov ' 09	---
								Concreting of Tenga Dam (Cum)	16,000	Dec' 07	To continue beyond Dec' 07		--
								Boring of HRT-Face-II (M)	1400	Dec' 07	To continue beyond Dec' 07		Geological surprise.
								Boring of HRT-Face-III (M)	2000	Jan' 08	To continue beyond Jan' 08		
								Boring of HRT-Face-VI (M)	700	Dec' 07	To continue beyond Dec' 07		
								Boring of HRT-Face-VII (M)	1100	Jan' 08	To continue beyond Jan' 08		
								Completion of Boring of Surge Shaft(%).	100%	Feb' 08	To be completed.		
								Boring of work for High Pressure Tunnel(%)	50%	March' 08	To continue beyond March' 08		
								Penstock-fabrication(%)	60%	March' 08	To continue beyond March' 08		---
								Power House-Concreting (%)	50%	March' 08	To continue beyond March' 08		---
3	Khangten Small Hydel Project (7.50 MW), A.P.	Generation of Hydro Power	50.58	1.08	—	*10.13	9.19	Major works of the project will start.	40 % of the Project work will be completed.	Commissioning Schedule : 2008-09	To continue beyond March' 08	To be completed during 2008-09.	---

SL. NO.	NAME OF THE SCHEMES / PROGRAMMES	OBJECTIVE / OUTCOME	Sanctioned Cost/Latest Cost (Rs. in Crs.)	Cumulative Expenditure from beginning till 31.12.2006 (Rs. in Crs.)	Allocation Outlay (2007-08-BE) (Rs. in Crs.)			Quantifiable Deliverable /Physical Outputs		Process / Timeliness/Commissioning Date (Date of Completion of Project)	Activity/ Status	Projected Outcomes	Remarks/ Risk factors
					Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources	Physical Activity	Targets/Achievements.				
1	2	3(a)	3(b)	3 (c)	4(i)	4(ii)	4(iii)	5	6	7	8	9	10
4	Tipaimukh HEP(1500MW), Manipur	Generation of Hydro Power	5855.83	3.15	—	295.23	0.00	1.Award of EPC Contract. 2.Township development works (%)	1. EPC Contract will be awarded within two months from the date of CCEA Clearance. 2. 25 % Township development works will be completed by March'08 subject to receipt of CCEA Clearance by March'07.	Commissioning Schedule : 87 Months from the date of CCEA clearance.	To continue beyond March' 08	To be completed within 87 months from the date of investment decision.	Law & Order is the risk factor.
5	Survey & Investigation	----	118.63	29.83	—	24.60	0.00	Survey & Investigation of Nine nos of Projects.	All associated S & I works including observation of HM data.	March'2008.	To continue beyond March' 08	Respective projects will be completed during XI th & XIIth Plan depending on CCEA Clearance.	Budget includes provision for road/terrace cutting for roads,EIA /EMP studies, Geotechnical investigation, Hydrological studies, environmental studies etc.
6	Ranganadi Stage-II HEP(130MW)(Project) Arunachal Pradesh.	Generation of Hydro Power	1120.31	5.42	—	0.00	0.00	--	---	Planned for commissioning in the XII th Plan	To continue beyond March' 08	----	DPR submitted for TEC on 17-03-06

SL NO	NAME OF THE SCHEMES / PROGRAMMES	OBJECTIVE / OUTCOME	Sanctioned Cost/Latest Cost (Rs. in Crs.)	Cumulative Expenditure from beginning till 31.12.2006 (Rs. in Crs.)	Allocation Outlay (2007-08-BE) (Rs. in Crs.)			Quantifiable Deliverable /Physical Outputs		Process / Timeliness/Commissioning Date (Date of Completion of Project)	Activity/ Status	Projected Outcomes	REMARKS
					Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources	Physical Activity	Targets/Achievements.				
1	2	3 (a)	3 (b)	3 (c)	4(i)	4(ii)	4(iii)	5	6	7	8	9	10
7	Pare HE Project (110MW) , A.P.	Generation of Hydro Power	624.87	12.66	—	50.06	0.00	1.Infrastructure works including roads/buildings/construction power etc. 2.Preparation of Bid documents& Award of Package Contracts.	1.Infrastructure works by March'08. 2.Award of Package Contracts by Feb'08.	Planned for commissioning in the XI th Plan	To continue beyond March' 08	Project will be commissioned within 4 years from the date of CCEA Clearance.	Achievement of Target(1) is subject to TEC by 2006-07 and Target (2) is subject to CCEA Clearance within 2006-07.
8	Talong HEP (160 MW), A.P.	Generation of Hydro Power	903.92	—	—	10.00	0.00	Stage -II activities.	March'08	Planned for commissioning in the XI th Plan	To continue beyond March' 08	Project will be commissioned within 4 years from the date of CCEA Clearance.	DPR submitted on 31-03-06
9	DibbinHEP (100 MW), A.P.	Generation of Hydro Power	371.52	—	—	10.00	0.00	Stage -II activities.	March'08	Planned for commissioning in the XI th Plan	To continue beyond March' 08	Project will be commissioned within four and half years from the date of CCEA Clearance.	DPR expected to be submitted by March' 2007.
10	AGTP Extension (42 MW), Tripura	Generation of Thermal Power	93.61	—	—	5.00	0.00	Preliminary investigation,Site development,construction facilities,non-Plant Civil works,Main Plant Civil works & Environment & Ecology etc.	March'08	Planned for commissioning in the XI th Plan	To continue beyond March' 08	Commissioning Schedule: XI Th Plan.	DPR is under preparation.
11	Margherita Coal Based thermal Power Project (480 MW), Assam	Generation of Thermal Power	2592.00	—	—	20.00	0.00	Preliminary investigation,Site development,construction facilities,non-Plant Civil works,Main Plant Civil works & Environment & Ecology etc.	March'08	Planned for commissioning in the XI th Plan	To continue beyond March' 08	Commissioning Schedule: XI Th Plan.	DPR is under preparation and to be completed by July'07. State Govt. clearance is steel awaited.

SL. NO.	NAME OF THE SCHEMES / PROGRAMMES	OBJECTIVE / OUTCOME	Sanctioned Cost/Latest Cost (Rs. in Crs.)	Cumulative Expenditure from beginning till 31.12.2006 (Rs. in Crs.)	Allocation Outlay (2007-08-BE) (Rs. in Crs.)			Quantifiable Deliverable /Physical Outputs		Process / Timeliness/Commissioning Date (Date of Completion of Project)	Activity/ Status	Projected Outcomes	Remarks/ Risk factors
					Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources	Physical Activity	Targets/Achievements.				
1	2	3(a)	3(b)	3 (c)	4(i)	4(ii)	4(iii)	5	6	7	8	9	10
12	Garo Hills Coal Based Thermal Power Project (720 MW), Meghalaya	Generation of Thermal Power	3888.00	—	—	20.00	0.00	Preliminary investigation, Site development, construction facilities, non-Plant Civil works, Main Plant Civil works & Environment & Ecology etc.	March'08	Planned for commissioning in the XI th Plan	To continue beyond March' 08	Commissioning Schedule: XI Th Plan.	DPR is under preparation and to be completed by July'07. State Govt. clearance is steel awaited.
13	West Khasi Hills Coal Based Thermal Power Project (240 MW), Meghalaya	Generation of Thermal Power	1296.00	—	—	20.00	0.00	Preliminary investigation, Site development, construction facilities, non-Plant Civil works, Main Plant Civil works & Environment & Ecology etc.	March'08	Planned for commissioning in the XI th Plan	To continue beyond March' 08	Commissioning Schedule: XI Th Plan.	State Govt. clearance obtained. DPR is under preparation and to be completed by July' 2007.
14	Tripura Gas Based Power Project (104.74 MW), Tripura	Generation of Thermal Power	448.83	—	—	77.62	0.00	Site development, construction facilities, non-Plant Civil works, Main Plant Civil works & Environment & Ecology etc.	March'08	Planned for commissioning in the XIth Plan	To continue beyond March' 08	Proposed to be Commissioned during the year 2009-10, subject to CCEA clearance by July' 2007.	Gas allocation received. Revised DPR for the Project will be submitted by March' 2007.
GRAND TOTAL :		----				706.47	552.23		----			----	----

NOTE :

* MNES Grant ,Column 4(ii) denotes NBS & Column (iii) denotes IEBR

POWER GRID CORPORATION OF INDIA LTD.
OUTCOME BUDGET 2007-08

CHAPTER-II

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
I. ON-GOING SCHEMES														
1	Dulhasti Combined	567.05	440.49	Power Evacuation + Grid Strengthening	0.00		14.32	Projects already completed. Outlay kept for final payments etc.			Power Evacuation + Grid Strengthening	National Grid	Oct-06	Project completed
2	Installation of II nd ICT at Indravati OHPC	19.05	12.74	Grid Strengthening	0.00		1.50	Projects already completed. Outlay kept for final payments .			Grid Strengthening		May-06	Project completed
3	System strengthening scheme in NR-ER (Formerly part of Tala Supplementary scheme)	391.20	334.22	Grid Strengthening	0.00		11.09	Projects expected to be completed in 2006-07. Outlay kept for final payments linked to completion of left-over works/ settlement of Contractual disputes etc.			Grid Strengthening		Mar'07	NR portion completed in Oct'06. ER portion in advance stage of completion (part system completed in Oct'06) and expected to be completed by Mar'07
4	Trans. System for TALA (Powergrid Portion)	872.10	488.86	Inter Regional Power Transfer	0.00		86.01	Projects commissioned in Aug.'06. Balance left over works expected by Mar.'07. . Outlay kept for pending final payments.			Inter Regional Power Transfer		Aug-06	Inter-regional & associated links completed in Aug.'06. Balance, LILO of Dadri-Ballabgharh at Delhi & Delhi (GIS) S/S expected to be completed by Mar'07 (delayed due to ROW problem in line and type testing for Off-shore Equipments).
5	Transmission System Associated with SIPAT-I STPS	1672.98	784.21	Power Evacuation	0.00		313.60	839	3	Sep-07	Power Evacuation		Sep-07	Part system shall be ready for commissioning by Mar'07 for Sipat-II Generation evacuation.Sipat-I Generation project anticipated by Sep'07.
6	System Strengthening in Singrauli-Vindhyachal Corridor	17.26	7.91	Grid Strengthening	0.00		2.23	Physical work planned to be completed by Dec-06. Outlay kept for final payments etc.			Grid Strengthening		Dec-06	
7	Northern Region System Strengthening Scheme -I (NRSS-1)	271.80	124.80	Grid Strengthening	0.00		48.34	Physical work planned to be completed by Mar.'07. Outlay kept for final payments etc.			Grid Strengthening		Jul-07	Project is in advance stage & expected to be completed by Mar.'07 against the tgt. of July'07.
8	Transmission System Associated with Northern Region Strengthening Scheme II (NRSS-II)	247.78	192.92	Grid Strengthening	0.00		13.87	Physical work planned to be completed by Dec-06. Outlay kept for final payments etc.			Grid Strengthening		Dec-06	Project in advance stage of completion.
9	Vindhayanchal-Korba Transmission Line	164.02	136.08	Grid Strengthening	0.00		6.22	Projects expected to be completed in 2006-07. Outlay kept for final payments etc.			Grid Strengthening		Feb-07	
10	Transmission System Associated with Teesta-V(HEP)	208.75	44.11	Power Evacuation	0.00		82.37	188	1	Mar-08	Power Evacuation		May-08	Efforts being made to complete matching with Gen. Project, which is now ant. In Sep'07

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
11	Enterprise Wide Converged Information Technology & Communication Network in Powergrid (EWCIT)	31.99	4.70	IT Enablement	0.00		1.26				IT Infrastructure	National Grid	2006-07	
12	Bhadravati Chandrapur Transmission System	33.38	11.93	Grid Strengthening	0.00		1.84	Projects completed in Apr.'06. Outlay kept for final payments etc.			Grid Strengthening		Apr-06	Project completed.
13	Bina Nagda Transmission Line	266.93	46.65	Grid Strengthening	0.00		48.27	512		Mar-08	Grid Strengthening		Mar-08	
14	Transmission System Associated with Sipat-II, STPP	601.90	252.47	Power Evacuation	0.00		63.81	195	4	Aug-07	Power Evacuation		Aug-07	Project approved for completion by Aug'07. Generation proj. anticipated in Mar'07. Part system (including part of Sipat-I TS) is being made ready matching with Generation Project.
15	Transmission System Associated with Vindhyanchal-III STPP	596.47	383.95	Power Evacuation	0.00		36.31	Physical work planned to be completed by Mar.'07. Outlay kept for final payments etc.		Jul-07	Power Evacuation		Jul-07	Project is in advance stage of completion & expected to be completed by Mar.'07. Commissioning of Trans. System is matching with commissioning of Gen. unit.
16	Western Region System Strengthening Scheme - I (WRSS-1)	199.21	6.61	Grid Strengthening	0.00		89.79	196	1	Nov-07	Grid Strengthening		Nov-07	
17	System Strengthening Scheme in Uttaranchal	76.42	8.81	Grid Strengthening	0.00		36.00	50	2	Mar-08	Grid Strengthening		Mar-08	
18	Transmission System Associated with Kahalgaon -II, Phase -I	1771.93	1009.91	Power Evacuation	0.00		348.74	200	3	Jul-07	Power Evacuation		Jul-07	Efforts are being made to complete part system by Mar'07 matching with the Generating unit.
19	Northern Region System Strengthening-III (NRSS-III)	230.52	55.54	Grid Strengthening	0.00		90.88	148	2	Mar-08	Grid Strengthening		Mar-08	
20	System Strengthening-V in Southern Regional Grid (SRSS V)	92.12	14.59	Grid Strengthening	0.00		27.52	-	6	Jun-07	Grid Strengthening		Jun-07	
21	System Strengthening-VII of Southern Regional Grid (SRSS VII)	279.30	0.20	Grid Strengthening	0.00		129.55	50	0	Mar-08	Grid Strengthening		Jul-09	
22	System Strengthening-III of Southern Region Grid (SRSS-III)	284.78	60.69	Grid Strengthening	0.00		20.25	80	-	Apr-07	Grid Strengthening		Apr-07	

CHAPTER-II

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
23	Transmission System Associated with Koteswar HEP	260.34	1.87	Power Evacuation	0.00		97.62	30	-	Mar-08	Power Evacuation		Jun-08	
24	National Load Despatch Centre(NLDC)	44.96	1.16	Grid Control	0.00		8.08	Supply & associated civil work completion during 2007-08.			Grid Control		May-08	
25	Transmission System Associated with Kahalgaon -II, Phase -II	464.02	16.25	Power Evacuation	0.00		133.24	264	-	Oct'07	Power Evacuation		Oct. '07 / Matching with Gen. unit	Completion critical due to delay in hand-over of land for Ranchi S/S (land acquired in Oct'06). However, part of Kahalgaon-II (Ph-II) transmission system is being targeted for completion matching with Phase-I Gen. Proj. anticipated by Mar'07, which shall be adequate for power evacuation
26	Transmission System associated with Kudankulam Atomic Power Project	1779.29	39.35	Power Evacuation	0.00		671.23	899	1	Mar-08	Power Evacuation		May-07 to Nov-08	Commissioning of Trans. System is matching with commissioning of Gen. units.
27	Transmission System Associated with NLC-II Expansion Project	691.83	32.40	Power Evacuation	0.00		385.62	675	8	Dec-07	Power Evacuation		Dec-07	Commissioning of Trans. System is matching with commissioning of Gen. unit.
28	Transmission System Associated with RAPP 5&6	499.45	62.78	Power Evacuation	0.00		197.50	367	5	Mar-08	Power Evacuation		Mar-08	Commissioning of Trans. System is matching with commissioning of Gen. unit. Evacuation line shall be completed matching with Gen. Project ant. in Jun'07.
29	Transmission System Associated with Kaiga 3&4	588.25	46.64	Power Evacuation	0.00		216.24	681	5	Dec-07	Power Evacuation		Dec-07	Commissioning of Trans. System is matching with commissioning of Gen. unit.
30	Supplementary Transmission System associated with Sipat Stage-II project	813.67	2.03	Power Evacuation	0.00		240.70	319	0	Mar-08	Grid Strengthening		Jun-08	
31	Unchahar-III Transmission System	73.46	2.17	Grid Strengthening	0.00		30.93	19	1	Mar-08	Grid Strengthening		May-08	Attempts are being made to complete transmission system by Oct.'07.
32	Augmentation of Transformation Capacity at MOGA & Amritsar in Northern	47.28	0.00	Grid Strengthening	0.00		17.33	-	2	Mar-08	Grid Strengthening		Mar-08	
33	Upgradation of Talcher-Kolar HDVC Bipole	118.33	0.00	Grid Strengthening	0.00		50.22	Completion of physical works planned in 2007-08.			Grid Strengthening		Apr-08	

National Grid

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
34	System Strengthening -VI in Southern Regional grid (SRSS-VI)	113.73	0.00	Grid Strengthening	0.00		33.94	148	1	Dec-07	Grid Strengthening		Dec-07	
35	Trans.System for BARH	3779.46	10.40	Power Evacuation	0.00		789.53	300	-	Mar-08	Power Evacuation		Sep-09	
36	WR Strengthening Scheme - II (WRSS-II)	3581.40	7.06	Grid Strengthening	0.00		343.41	Outlay kept for initial advance against awards and infrastructure development for S/S etc.		Mar-08	Grid Strengthening		Jul-10	
37	Strengthening of East West Transmission Corridor	803.70	0.00	Grid Strengthening	0.00		266.82	Under Award. No stringing is planned during 2007-08.		Mar-08	Grid Strengthening		Jun-09	
38	Transmission System for Gandhar Stage-II	653.21	0.53	Power Evacuation	0.00		57.06	Outlay kept for initial advance against awards and infrastructure development for S/S etc.		May '09 / 33 months from date of Fuel supply	Power Evacuation			Tying up of fuel supply by NTPC.
39	Strengthening of North West Transmission Corridor	483.10	0.53	Grid Strengthening	0.00		124.57	100	-	Mar-08	Grid Strengthening		Jan-09	
40	System Strengthening In Roorkee Area	109.95	4.47	Grid Strengthening	0.00		26.30	Stringing / Tfr. Erection planned in 2008-09.		Mar-08	Grid Strengthening		May-09	
41	WR System Strengthening-III (WRSS-III)	75.65	0.00	Grid Strengthening	0.00		28.01	20	-	Mar-08	Grid Strengthening		Aug-08	
42	System Strengthening-V in NR (NRSS-V)	721.25	0.10	Grid Strengthening	0.00		194.45	50	-	Mar-08	Grid Strengthening		Jun-09	
43	Transmission System for Koldam H.E.P.(Powergrid)	162.96	0.00	Power Evacuation	0.00		51.88	20		Mar-08	Power Evacuation	National Grid	Sep-08	Commissioning of Trans. System is matching with commissioning of Gen. unit.
44	Transmission System for Prabati-III	557.24	0.00	Power Evacuation	0.00		103.75	Stringing / Tfr. Erection planned in 2008-09 onwards.			Power Evacuation		Jul-10	Commissioning of Trans. System is matching with commissioning of Gen. unit.
45	System Strengthening in South Western of Northern Grid - Part A(earlier RAPP 5&6 Supplementary	381.28	0.00	Grid Strengthening	0.00		51.64	50	-	Mar-08	Grid Strengthening		Apr-09	
46	System Strengthening in South Western of Northern Grid - Part B(earlier RAPP 5&6 Supplementary	150.26	0.00	Grid Strengthening	0.00		36.20	5	-	Mar-08	Grid Strengthening		Oct-09	
47	Transmission System for Koldam Project (Powergrid Equity Portion)	48.49	0.00	Power Evacuation	0.00		12.45				Power Evacuation		2008-09	
48	System Strengthening in NR-VII (NRSS_VII)	60.99	0.00	Grid Strengthening	0.00		6.23	Outlay kept for initial advance, infrastructure development etc.			Grid Strengthening		30 months from 1st LOA .	Awards expected in Sept.'07.

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		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
49	Transmission System for URI-II	238.25	0.00	Power Evacuation	0.00		15.56	Outlay kept for initial advance, infrastructure development for S/S etc.			Power Evacuation		Oct-10	Approved in Oct.'06. Commissioning of Trans. System matching with commissioning of Gen. unit.
50	Transmission System for Parbati-II (POWERGRID Equity Portion)	358.42	3.29	Power Evacuation	0.00		0.10	Award to be placed soon after the formation of JV company. Hence till the formation of JV no physical work for the year 2007-08 can be envisaged.			Power Evacuation	National Grid	Sep-08	Formation of JV
51	System Strengthening for NER(MISSING LINK)	58.93	0.00	Grid Strengthening	0.00		6.23	Outlay kept for initial advance, infrastructure development etc.			Grid Strengthening		24 months from LOA of Tower / Tfr. Pkg.	Award ant. By Apr.'07
52	WR System Strengthening-IV	97.22	0.00	Grid Strengthening	0.00		44.46	NA	Not planned in 2007-08		Grid Strengthening		Aug-08	
53	System Strengthening in NR-VIII (NRSS-VIII)	220.69	0.00	Grid Strengthening	0.00		11.60	Provision kept for initial advance, Infrastructure works etc.		Mar'08	Grid Strengthening		30 months from 1st LOA .	
54	Capacity Enhancement in East-West Corridor in NR	123.70	0.00	Grid Strengthening	0.00		40.00	Only Foundation & T.E planned during 2007-08.		Mar'08	Grid Strengthening		24 months from 1st LOA .	
55	Transmission System associated with SEWA-II HEP	98.47	0.00	Power Evacuation	0.00		28.50	150	-	Mar'08	Power Evacuation		May-08	
56	Backbone Telecom Network (C)	934.23	0.00		0.00		11.22	Physical work expected to be completed during 2006-07. Provision kept for left over works / final payments during 2007-08.						
		27156.17	4653.43		0.00		5806.39							

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5	6	7(i)	7 (ii)	7 (iii)	8	
II. NEW SCHEMES		100												
1	SR-I Complex (RHQ building)	0	6.36	Infrastructure Development	0.00		5.19	Building works.		Mar-08	Infrastructure development	National Grid	2008-09	
2	Transmission System for Misa-Bymihat Project (Power Grid Equity)	0	0.00	Grid Strengthening	0.00		0.05	Award to be placed soon after the formation of JV company. Hence till the formation of JV no physical work for the year 2007-08 can be envisaged.			Grid Strengthening		2009-10	Formation of JV
3	Transmission System for Tehri PSP	0	0.00	Power Evacuation	0.00		20.75	Provision kept for Initial advances.			Power Evacuation		2010-11	
4	Transmission System for Kawas Stage -II	0	1.70	Power Evacuation	0.00		0.10	Project under formulation. Only token outlay provided.			Power Evacuation		2011-12	Tying up of fuel supply by NTPC.
5	System Strengthening -VI in NR (Gurgaon S/Stn) (NRSS-VI)	0	0.00	Grid Strengthening	0.00		14.46				Grid Strengthening		2008-09	
6	North East - NR/WR Interconnector (Subansiri & Kameng)	0	0.08	Power Evacuation + Inter Regional Power Transfer	0.00		264.71	Provision kept for Initial advances & Acquisition of land.		Mar.08	Power Evacuation + Inter Regional Power Transfer	National Grid	2010-11	
7	ER Strengthening Scheme (ERSS-1)	0	0.00	Grid Strengthening	0.00		128.14	Provision kept for Initial advance for tower & S/S package and other initial works.		Mar.08	Grid Strengthening		Oct-09	
8	Transmission System for North Karanpura	0	0.00	Power Evacuation + Grid Strengthening	0.00		24.21	Provision kept for Developmental Activities.		Mar.08	Power Evacuation + Grid Strengthening		2011-12	Planned to be implemented through IPP.
9	II nd Spare Converter Transformer for Talcher Kolar	0	0.00	Grid Strengthening	0.00		2.08	Provision kept for Initial advance.		Mar.08	Grid Strengthening		2008-09	
10	Transmission System for RAPP 7&8	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2011-12	
11	System Strengthening-II in ER (ERSS-II)	0	0.00	Grid Strengthening	0.00		5.29	Provision kept for Developmental			Grid Strengthening		2009-10	Planned to be implemented through IPP.
12	System Strengthening-III in ER (ERSS-III)	0	0.00	Grid Strengthening	0.00		1.35	Project under approval.			Grid Strengthening		2009-10	
13	Transmission System for Maithon Right Bank	0	0.00	Power Evacuation	0.00		51.88				Power Evacuation		2009-10	
14	Transmission System for Kayamkulam -II (RGCCP - II)	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2010-11	System forwarded to CEA.

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
15	Transmission System for Karcham Wangtoo +System Beyond Abdullapur	0	0.00	Power Evacuation	0.00		0.05	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2011-12	
16	Establishment of 400/220 KV GIS Pooling Station near CHAMERA-II	0	0.00	Power Evacuation	0.00		20.00	Project under approval.			Power Evacuation		2009-10	
17	Trans. System for evacuation of CHAMERA-III HEP	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2010-11	

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
18	Transmission System for Kishen Ganga	0	0.00	Power Evacuation	0.00		0.05	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2011-12	
19	Transmission System for Rampur	0	0.00	Power Evacuation	0.00		0.05	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2010-11	
20	NRSS -IX(System Strengthening -IV in NR)	0	0.00	Grid Strengthening	0.00		0.05	Project under planning/formulation. Only token outlay provided.			Grid Strengthening		2010-11	
21	Transmission System for Dadri II	0	0.00	Power Evacuation	0.00		0.05	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2009-10	
22	Transmission System for Maithon Project	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2009-10	
23	Development of Chicken Neck Area	0	0.00	Inter Regional Power Transfer	0.00		10.38	Project under approval.			Inter Regional Power Transfer		2010-11	
24	Other New Schemes	0	0.00		0.00		60.20	Provisions kept for other new schemes			0			
25	ER-II Headquarter	0	0.00	Infrastructure Development	0.00		1.04				Infrastructure Development	National Grid		
26	Power Grid Equity (Torrent Transmission Project)	0	0.00	Power Evacuation	0.00		10.00				Power Evacuation		2008-09	
27	Power Grid Equity (Karcham Wangtoo Transmission Project)	0	0.00	Power Evacuation	0.00		12.00				Power Evacuation		2011-12	
28	Trans. System Associated with Boingaigaon TPS	0	0.00	Power Evacuation	0.00		0.05	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2009-10	
29	SR-II Complex (RHQ building)	0	0.00	Infrastructure Development	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Infrastructure Development			

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective / Outcomes			Outlay BE 07-08 (Rs. Cr.)			Physical Outputs/ Quantifiable Deliverables for the year (2007-08)			Projected Outcomes			Remarks/ Status/ Risk Factors
		Sanctioned Cost (Rs. Cr.)	Cum. Exp till 31.03.06 (Rs. Cr.)	Objective / Outcomes	Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Stringing (ckm)	Transformer Erection (no.)	Process / Time-liness	Intermediate/ Partial	Final	Date of Completion of Projects	
1	2	3 (i)	3 (ii)	3 (iii)	4 (i)	4 (ii)	4 (iii)	5		6	7(i)	7 (ii)	7 (iii)	8
30	North Chennai	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2011-12	
31	Tutucorin (Powergrid Portion)	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2011-12	
32	Kalpakkam PFBR	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2011-12	
33	SR-WR Synchronous Interconnector	0	0.00	Inter Regional Power Transfer / Grid Strengthening	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Inter Regional Power Transfer / Grid Strengthening		2011-12	
34	Talcher-Rourkela	0	0.00	Inter Regional Power Transfer	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Inter Regional Power Transfer		2010-11	
35	System Strengthening for evacuating of power from Sikkim	0	0.00	Grid Strengthening	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Grid Strengthening	National Grid	2011-12	
36	Transmission System for Farrakka Stage-III	0	0.00	Power Evacuation	0.00		0.10	Project under planning/formulation. Only token outlay provided.			Power Evacuation		2010-11	
37	WR Strengthening Scheme - V (Vapi-New Mumbai)	0	0.00	Grid Strengthening	0.00		0.20				Grid Strengthening		2009-10	
38	NR System Strengthening - IX,X,XI & XII	0		Grid Strengthening	0.00		60.00				Grid Strengthening		2011-12	
39	Korba -III(500MW)	0	0.00	Power Evacuation	0.00		0.10				Power Evacuation		2010-11	
		0	8.14		0.00		693.62							
					0.00		6500.00							

NATHPA JHAKRI HYDRO ELECTRIC PROJECT

Outcome Budget 2007-08

Rs. In Crores									
Sl. No.	Name of Scheme /Programme/ Project	Objective /outcome	Outlay 2007-08 (Rs.in crores)			Quantifiable Deliverables	Processes	Timeliness	Remarks/Risk
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	Nathpa Jhakri Hydro Electric Project	Commissioning of 1500 MW Power Project			8.94	Major Civil Works			
						Balance Civil Works of NJHEP	Processes primarily comprise : Balance Civil works of adit#2 gate, cable trench and SFT outfall structures & SFT lining, Invert lining of Nathpa & Wadhal adit, c/o various approach road to Dam, Intake and Desilting Complex,	June 07	
							P/F of Blanking panels on Trash Rack of Intake Structure, Modification of Intake Gates	July 07	
							P/I of Toyo pumps for slush removal from Intake Gates.	August 07	
							Work shop for repair & maintenance of Dam, Intake, SFT & Sholding gate components at Nathpa and Construction of O&M workshop building at Jhakri.	June 07	
						Electro-Mechanical Works			
					57.96	Procurement of Capital spares & balance payments against Gates & Hoist.	Processes primarily comprise : Runner (4 No.) (Rs. 55 Crores) Balance payments against Gates & Hoist (Rs. 2.38 Crores).	March 08 October 07	
						Miscellaneous Infrastructural Works			
					0.59	Alternative package in lieu of employment	Processes primarily comprise : Compensation against Land acquisition (Rs. 0.25 Crores)	March, 08	
						C/o non-family Type-A Hostel Accommodation at Jhakri.	Accommodation (Rs. 0.21 Crores)	March, 08	
					0.00	IEDC, IDC, Recovery of ICF Cost, recovery of Revenue from infirm power			
					67.49	Sub Total			

NATHPA JHAKRI HYDRO ELECTRIC PROJECT

Outcome Budget 2007-08

Rs. In Crores

Outcome Budget 2007-08									
Rs. in Crores									
Sl. No.	Name of Scheme /Programme/ Project	Objective /outcome	Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Quantifiable Deliverables	Processes	Timeliness	Remarks/Risk
			Outlay 2007-08 (Rs.in crores)						
Sl.	Name of	Objective	Non Plan	Plan	Complementary Extra Budgetary	Quantifiable Deliverables	Processes	Timeliness	Remarks/Risk
			Outlay 2007-08 (Rs.in crores)						
Sl. No.	Name of Scheme /Programme/ Project	Objective /outcome	Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Quantifiable Deliverables	Processes	Timeliness	Remarks/Risk
2	Rampur Hydro Electric Project	Construction of RHEP				Major Civil Works			
					86.28	Package-I	Processes primarily comprise :		
						Completion of all adits Excavation of HRT Heading of 1500 Mtr.	Mobilisation advance (Rs. 21.25 Crores)	May, 07	
							Machinery advance (Rs. 21.25 Crores)	May, 07	
							Adit - I	March 08	
							Balance portion of Adit - II		
							Balance portion of Adit - III		
							Adit cum spillway tunnel, Approach Road , Portal Development etc.	March 08	
							HRT Heading Excavation (Rs. 39.06 Crores)	Running payments upto	
					134.95	Package-II	Processes primarily comprise :		
					About 40% of Surge Shaft excavation	Mobilisation advance (Rs. 19.05 Crores)	Aug, 07		
Excavation and about 20% of Power House Complex to be completed.	Machinery advance (Rs. 23.10 Crores)	Jan, 08							

NATHPA JHAKRI HYDRO ELECTRIC PROJECT

Outcome Budget 2007-08

Rs. In Crores									
			Outlay 2007-08 (Rs.in crores)						
Sl. No.	Name of Scheme /Programme/ Project	Objective /outcome	Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources	Quantifiable Deliverables	Processes	Timeliness	Remarks/Risk
						Excavation of Penstocks to be completed. Valve House Chamber excavation and concreting to be completed 200 Mtr of HRT excavation to be completed.	Main Works (Rs. 92.80 Crores) Comprising execution of 2188 Mtrs of HRT, TRT, Valve Chamber, Surger Shaft, Pressure Shaft and Power House Complex.	Running payments upto March, 08	
					67.00	Electro-Mechanical Packages	Processes primarily comprise : Mobilisation advance.	September , 07	
					53.56	Infrastructural Works			
					0.77	A- Preliminary			
						Geological Exploration & Instrumentation	Processes primarily comprise : Physico-mechanical properties of rocks to be encountered in under ground structures and assesment of rock	Feb,08	
					9.75	B-Land ER&R Various Community Development Schemes	Processes primarily comprise : Various R&R schemes, infrastructure, development schemes and other misc. activities (Rs. 2.50 Crores). Drinking water supply schemes/restoration of dried up water sources / Water Supply scheme from Deor Khad (Rs. 2.00 Crores) Bus stand at Rampur Bushahr (Rs. 4.00 Crores).	Running payments upto March, 08 Feb,08 Sep,07	
					8.43	K- Buildings			
						Residential & Non - Residential Buildings	Processes primarily comprise : Permanent residential building at Jhakri (Rs. 3.44 Crores) Non Residential Buildings at Jhakri i.e. Office Building. C/o of Permanent Non-residential Buildings at Bayal including EI (i.e. Field Hostel, Office building. Site office, site Lab., Rest shed, Hospital, store at Bhadrash,etc. (Rs.3.14 Crores)	Running payments upto March, 08 Running Running payments upto March, 08	
					15.87	O-Miscellaneous	Processes primarily comprise : Electrification/Arrangement of const.power(sub- station & HT lines) (Rs. 13.73 Crores). Arrangement of Power Supply at Jhakri (underground cabling, DG Sets, Transformers etc.) (Rs. 0.34 Crores) Water Supply and Sewerage Systems (Rs. 0.25 Crores)	March, 08 May, 07 June,07	
					10.93	R-Communication (Roads & Bridges)	Processes primarily comprise : Roads required to be widened through HPPWD & approaches (Rs. 3.70 Crores) Bridge at Dutt Nagar (Rs. 2.94 Crores) Double lane steel truss bridge at Rampur (Rs.3.45 Crores)	September 07 Nov 07 March, 08	
					6.95	X- Environment & Ecology	Implementation of CAT Plan & environmental studies	December, 07	
					26.44	Establishment.	Continuous process.		
					368.21	Sub Total			

NATHPA JHAKRI HYDRO ELECTRIC PROJECT

Outcome Budget 2007-08

Outcome Budget 2007-08									
Rs. In Crores									
Outlay 2007-08 (Rs.in crores)						Quantifiable Deliverables	Processes	Timeliness	Remarks/Risk
Sl. No.	Name of Scheme /Programme/ Project	Objective /outcome	Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
3	Luhri Hydro Electric Project (776 MW)	Constructio n of LHEP			162.84	Completion of drifts 850 Mtr	Survey & Investigation	March 08	Subject to Clearance to go ahead with execution of project after signing of Implementaion Agreement with Govt. of Himachal Pradesh.
						Completion of exploratory holes 1500 Mtr			
						Acquisition of private land 77 hactare and diversion of forest land 242 hactares	Land acquisition (Rs. 82.00 Crores)	March 08	
						Running expanses on R&R Schemes	Various R&R Schemes, infrastructure, development scheme, construction of houses for R&R works & other Misc. activities regarding R&R works (Rs. 2.00 Crores)	Running payments upto March, 08	
						Construction of 22 KV HT lines	Making available construction power and transporation facility (Rs. 21.50 Crores)	March 08	
						Electrification of pre-fabricated structure			
						Construction of sub-stations by HPSEB as deposit work.	Communication (Roads and Bridges) (Rs. 39.05 Crores)	March 08	
						Completion of approach road to adits / project components, widening of roads by HPPWD, steel truss bridge and improvement of existing bridges.			
4	Khab Hydro Electric Project (1020 MW)	Constructio n of KHEP			13.28	Establishment.	Continuous process.	Running payments upto March, 08	Subject to Clearance to go ahead with execution of project after signing of Implementaion Agreement with Govt. of Himachal Pradesh.
						Revised PFR and DPR preparation	Survey & Investigation		
5	Devsari Dam HEP	Constructio n of Devsari Dam HEP			9.99	Completion of DPR based on complete geophysical exploration, mapping, topographical surveys, drilling and drifting	Survey & Investigation and preliminary works including Building , O-miscellaneous and R-communication etc.	Running payments upto March, 08	
						Completion of approaches to different project components			
6	Naitwar Mori HEP (34.5 MW)	Constructio n of NMHEP			9.39	Completion of DPR based on complete geophysical exploration, mapping, topographical surveys, drilling and drifting	Survey & Investigation and preliminary works including Land , O-miscellaneous and R-communication etc.	Running payments upto March, 08	
						Completion of approaches to different project components			
						50% land acquisition to be completed.			
						Making available construction power			
7	Jakhol Sankri HEP (36 MW)	Constructio n of JSHEP			10.05	Completion of DPR based on complete geophysical exploration, mapping, topographical surveys, drilling and drifting	Survey & Investigation and preliminary works including Land , O-miscellaneous and R-communication etc.	Running payments upto March, 08	
						50% land acquisition to be completed.			
						Making available construction power			

NATHPA JHAKRI HYDRO ELECTRIC PROJECT

Outcome Budget 2007-08									
Rs. In Crores									
Sl. No.	Name of Scheme /Programme/ Project	Objective /outcome	Outlay 2007-08 (Rs.in crores)			Quantifiable Deliverables	Processes	Timeliness	Remarks/Risk
			Non Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
					1.55	Establishment (Corporate Centre and Project Office at Dehradun for DDHEP, NMHEP and JSHEP).	Continuous process.		
		Total BE			642.80				

**Damodar Valley Corporation
Outcome Budget 2007-08**

(Rs. Crore)

Sl. No.	Name of Project	Objective/Outcome	Annual Plan 2007-08			Quantifiable Deliverables /Milestones /Outcomes (Targets)	Projected Outcomes	Processes / Timelines	Remarks
			Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3			4	5		6	7
A.	Ongoing Power Projects								
1	Mejia TPS Extn. Unit # 5 & 6 (2x250 MW), <i>Scheduled COD: U-5: 12/1/2007, U-6:12/3/2007</i>	Capacity addition of 500 MW			323.46	Unit-5: 1] Commercial Operation	Capacity addition of 500 MW	by 07/07	
						Unit-6: 1] Commercial Operation		by 09/07	
2	Chandrapura TPS Extn. Unit # 7 & 8 (2x250 MW), <i>Scheduled COD: U-7: 27/1/2007, U-8:27/3/2007</i>	Capacity addition of 500 MW			597.66	Unit-7: 1] Boiler Light up - Chemical cleaning	Capacity addition of 500 MW	by 04/07	
						2] TG Box Up complete		by 05/07	
						3] Oil Flushing complete		by 06/07	
						4] Synchronisation		by 08/07	
						Unit-8: 1] Boiler Light up - Chemical cleaning		by 06/07	
						2] TG Box Up complete		by 07/07	
						3] Oil Flushing complete		by 08/07	
						4] Synchronisation		by 10/07	
Total Ongoing Power Projects					921.12				

(Rs. Crore)

Sl. No.	Name of Project	Objective/Outcome	Annual Plan 2007-08			Quantifiable Deliverables /Milestones /Outcomes (Targets)	Projected Outcomes	Processes / Timelines	Remarks
			Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3			4	5		6	7
B.	New Thermal Power Projects								
	Green Field Projects By DVC								
1	Kodarma Stage-I:U # 1 & 2 (2x500 MW)	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 42 months from date of LOA for EPC contract			514.92	1] Issue of LOA for Main Plant items 2] Mobilisation of Man & machineries 3] Issue of LOA for Water System package 4] Issue of LOA for Coal handling 5] Commencement of Piling & Foundation 6] Commencement of SG Erection U#1	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 42 months from date of LOA for EPC contract	by 04/07 by 05/07 by 06/07 by 06/07 by 06/07 by 03/08	
2	Durgapur Steel TPS U # 1&2 (2x500 MW)	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 42 months from date of LOA for EPC contract			468.59	1] Issue of NIT for Main Plant Package 2] Complete land acquisition 3] Issue of LOA for EPC items 4] Mobilisation of Man & machineries 5] Commencement of Piling & Foundation	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 42 months from date of LOA for EPC contract	by 02/07 by 07/07 by 08/07 by 09/07 by 11/07	
3	Raghunathpur TPS: Unit # 1 & 2 [2 X	Capacity addition of 1000+20% MW with COD: U-1: 39 months & U-2: 44 months from date of LOA for EPC contract			530.42	1] Issue of NIT for Main Plant Package 2] Complete land acquisition 3] Issue of LOA for EPC items	Capacity addition of 1000+20% MW with COD: U-1: 39 months & U-2: 44 months from date of LOA for EPC contract	by 04/07 by 09/07 by 10/07	
	Replacement /Extension Projects By DVC								
4	Bokaro 'A' TPS: (1x 500 MW)	Capacity addition of 500 MW			682.98	1] Unit-1: Start foundation of SG 2] Unit-1: Start Boiler Erection	Capacity addition of 500 MW	by 5/07 by 11/07	
5	Mejia Phase-II: Unit1&2 (2x 500 MW)	Capacity addition of 1000 MW			672.34	3] Unit-1: Start Boiler Erection 4] Unit-2: Start Boiler Erection	Capacity addition of 1000 MW	by 11/07 by 02/08	
	Joint Venture Projects								
6	Maithon RB TPS:U # 1 & 2 (2x500 MW) [Equity contribution @26% from DVC to MPL, proposed Joint Venture of TPC & DVC], [Estd. project cost= Rs. 4425.74 Crs.]	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2:42 months from date of LOA for EPC contract			200.00	To achieve about 20% progress of Project constn. work	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2:42 months from date of LOA for EPC contract	by 03/08	
7	Bokaro Steel TPS U # 1&2 (2x250 MW) [Equity Contribution @50% from DVC to BPSCL, a Joint Venture of DVC & SAIL], [Estd. project cost= Rs. 2100 Crs.]	Capacity addition of 500 MW with COD : U-1: 31 months & U-2:33 months from date of LOA for EPC contract			32.00	Issue of LOA for EPC items	Capacity addition of 500 MW with COD : U-1: 31 months & U-2:33 months from date of LOA for EPC contract	by 12/07	
	Other Projects Likely for 12th Plan & Beyond								
8	Ramgarh Stage-I:U # 1 & 2 (2X500 MW)	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 44 months from date of EPC contract award			0.56	To finalise Land details for submission to Govt. of Jharkhand.	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 44 months from date of EPC contract award	by 03/08	
9	Maithon LB TPS Stage-I:U # 1 & 2 (2x500 MW)	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 44 months from date of LOA for EPC contract			0.00		Capacity addition of 1000 MW with COD : U-1: 39 months & U-2: 44 months from date of LOA for EPC contract		
9	Investigation / Feas. Studies / DPR etc.				Provision Included in projects at 1,2,3,4,5,7 & 8 above				
	Total :New Thermal Power Projects :1] to 9]				3101.80				
1	Belpahari Dam/Hydel	Study by Consultant			2.26	Completion of study	Study by Consultant	by 03/08	
2	Konar Dam				0.00				
	Total :Dam/Hydel Projects :				2.26				

(Rs. Crore)

Sl. No.	Name of Project	Objective/Outcome	Annual Plan 2007-08			Quantifiable Deliverables /Milestones /Outcomes (Targets)	Projected Outcomes	Processes / Timelines	Remarks
			Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3			4	5		6	7
D.	T & D schemes								
	TSC Schemes: T & D	To facilitate Transmission & Distribution (R&D) of power			123.20	1] Completion of 220kV D/C MTPS-Durgapur Line.	To facilitate Transmission & Distribution (R&D) of power	by 4/07	
	R&A of T&D				51.02	2] Commencement of 220 KV D/C CTPS-Maithon LILO at Dhanbad, Barjora-Uluberia Line, Durgapur-Panagarh Line, Dhanbad-Giridih Line, BTPS-JSR D/C LILO at Gola & extrn. upto Ramgarh, Ramgarh-Hazaribagh Line, Panagarh-Burdwan Line, MRBTPS-Kalyaneswari Line, Parulia-Durgapur Line & Mejia-Gola Line.		by 03/2008 in phases	
						3] Commencement / completion of 132 KV Putki-PTD S/C LILO at Dhanbad, Howrah-Kolaghat D/C LILO at Uluberia &		by 03/2008 in phases	
						4] Commencement / completion of 33 KV D/C Line from Koderma S/S to R/S, CTPS-BSL Line, Patherdih-Govindpur		CTPS-BSL by 10/07 Patherdih-	
						5] Commencement of constr. of 220 KV S/S at Dhanbad, Uluberia, Giridih, Panagarh, Gola & Hazaribagh subject to availability of land.		by 03/2008 in phases	
						6] Completion of 132 KV infrastructure at Barjora S/S.		by 11/07	
						7] Completion of 132 KV Jamuria S/S & Poradih S/S.		Jamuria : by 4/07 *	
						8] Commencement / completion of 33 KV R/S at BSL with 2 Nos. bays at CTPS & at Govindpur.		by 8/07	
						9] Feasibility survey of different associated lines including 400 KV network.		by 03/2008 in phases	
						11] Land aquisition of different S/S.		by 03/2008 in phases	
						12] Execution of misc. R&A and capacity addition work.		by 03/2008 in phases	
						13] Completion of re-conductoring work of 132 KV Putki-Nimiaghat Line & Bokaro-Barhi Line.		Putki-Nimiaghat : 8/07, Bokaro-Barhi : 6/07	
						* Job could be taken up only on availability of land & forest clearance from Govt. of Jharkhand and West Bengal.			
	Total T & D schemes				174.22				
E.	Communication schemes								
	1] Power Line Carrier Communication (PLCC)	1] Speech and data communication for Kalyaneswari – Pithakari line section and 132 KV Jamuria sub-station			0.8337	1] Obtaining operating frequency clearance, 2] Procurement of material, 3] Erection	1] Speech and data communication for Kalyaneswari – Pithakari line section and 132 KV Jamuria sub-station	1] by 06/2007, 2] by 12/2007, 3] by 03/2008	Establishment of connectivity dependent on progress of T&D works
		2] Speech and data communication for Mejia – Durgapur line section				1] Obtaining operating frequency clearance, 2] Procurement of material, 3] Erection	2] Speech and data communication for Mejia – Durgapur line section	1] by 04/2007, 2] by 04/2007, 3] by 04/2007	
	2] Satellite Communication (VSAT)	Speech and data communication for Bunpur, Nimiaghat, Koderma, Barjora, Durgapur 220 KV sub-station			1.6878	1] Placement of work order 2] Erection	Speech and data communication for Bunpur, Nimiaghat, Koderma, Barjora, Durgapur 220 KV sub-station	1] by 12/2007 2] by 03/2008	Statutory clearance to be obtained
	3] Very High frequency communication (VHF)	Speech communication for North Karanpura sub-station			0.0123	1] Obtaining operating frequency clearance, 2] Erection	Speech communication for North Karanpura sub-station	1] by 04/2007 2] by 04/2007	----
	4] Unified Load Despatch & Communication scheme (ULDC)	1] Repayment of Project cost to Power Grid 2] Speech and data communication for Barjora, Durgapur 220 KV sub-station and data communication for Unit 5 & 6 of Mejia.			15.2313	1] Speech and data integration among constituents of Eastern region, 2] Speech and data integration of Barjora, Durgapur 220 KV sub-station and data communication for Unit 5 & 6 of Mejia with SLDC Maithon, DVC HQ Kolkata and RSCC Tollygunge.	1] Repayment of Project cost to Power Grid 2] Speech and data communication for Barjora, Durgapur 220 KV sub-station and data communication for Unit 5 & 6 of Mejia.	1] by 03/2008 2] by 04/2007	1] Project Complete & commissioned, payment awaited, 2] Under implementation by Power Grid.
	5] Carrier Replacement	Speech and data communication by replacement of outdated equipment for Kharagpur – Kolaghat, Kharagpur – Mosaboni section.			0.0051	1] Procurement of material, 2] Erection	Speech and data communication by replacement of outdated equipment for Kharagpur – Kolaghat, Kharagpur – Mosaboni section.	1] by 04/2007 2] by 04/2007	----
	Total Communication Schemes:				17.7702				

(Rs. Crore)									
Sl. No.	Name of Project	Objective/Outcome	Annual Plan 2007-08			Quantifiable Deliverables /Milestones /Outcomes (Targets)	Projected Outcomes	Processes / Timelines	Remarks
			Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3			4	5		6	7
F.	R&M Schemes								
	<i>R & M Schemes: Phase - II</i>	Improved Performance				Closing of contracts of 8th & 9th Plan activities	Improved Performance	by 03/08	
	CTPS				0.24				
	DTPS				0.03				
	<i>Total R & M: Phase - II</i>				0.27				
	<i>R & M Schemes: Phase - III</i>								
	BTPS-A				0.00				
	CTPS				0.36				
	DTPS				0.42				
	<i>Total R & M: Phase - III</i>				0.78				
	<i>R & M Schemes: Phase - IV</i>								
	BTPS-A	Restoration of original capacity (MW) & improved performance (PLF 70%)			0.00	---	Restoration of original capacity (MW) & improved performance (PLF 70%)	---	---
	CTPS	Restoration of original capacity (MW) & improved performance (PLF 70%)			0.00	---	Restoration of original capacity (MW) & improved performance (PLF 70%)	---	---
	DTPS	Restoration of original capacity (MW) & improved performance (PLF 70%)			0.00	---	Restoration of original capacity (MW) & improved performance (PLF 70%)	---	---
	MAITHON HYDEL	Achieving up-rated capacity (MW)			2.14	1) Closing of Contract of RMU/LE of U # 2 2) Finalization of contracts for different Packages for U# 1 & 3	Achieving up-rated capacity (MW)	by 07/07	
	PANCHET HYDEL	Achieving up-rated capacity (MW)			4.50	1) Preparation of Bid Doc/ issuance of NIT & finalization of RMU/LE agency 2) Advance Payment to RMU/LE Agency for supply of materials	Achieving up-rated capacity (MW)	by 06/07 by 08/07	
	<i>Total R & M: Phase - IV</i>				6.64				
	Sub Total R&M : Ph. II + Ph. III + Ph. IV				7.69				
G.	Pollution: [1] Addl. ESPs at BTPS'B'	For Environmental compliance			0.00		For Environmental compliance		
	[2] Dry Ash Disposal System for BTPS'B' (3X210 MW)	For Environmental compliance			16.52	Commissioning of Dry Ash Disposal Sys	For Environmental compliance	by 03/08	
	Grand Total in Rs. Crs :A to H				4271.38				

Tehri Hydro Development Corporation limited

Outcome Budget 2007-08

Sl. No.	Name of Schemes/ Programme	Objective/ Outcome	Approved Outlay 2007-08 (in Rs. crore)			Quantifiable Deliverables/Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5		6	7
1	Tehri Dam & HPP (1000 MW)	Hydro Power Generation	0.00	0.00	19.00 + 130.76 (*)	Generation - 2649 MU	Hydro Power Generation	-	
2	Koteshwar HEP (400 MW)	Hydro Power Generation	0.00	0.00	391.90	Dam & spillway concrete upto EL550m Erection of EOT crane PH concreting upto EL570m Completion of Concreting in Stilling Basin Completion of concreting in Power Intake Completion of concreting of Switchyard		July'07 Sept.'07 Nov.'07 Dec.'07 Feb.'08 March'08	

						Completion of concreting of in Draft Tube Gate Shaft (Unit-I & II)		March'08	
3	Vishnugad Pipalkoti (444MW)	Hydro Power Generation	0.00	5.00	0.00 + 54.63(*)	Award of Works		March'08	TEC accorded by CEA in Sept.'06. Project funding is under consideration by World Bank. NIT for major package being issued after clearance of PQ Criteria/ documents by World Bank. PIB approval is under process.
						Construction of Bridges		Jan.'08	
Sl. No.	Name of Schemes/ Programme	Objective/ Outcome	Approved Outlay 2007-08 (in Rs. crore)			Quantifiable Deliverables/ Physical Outputs	Projected Outcome	Processes/ Timelines	Remarks
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3	4(i)	4(ii)	4(iii)	5		6	7
4	Tehri PSP (1000MW)	Hydro Power		5.00	0.00 +	Award of Works		Nov.'07	

		Generatio n			18.08(*)	Commencement of Machine Hall excavation Completion of Adits 8, 8(a), 9 to TRT, d/s surge shaft, PAC		Feb.'08	
								March'08	
5	New Projects	Hydro Power Generatio n		0.00	0.00 + 7.12(*)	Preparation of DPR of Maleri Jhelum and Jhelum Tamak Projects.		March'08	MOEF stage-I clearance not accorded for Bokang Bailing Project as the proposed project site is coming in Askot Musk Deer Sanctuary. Also, It has been intimated by Forest Deptt., GOUA in Aug.'06, that Project sites of Karmoli (140 MW) & Jadhganga (50 MW) comes under “ Gangotri National Park”. To carry out any Survey & Investigation on these three Project sites, permission of Hon’ble Supreme Court would be required.
	i) Karmoli (140MW)								
	ii) Gohana Tal (60MW)		-						
	iii) Jadhganga (50MW)		-						
	iv) Malari Jhelam (55MW)								
	v) Jhelam Tamak (60 MW)		-						
	vi) Bokang Bailing (330MW)		-						

									It has recently informed by GOUA that 3 small hydro projects have been allotted in the reach proposed to be utilised for development of Gohana Tal. Matter has been taken up with State Govt. and MOP for resolution. Preparation of FR for 2 Projects taken up.
	Total			10.00	410.90 + 210.59(*)				

Note: 1) Plan Budget includes GBS from the Govt.

2) Complementary Extra-Budgetary Resources includes Commercial borrowings

(*) Includes contribution of State Govt. of U.P. for Rs.210.59

Chapter – III

Major Initiatives/ Reforms & Policy Measures

1. Accelerated Power Distribution Reform Programme During XIth Plan (Under Proposal for Restructuring)

1.1 Accelerated Power Development and Reform Programme was launched in 2002-03. The Ministry of Power took up the evaluation of the programme through independent agencies. While recommending the continuance of the APDRP beyond 10th Plan, the evaluators made certain suggestions for incorporating in the programme for achieving better results. The utilities and the Planning Commission had also proposed certain modifications in the programme. Considering this, the Ministry of Power constituted a Task Force headed by Sh. P. Abraham, former Secretary, Government of India, to assess and analyze the current efforts, suggestions made by various agencies and to suggest restructuring of the programme to achieve the objectives of APDRP. The Task Force also recommended continuation of the programme during XI Plan with modified conditionality and with realistic and firm targets.

1.2 In view of the recommendations of the Task Force and the independent evaluators, to complete the already sanctioned schemes and to cover balance district headquarter & major towns, it is proposed to continue APDRP during the XI Plan with the revised terms and conditions and with the new name “Accelerated Power Distribution Reform Programme” with Central Sector Assistance.

1.3 The focus of the programme shall be on establishment of base line data, which shall enable reduction of AT&C losses in major towns of the country through strengthening & upgradation of Sub-Transmission and Distribution network and adoption of Information Technology in the areas of energy accounting & auditing and improvement in consumer services through establishment of Bijlee Sewa Kendra.

1.4 The programme will cover urban areas only, covering all District Headquarters and towns with population of more than 50,000 . The funding will be project specific.

1.5 The proposal is to merge investment and incentive components with the provision of conversion of loan to incentive to the distribution companies on achieving specified milestones including reduction of AT&C loss in specific metropolises, cities, state head quarters, district head quarters and other towns. There will be a provision of incentive to the employees of the Utilities in project areas, which achieve agreed targets. However, for States and utilities that have not moved at satisfactory rate in ushering in reforms or fail to achieve the predetermined milestones and parameters, the loan assistance would continue to remain loan. Such States would not be eligible for any grants.

1.6 The programme will cover preparation of Base-line data for the town / city covering Consumer Indexing, GIS Mapping, Metering of Distribution Transformers and Feeders, and Automatic Data Logging for all Distribution Transformers and Feeders, Renovation, Modernization and strengthening of the sub-transmission and distribution network.

The programme is under finalization and therefore the features of the programme indicated above may undergo some changes before approval.

2. Ultra Mega Power Projects (UMPPs)

- 2.1 The Ministry of Power, Government of India has launched an initiative for development of coal based Ultra Mega Power Projects (UMPPs) in India, each with a capacity of 4000 MW or above. These projects will be awarded to developers on the basis of tariff based competitive bidding.
- 2.2 To facilitate tie-ups of inputs and clearances project specific Shell companies have been set up as wholly owned subsidiaries of the Power Finance Corporation Ltd. These companies will undertake preliminary studies and obtain necessary clearances including water, land, fuel, power selling tie-up etc. prior to award of the Project to the successful bidder.
- 2.3 Nine sites have been identified by CEA in nine different states for the proposed Ultra Mega Power Projects. These include four pithead sites one each in Madhya Pradesh and Chhattisgarh, Orissa, Jharkhand and five coastal sites one each in Gujarat, Karnataka, Maharashtra, Andhra Pradesh and Tamil Nadu. It is proposed to set up pithead projects as integrated proposals with corresponding captive coal mines. On the request of Ministry of Power, Min. of Coal has already allocated captive coal mining block for Sasan UMPP in Madhya Pradesh and earmarked captive coal mining block for Orissa UMPP. For the coastal projects imported coal shall be used. The projects are to be developed with a view to result in minimum cost of power to the consumers. Because of bigger size units, the cost of the project would be lower due to economy of scale. Further, the layout of the project would be compact and all systems would be optimized to result in lower cost of power. Further projects would be environment friendly adopting supercritical technology to reduce emissions.
- 2.4 A time bound action plan for preparation of project report, tie-up of various inputs/clearances, appointment of consultants, preparation of RFQ/RFP have been prepared. In respect of first two sites of Sasan and Mundra, there has been overwhelming response as 10 developers have submitted their bids for Sasan and six have submitted their final bids for Mundra UMPPs. In respect of Sasan (Madhya Pradesh) financial bids were opened on 18th December 2006 and the lowest tariff of Rs. 1.19 per KWh (levelised tariff for 25 years and first year tariff as 93 paise per unit) was quoted by consortium of M/s. Globeleq Singapore, PTE. Ltd. and M/s. Lanco Infratech Pvt. Ltd. In respect of Mundra (Gujarat) financial bids were opened on 18th December 2006 and the lowest tariff as Rs. 2.264 per KWh (levelised tariff for 25 years and the first year tariff as Rs. 1.91 per unit) was quoted by Tata Power Company Ltd. The Letter of Intent (LoI) was handed over

to the successful developers on 28th December 2006. The result achieved in these two cases has been quite heartening and it shows the way forward for capacity addition at the most competitive cost. Developers for Krishnapatnam UMPP (Andhra Pradesh) and Jharkhand UMPP are expected to be selected by April 2007 and July 2007 respectively. Once the developers are selected, the ownership of the Shell companies shall be transferred to the successful bidders.

2.5 All UMPPs are based on supercritical technology. Power plants using super critical technology have higher efficiency of about 40 per cent compared to 38.6 per cent of sub-critical 500 MW units in terms of thermal efficiency. Six more supercritical units of 660 MW of NTPC Ltd., at Sipat (3x660) and Barh (3x660) are at the advanced stage of construction and the first super-critical unit is expected to be commissioned during 2009-2010. In XI Plan, NTPC Ltd., and some State Utilities have plans to go for adoption of 800 MW. NTPC has already drawn up-plans to induct 800 MW units at Darlipalli, Lara and Gajmara. Adoption of large supercritical units provides the following advantages: -

- i) Faster capacity addition due to large unit size.
- ii) Higher efficiency gain of 1.8% to 5.1% and reduced emission of SO_x and NO_x.
- iii) Better load cycling.
- iv) Reduction of fuel consumption upto 0.79 million tons per annum for a 4000 MW (5x800 MW) station as compared to 8 units of 500 MW.

3. Development of Merchant Power Plants

3.1 In order to facilitate the development of electricity market, the Ministry of Power has issued the approach and the guidelines on development of Merchant Power Plants, for which coal linkage/coal blocks allotment would be available. Unlike traditional utilities, Merchant Power Plants compete for customers and absorb the full market risk. There are no guarantees that they have a minimum off-take of their output. Typically the risk of a Merchant Power Plant is carried on the balance sheet of the promoter. Merchant Power Plants can provide the additional generating reserves that India needs now and will need in the future. They are a modern, market-based answer – at least in part – to energy challenges faced by the country.

3.2 Merchant Power Plants are a product of the restructuring of the electricity industry. Merchant Power Plants fill different niches in the market; some provide steady supplies to a power grid, while others fire up only when demand is highest and meet peak loads. Merchant power plants operating competitively help assure that power is produced with efficiency and supplied to locations where it is needed most.

3.3 Considering the redundancies that are being provided in the grid to promote open access in transmission and open access in distribution in coming years, it would be reasonable to expect that merchant power plants each of capacities of 1,000 MW and below could be accommodated for being able to access transmission availability for wheeling of power to customers which are generally not predetermined. Merchant

Power Plants would be expected to have dedicated lines upto the nearest regional/national grid system.

- 3.4 Merchant Power Plants upto a capacity of 1000 MW would be provided coal linkage and captive coal blocks may also be provided to merchant power plants in the range of 500 – 1000 MW.
- 3.5 It would be essential that certain normative criteria are laid down for eligibility for coal blocks allotment, particularly to IPPs and merchant plans. These criteria could relate to net worth of the company, their internal resource generation and annual turn over. The agencies being allotted the coal blocks, may also be required to put in place bank guarantee of a reasonable amount which should be liable to be encashed if important milestones for development of coal mines are not achieved. The intermediate milestones may include not only in relation to development of coal mines, but also with reference to the power projects, such as award of EPC contracts, commencement of construction etc.
- 3.6 Success of this scheme, however, would, to a great extent, depend on availability of reliable data and information for plant sites and other inputs in this capacity range so that developers then can take further appropriate action. An initiative to prepare PFRs of 15-20 such Pre Feasibility Reports for various plant locations has been taken by the Ministry with CEA to provide the technical inputs for preparation of such reports and PFC, on the basis of advice of CEA, would engage various agencies to develop brief Feasibility Reports in a time-bound manner for about two dozen power plant locations in the capacity of 500 – 1000 MW. These reports may become available in a period of 3-6 months time.

4. Crash Programme For Augmentation of Power Supply in Delhi in view of Commonwealth Games

- 4.1 Ministry of Power has identified shelves of projects for taking care of electricity needs of city of Delhi in view of Commonwealth Games to be held in 2010 in the capital. The identified projects are Dadri-II Expansion (2x490 MW), Badarpur Expansion Project Stage-III (2x500 MW) and Jhajjar Project (3x500 MW) of NTPC Ltd., and Mejia Project (1000 MW), Koderma Project (1000 MW) and Bokaro expansion project (500 MW) of DVC. Out of the total 5980 MW power from these projects, the units totaling to capacity of 5480 MW will be commissioned by October 2010. The generation projects along with associated power transmission and distribution systems are being maintained in the Ministry of Power by a High Level Inter-ministerial Monitoring Committee formed under chairmanship of Secretary (Power).

5. Revival of the Dabhol Power Project

5. Revival process of the Dabhol Power Project which was closed since June, 2001 following disputes between the Dabhol Power Company and Maharashtra SEB (MSEB) was initiated in 2005. A joint venture company by the name of Ratnagiri Gas and Power Private Limited (RGPPL), with shareholding of National Thermal Power Corporation (NTPC), Gas Authority of India Limited (GAIL), Indian Financial Institutions (IFIs) and MSEB has been constituted to restart the power plant and complete the construction of Phase II and the associated LNG terminal. The Project's assets have been taken over by RGPPL with the approval of Maharashtra High Court. Block-II (740MW) of Dabhol Power Project has already been commissioned on 15-5-2006. Balance capacity of the project shall be commissioned by March'2007.

6. Power Transmission Network & National Grid

- 6.1 Formation of a strong National Power Grid has been recognized as a flagship endeavor to steer the development of Power System on planned path leading to cost effective fulfillment of the objective of 'Electricity to All' at affordable prices. A strong all India grid would enable exploitation of unevenly distributed generation resources in the country to their optimum potential.
- 6.2 Presently, the inter-regional transmission capacity of 11,450 MW is existing, which connects Northern, Western, Eastern and North Eastern regions in synchronous mode operating at same frequency and Southern region asynchronously. This has enabled inter-regional energy exchanges of more than 12 billion kWh in a year thus contributing to greater utilization of generation capacity and improved power supply position. It is expected to achieve inter-regional capacity of 15,750 MW by the end of 10th Plan and the programme is to achieve 37,150 MW by the end of 11th Plan. The plan also includes synchronous integration of Southern region with rest of the regions forming an all India synchronous grid.
- 6.3 The Northern region, which till August, 2006 had asynchronous radial mode and HVDC back-to-back inter-regional transmission connectivity of 600 MW with the Eastern region, and 1000 MW with the Western region, was also synchronously integrated with the ER/NER/WR system with commissioning of the 400 kV Muzaffarpur-Gorakhpur line on 26th August, 2006. The Muzaffarpur – Gorakhpur 400 kV D/C quad line with fixed series capacitor and TCSC has added 2000 MW to the ER-NR inter-regional transmission capacity.

7. Development of Regional and State Grid

- 7.1 Transmission systems within the regions to support the above inter-regional transmission capacity is also planned. For example, together with Muzaffarpur-Gorakhpur 400 kV D/C line, Siliguri-Purnia-Muzaffarpur 400kV D/C in the Eastern region and Gorakhpur-Lucknow 400kV D/C and Bareilly-Mandola 400kV D/C lines in Northern region has also been provided. Similarly, together with inter-regional

transmission lines that would bring power from Kahalgaon and Barh in Eastern region to Balia in Northern region, transmission system from Balia onwards towards western part of Northern region has been planned. In the Western region, major system strengthening scheme has been programmed for onwards transmission of power to be received through ER-WR inter regional links. Similarly, transmission system has also been planned on both sides of inter-regional links between NR and WR and between ER and SR.

8. Private Sector Participation in Transmission

8.1 Ministry of Power has notified Guidelines for Encouraging competition in development of Transmission Projects and Tariff Based Competitive Bidding Guidelines for Transmission Service under Section 63 of the Electricity Act, 2003. As per the provisions in these guidelines, an Empowered Committee under the chairmanship of Member, Central Electricity Regulatory Commission has been constituted with representatives from Ministry of Power, Planning Commission, Central Electricity Authority (CEA), Powergrid Corporation of India Ltd (PGCIL) and two experts from the power sector. This Committee has identified 14 transmission projects to be developed by the private sector through tariff based competitive bidding. Rural Electrification Corporation (REC) and Power Finance Corporation (PFC) have been entrusted the task of formulating Feasibility Report/Detailed Project Report for these transmission lines and to invite bids under the supervision of the Empowered Committee. REC has invited Expression of Interest for the following two projects :-

- (i) Evacuation System for North Karanpura – Rs.4100 crs.
- (ii) Talcher Augmentation System – Rs. 900 crs.

Similarly PFC has invited Expression of Interest for :-

- (i) Evacuation System for Maithon Right Bank(1000 MW), Koderma(1000MW) & Bokaro Extn. (500MW) - Rs. 4200 crs.
- (ii) Scheme for enabling import of NER/ER power by NR - Rs.1800 crs.

9. Policy Initiatives

9.1 Rural Electrification Policy

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

The Policy aims at: -

- Provision of access to electricity to all households by year 2009.
- 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.

9.2 Tariff policy

- Under the provisions of Electricity Act 2003, Central Government has notified the tariff policy, evolved in consultation with the State Governments, CERC and various stakeholders. To promote competition, the policy provides that all future requirements of power should be procured competitively, except in the case of one- time expansion of existing projects, or where a State-controlled publicly owned company has been identified as the developer. A transition period of five years has been indicated for achieving the goal of developing generation and transmission projects in the public sector also through competitive bidding only. The policy lays down a timeframe for rationalization of electricity tariffs and mandates reduction of the cross subsidies to within a band of + 20% by the end of year 2010-11. The policy clearly says that provision of free electricity is not desirable, as it encourages wasteful consumption of electricity and, in most of the cases, depletion of the water table. To facilitate choice of supply to the consumers through open access in distribution, the policy provides unambiguous methodology for calculating cross-subsidy surcharge and its time bound reduction. It also lays down mechanism for arranging back-up supply for such consumers.

9.3 New Hydro-Policy

- Hydropower is a renewable, economic, non-polluting and environmentally benign source of energy. Hydro power stations have the inherent ability of instantaneous starting, stopping, managing load variations and help in improving the reliability of the power system. Technically, hydro stations are the best choice for meeting the peak demand. In addition, the generation cost of hydro power is almost 'inflation free' and it actually reduces with time. Hydro-power projects also help in conserving scarce fossil fuels. However, despite hydro electric projects being recognized as the most economic and preferred source of energy, the share of hydro power in India has actually come down from about 50% to only about 26% at present. India has an estimated hydro potential of about 1,50,000 MW of which about 33,600 MW has been developed so far. The bulk of the potential yet to be developed is along the Himalayas i.e. in the hill States, more particularly, Sikkim and Arunachal Pradesh. The North Eastern Region is endowed with a vast hydro electric potential of the order of 58,971 MW of which 93% remains to be harnessed.
- It is, therefore, imperative that development of the huge hydroelectric potential of the Himalayan States in general and the North-Eastern Region, in particular is taken up to address the economic development needs of the region.

- While Section 63 of the Electricity Act provides for development of projects on the basis of competitive bidding for Tariff, Sections 61 and 62 allow such project developed on the basis of Tariff to be fixed by the Regulator based on capital cost and norms. In fact, the Electricity Tariff Policy notified in January 2006 also allows a special dispensation for project development by State and Central PSUs on the basis of capital cost and norm based tariff to be determined by the Regulatory Commission. This dispensation, allowed for PSUs, is now proposed to be made available for the same period of 5 years to promote hydro power development even through the private sector route. The State would be required to follow a transparent process for selection of the developer.
- This arrangement would have several advantages. While the initiative for allocation of the project would remain with the State Government, (the state would however have to ensure transparency in the allocation), the scrutiny of the regulator and the CEA would ensure that the project is being designed and built in the most optimal and economic manner and that the interest of the consumers is adequately protected. From the point of view of the developer, this procedure would reduce numerous risks associated with the construction and O&M of hydro projects

9.4 Guidelines for procurement of electricity

- In compliance with section 63 of the Electricity Act, 2003, the Central Government had notified guidelines for procurement of power by Distribution Licensees through competitive bidding. Central Government has also issued the standard bid document containing RFQ, RFP and model PPA for long term procurement of power from projects having specified site and location.

9.5 Amendment to the Electricity Act 2003 (I)

- The NCMP, *inter-alia*, states that: “The review of the Electricity Act 2003 will be undertaken in view of the concern expressed by a number of States. The mandatory date of June 10, 2004 for unbundling and replacing the state electricity boards will be extended. The UPA government also reiterates its commitment to an increased role for private generation of power and more importantly power distribution.” A review of the Act has been carried out and it has been proposed to bring the following amendments :-
 - (i) Amendment to Section 6 to clarify that both the concerned State Governments and the Central Government would jointly endeavour to provide access to electricity to all areas including villages and hamlets through rural electricity infrastructure and electrification of households.
 - (ii) Amendment to relevant sections to delete the provision for ‘elimination’ of cross subsidies. Provision for ‘reduction’ of cross subsidies will continue.
 - (iii) Amendment to Section 151 to clarify that the police would be able to investigate cognizable offences under the Act.

- (iv) Certain amendments have been proposed to the Bill to further enhance deterrence against theft of electricity.

The Electricity (Amendment) Bill, 2005 on the above-proposed amendments has been introduced in the Lok Sabha on December 23, 2005.

CHAPTER-IV

PHYSICAL PERFORMANCE OF SCHEMES & PROJECTS

INTRODUCTION

1.0 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 Yajana
- (2) Accelerated Power Development & Reform Programme
- (3) Generation
- (4) Transmission
- (5) Capacity Building and Programme Assessment
 - (i) Ministry of Power Secretariat
 - (ii) Central Electricity Authority

Salient features and performance highlights of the main schemes are as follows:-

(a) Rajiv Gandhi Grameen Vidyutikaran Yojna:

The scheme “Rajiv Gandhi Grameen Vidyutikaran Yojana” (RGGVY) for Rural Electricity Infrastructure and Household Electrification has been introduced in April, 2005 for the attainment of the National Common Minimum Programme of **providing access to electricity to all Rural Households** in four years. Rural Electrification Corporation (REC) is the nodal agency.

1.Scope Of The Scheme

Under the scheme, projects could be financed with 90% capital subsidy for provision of –

a) Rural Electricity Distribution Backbone (REDB)

- Provision of 33/11 KV (or 66/11 KV) sub-stations of adequate capacity and lines in blocks where these do not exist.

b) Creation of Village Electrification Infrastructure (VEI)

- Electrification of un-electrified villages.
- Electrification of un-electrified habitations.
- Provision of distribution transformers of appropriate capacity in electrified villages / habitation(s).

c) Decentralised Distributed Generation (DDG) and Supply

Decentralised generation-cum-distribution from conventional sources for villages where grid connectivity is either not feasible or not cost effective

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provided it is not covered under the programme of Ministry of Non-conventional Energy Sources for providing electricity from non-conventional energy sources under their remote village electrification programme of 25000 villages.

d) REDB, VEI and DDG would also cater to the requirement of agriculture and other activities including

- irrigation pumpsets
- small and medium industries
- khadi and village industries
- cold chains
- healthcare
- education and IT

This would facilitate overall rural development, employment generation and poverty alleviation.

e) Rural Household Electrification

Electrification of un-electrified Below Poverty Line (BPL) households would be financed with 100% capital subsidy as per norms of Kutir Jyoti Programme in all rural habitations.

Households above poverty line would be paying for their connections at prescribed connection charges and no subsidy would be available for this purpose.

2. Funding

Under the scheme, 90% capital subsidy would be provided by the Central Government for overall cost of the project and the remaining funds would be in the form of loan from REC on soft terms.

The outlay of scheme is Rs. 5000 crore for X Plan and continuance of scheme in XI Plan is subject to Cabinet approval after review of the scheme by the Planning Commission.

3. Conditionalities

In order to be eligible for availing assistance under RGGVY, the states have to comply with the following conditionalities to ensure proper implementation of the programme. These are:

1. States must make adequate arrangements for supply of electricity and there should be no discrimination in the hours of supply between rural and urban households.
2. Deployment of franchisees for the management of rural distribution in projects financed under the scheme, and
3. Making provision of requisite revenue subsidies to the State Utilities as required under the Electricity Act, 2003.

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4. Determination of bulk supply tariff for franchisees in a manner that ensures their commercial viability.
5. To implement the rural electrification projects on a turnkey contract basis.

Eligible projects are being implemented after fulfilling the conditionalities above. In the event the projects are not implemented satisfactorily in accordance with the conditionalities, the capital subsidy can be converted into interest bearing loan.

4. Franchisees

In order to ensure revenue sustainability of the scheme, deployment of franchisees for management of rural distribution has been made mandatory under the scheme. It is necessary that the system of franchisee is implemented in a phased manner by the state government / utilities in order to bring down commercial losses, improve collection efficiency and provide door-step services to the consumers. The franchisee would be responsible for distribution of electricity within an identified contiguous area for a prescribed duration and for collecting revenue directly from the consumers.

The franchisees arrangement could be for system beyond and including feeders from substation or from and including Distribution Transformer(s)

There can be many variants of franchisee model but the arrangement must entail purchase of bulk power (input based) and routine operation and maintenance of distribution infrastructure. The arrangement may also include grid extension and undertaking of capital expenditure programmes and in such cases the distribution system of the existing distribution licensee may be transferred to the franchisee. Assets may be leased to the selected franchisee at a nominal rent in order that consumer tariff is not loaded with additional burden. The margins to be provided for each of these functions should ensure commercial viability of the micro enterprises/local management to be created.

Franchisee will be selected following a transparent process on the basis of clearly laid down criteria. Wherever feasible franchisee should be selected on the basis of capacity bidding for the most favourable Bulk Supply Tariff for the distribution licensee. The state government may adopt alternative basis for such revenue sharing if it considers appropriate.

The contractual arrangement with a franchisee should provide for adequate bankable security such as bank guarantee, which may be equal to the value of energy supplied for a period of 3 months. A review of the working of the franchisee should be done without any delay if the franchisee fails to honor the contractual obligations, particularly collecting the bills from the consumers and paying the cost of energy supplied. The contract should provide clear stipulation for termination of arrangement in case of failure of either party to honour the agreed commitments and also for taking over the assets if applicable. The contractual arrangement must also set norms for various services to be delivered by franchisee to the consumers. The concept of undertaking electricity distribution through franchisee is relatively new to the rural

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population. It would be therefore, necessary that the concept is properly explained both to the intending franchisee and the consumers. To ensure the success of franchisee arrangement, it would be necessary that the distribution licensee follows non-discriminatory approach towards franchisee in case of power supply shortage.

The state government should come out with time bound programmes of suitable capacity building of franchisees, the consumer associations and Panchayat institutions. Franchisees could be Non-Governmental Organisations (NGOs), Users Association, Cooperatives or individual entrepreneurs; the Panchayat institutions would be associated.

5. Revenue Sustainability

The success of RGGVY will hinge on long term revenue sustainability in rural areas; not only the utilities but also the state governments have to make all out efforts to achieve this objective.

Based on the consumer mix and the prevailing consumer tariff and likely load, the Bulk Supply Tariff (BST) for the franchisee would be determined after ensuring commercial viability of the franchisee. Wherever feasible, bidding may be attempted for determining the BST. This Bulk Supply Tariff would be fully factored into the submissions of the State Utilities to the State Electricity Regulatory Commissions (SERCs) for their revenue requirements and tariff determination. The State Government under the Electricity Act is required to provide the requisite revenue subsidies to the State Utilities if it would like tariff for any category of consumers to be lower than the tariff determined by the SERC. While administering the scheme, prior commitments may be taken from the State Government regarding – revenue sustainability and providing for subsidy upfront.

6. Assistance Of Cpsus

In order to speed up the process of implementation, services of Central Public Sector Organisations like Power Grid, National Thermal Power Corporation, National Hydro-electric Power Corporation, Damodar Valley Corporation have been provided to states for which they have signed agreements with Rural Electrification Corporation Ltd. and these organizations.

7. District Committees

States have been advised to set up District level committees which will include local representatives to monitor the village electrification process. 19 states have reported that notifications have been issued for setting up District level Committees.

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8. Notification Of Rural Areas

Under Section 14 of Electricity Act and rural policy states have to notify rural areas. 26 states have so far notified rural areas, which are as under : -

Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhatisgarh, Gujrat, Haryana, Himchal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Kerala, Maharashtra, Madhaya Pradesh, Meghalaya, Mizoram, Nagaland, Orissa, Punjab, Rajasthan, Sikkim, Tripura, Tamil Nadu, Uttar Pradesh, Utrtrakhand and West Bengal. Only Manipur & J&K are yet to notify rural areas.

This will allow them to take maximum benefit under the scheme.

9. Status Of Implementation

One lakh villages have been targeted to be electrified under RGGVY by 2009.

The action plan is as follows –

Year	Targets
2005-06	10,000
2006-07	40,000
2007-08	40,000
2008-09	10,000

Till January, 2007 projects have started for 201 districts covering 61145 un-electrified villages and 1.07 crore rural households.

In 2005-06, 9819 villages have been electrified. In 2006-07, already 17,357 villages have been electrified ending January, 2007. Total villages electrified during 2005-06 and 2006-07 uptill January 2007 are 27176.

Franchisees are in place/operation in 12 states namely, Uttar Pradesh, Uttranchal, Karnataka, West Bengal, Assam, Nagaland, Haryana, Orissa, Madhya Pradesh, Andhra Pradesh, Rajasthan and Bihar covering 39113 villages. Revenue collection has improved in the states where franchisees are in operation.

Progress of implementation of RGGVY (till 9th February, 2006)

- 27 states and their utilities have signed Memorandum of Agreement (MoA) agreeing to the conditionalities for implementation of the programme as envisaged under RGGVY.
- CPSUs, namely, Power Grid Corporation (India) Ltd. (PGCIL), National Thermal Power Corporation (NTPC), National Hydro-electric Power Corporation (NHPC), Damodar Valley Corporation (DVC) are working in 134 districts of J&K, Rajasthan, Uttar Pradesh, Chattishgarh, Gujarat, Madhya Pradesh, Bihar, Jharkhand, Orissa, West Bengal, Assam and Tripura.

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- So far 317 projects for 316 districts have been sanctioned covering 27 states at the cost of Rs.11514.22 crore covering 69534 un-electrified villages, 1.08 crore BPL households and 165124 electrified villages have been covered for intensive electrification.
- Tenders have been issued for 273 projects covering 272 districts 69239 un-electrified villages and 9202889 BPL households.
- Contracts have been placed for 200 projects covering 175 districts to electrify 61012 un-electrified villages 7106387 BPL households).
- 28241 villages have been electrified and 504141 connections to BPL households have been released till 9th February 2007.

(b) Accelerated Power Development And Reforms Programme (APDRP)

Ministry of Power launched Accelerated Power Development and Reforms Programme (APDRP) in year 2002-03 with an outlay of Rs. 40,000 crore as additional central plan assistance to states during 10th Five Year Plan. The programme objectives are as follows:

- Reduce AT&C losses
- Bring about commercial viability in the power sector
- Reduce outages & interruptions
- Increase consumer satisfaction

The programme has two components.

Investment component: Under the investment component of the programme, funds are provided as Additional Central Assistance to the state Utilities through respective state Governments for the projects relating to up gradation & strengthening of sub-transmission & distribution network (below 33kV or 66kV) for improving technical and commercial efficiencies of the utilities. In the beginning assistance to the tune of 50% of the project cost was being extended in form of 25% grant and 25% loan. For special category states, the grant was 90% and balance 10% as loan. However, on the recommendations of 12th Finance Commission the loan component was discontinued from 2005-06. Now only 25% grant is being provided to the general category states and 90% to the special category states since April 2005. The allocation of fund to the states was not based on state quota but on the basis of their preparedness towards reforms, preparation of projects and their implementation.

The status as on 31st December 2006:

• Under investment component

- No. of Projects sanctioned : 571 Nos.
- Cost of projects sanctioned : Rs. 17033.58 Cr.

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➤ Funds released	:	Rs. 6574.89 Cr.
➤ Counter-Part funds tied up	:	Rs. 6468.72 Cr.
➤ Counter-Part funds drawn	:	Rs. 4225.16 Cr.
➤ Funds Utilised	:	Rs. 10139.24 Cr.

More than 50% completion of APDRP projects has been achieved in Andhra Pradesh, Delhi, Gujarat, Himachal Pradesh, Karnataka, Rajasthan, Sikkim, Tamilnadu, Uttaranchal and West Bengal. It is planned to complete majority of the ongoing projects by March 2008.

Incentive component: Assistance under Incentive component was introduced to motivate the Utilities to reduce their cash loss as it was felt essential to integrate the investment programme in the distribution segment with an incentive mechanism linked to efficiency improvement. It was envisaged that it will help the Utilities to bring about commercial viability through improvement in billing and collection efficiency.

The state Utilities are incentivised up to 50% of the actual cash loss reduction by them as grant. The year 2000-01 has been fixed as the base year for calculating the reduction of loss during subsequent years. Losses are calculated net of any subsidy & tariff compensation given by the state Government both in base as well as during the subsequent years. The revenue is considered on net realization basis only (increase in receivables is factored out). The Ministry appointed M/S CARE and M/S ICRA for independent scrutiny of the claims of the Utilities.

Under incentive component utilities of Andhra Pradesh, Gujarat, Haryana, Kerala, Maharashtra, M.P., Rajasthan, West Bengal and Punjab have shown cash loss reduction of Rs. 4946.94 crores and are eligible for receiving incentive amounting to Rs.2473.48 crores. Government has released Rs.1575.02 crore to these utilities. Balance amount will be released to the States subject to availability of additional fund of Rs.900 crore during 2007-08.

The billing efficiency at national level has improved from 68.12% during 2001-02 to 69.87% during 2004-05. Similarly, collection efficiency improved during the same period from 91.78% to 94.72%. Due to this improvement in billing and collection efficiency, the national average AT&C loss of the distribution companies has reduced from 38.18% in 2001-02 to 33.82% in 2004-05. Further, based on provisional accounts for 2005-06 states of Andhra Pradesh, Goa and Tamilnadu have reported AT&C loss below 20% during the year. Punjab and 2 DISCOMs of Gujarat (Madhya & Uttar) have reported AT&C loss in between 20% and 25% during 2005-06. AT&C Losses have been brought below 20% in 212 APDRP towns in the country of which 169 towns have brought AT&C losses below 15%.

The overall commercial loss (without subsidy) of the Utilities reduced from Rs. 29,331 Crore during 2001-02 to Rs. 22,126 Crore during 2004-05 (Source: PFC). Further, Utilities in the states of Andhra Pradesh, Goa, Himachal Pradesh, Punjab, Gujarat, Meghalaya, Chattisgarh & West Bengal have reported profits during 2005-06. States of

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Jharkhand, Madhya Pradesh, Haryana, Rajasthan, Uttaranchal, Karnataka, Kerala and Assam have also reported reduction in their losses during 2005-06 in comparison to the previous year.

It is proposed to continue the Programme during XI Plan with the revised terms & conditions but under the Central Scheme as recommended by the Task Force on APDRP, independent evaluators and the Planning Commission.

(c) Generation

Central Sector Electricity Generation is planned and implemented through various organizations viz. NTPC, NHPC, NHPC, NEEPCO, THDC, SJVNL and DVC. Under Central Sector 710 MW thermal Generation capacity and 880 MW of hydro generation Capacity has been added till February 2007. The thermal generation capacity added comprises of 500 MW Unit 9 Vindhyachal TPS-III and 210 MW of Unchahar TPS-II projects of NTPC and the capacity addition in hydro sector was on account of 750 MW of Tehri Project and 130 MW of Dulhasti Project. Details of progress achieved by these organizations towards construction of various projects are in the tables of the chapter.

(d) Transmission

Powergrid has till February 2007 commissioned 3221 circuit Km. of transmission line and achieved 4095 MVA of transformation capacity addition.

On the basis of performance in the first three quarters of financial year 2006-07, tables showing achievement against each activity outlined in the Outcome Budget under different schemes/projects are given in the tables :-

Rajiv Gandhi Grameen Viduytikaran Yojana

(Rs. in crore)

Sr. No.	Name of Scheme/Program	Sanctioned cost/ cumulative expenditure for beginning till 31/12/05 Objective/ Outcome	Objective/ Outcome	Outlay 2006-07			Quantifiable Deliverables / Physical Outputs (2006-07)	Processes/ Timelines	Achievement till 31 st December 2006	Remarks/Risk Factors
				Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3(a)	3 (b)	4 (i)	4(ii)	4 (iii)	5	6	7	8
1.	Rajiv Gandhi Grameen Vidhyutikaran Yojana (RGGVY)	*	Electrifying all villages and providing access to electricity all rural households in four years		Rs.3000 crore		Electrification of 40,000 villages, provide access to electricity to around 80 lakh rural households** Including free connections to around 40 lakhs BPL families.***	Over a period of 4 years, the scheme will electrify one lakh villages and will provide access to electricity to 7.8 crore rural households	15463 villages electrified and 1.5 free BPL Connections released@	Nil

*Cost of the projects sanctioned till 31.12.2005 – Rs.6241.88 crores (this includes loan component).

Cumulative release of funds till 31.12.2005 by REC – Rs.1031.35 crores

The scheme will be completed by year 2009.

**Those above poverty line will have to give connection charges.

*** **Electrification Of 40,000 Villages, Access To Electricity To Around 80 Lakh Rural Households Including Free Connections To Around 40 Lakhs Bpl Families Was Linked To The Availability Of Allocation Of Funds To The Tune Of Rs.3900 Crore.**

@ Some BPL families have not accepted the offer of free connections as it involves recurring expenditure on Bills.

Performance of APDRP (ACA to States under Demand No. 35) 2006-07
Outcome Budget (Achievement till DEC. 2006)

S. No	Name of the scheme/ Programme / Project	Objective/ outcome	Outlay 2006-07			Quantifiable deliverables/ physical outputs	Processes/ timeliness	Remarks/ risk factors	Achievements upto 31 th December 2006
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) : Addl. Central Assistance to States	Carrying out distribution reforms through APDRP schemes to bring about efficiency and commercial viability into power sector.	-	Rs.650.00 crores	Utilities have to arrange counter part funds from the financial institutions or from their own sources to the tune of 75% in case of non-Special category States and 10% in case of special category states.	The projects under APDRP are sanctioned on receipt of DPRs from the State Power Utilities which are considered by the Steering Committee on various parameters including payback period. It has been decided to cover all the District Headquarters on priority under the scheme. The implementation	The schemes sanctioned under APDRP have a project implementation period ranging from 24 months to 36 months excluding the time required for calling tenders and processing for award.	The programme will show results once the APDRP projects sanctioned are completed.	The billing efficiency at national level has improved from 68.12% during 2001-02 to 69.87% during 2004-05. Similarly, collection efficiency improved during the same period from 91.78% to 94.72%. Due to this improvement in billing and collection efficiency, the national average AT&C loss of the distribution companies has reduced from 38.18% in 2001-02

					<p>of the schemes, for strengthening of the sub-transmission & distribution system will result in less outages, better quality of power and reduced AT&C losses. So far, 583 projects have been sanctioned. The independent evaluators of the scheme have reported that interventions under APDRP have shown good progress and has resulted in a declining trend in losses. State Governments have taken steps to control commercial losses like strengthening of anti-theft measures,</p>		<p>to 33.82% in 2004-05. Further, based on provisional accounts for 2005-06 states of Andhra Pradesh, Goa and Tamilnadu have reported AT&C loss below 20% during the year. Punjab and 2 DISCOMs of Gujarat (Madhya & Uttar) have reported AT&C loss in between 20% and 25% during 2005-06. AT&C Losses have been brought below 20% in 212 APDRP towns in the country of which 169 towns have brought AT&C losses below 15%. Similarly DT failure rate below 5% has been reported by 215 towns, out of which 71 have reported up to 1%.</p>
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						<p>metering, consumer indexing, feeder level energy accounting and audit. They have observed that APDRP has contributed in improving the energy sales, reducing the AT&C losses, improving the quality of supply to consumers and also service to consumers. It has also helped in reduction of O&M costs in repairs of distribution transformers, reduced DT failures and reduced service interruption.</p>			
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CONSULTANCY CHARGES FOR APDRP PROJECTS

OUTCOME BUDGET (Achievement till DEC. 2006)

S. No	Name of the scheme/ Programme / Project	Objective/ outcome	Outlay 2006-07			Quantifiable deliverables/ physical outputs	Processes/ timeliness	Remarks/ risk factors	Achievements upto 31 th December 2006
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources				
	Consultancy charges for APDRP projects	To meet the actual expenditure incurred by Advisor-cum-Consultants appointed under APDRP	-	Rs. 25.00 Cr.	-	<p>Proper implementation of APDRP schemes on turn-key basis; for which States have no experience. The end objectives of engaging consultants is to achieve the parameters enshrined for APDRP are</p> <p>(i) to reduce AT&C losses (ii) to reduce number of outages (iii) to increase reliability index (iv) to reduce DT failure rate (v) to increase average revenue realisation</p>	The role of AcCs will continue till APDRP remain in operation.	APDRP has been put in place as an instrument to leverage distribution reforms in the States. The actual results depend on the proper implementation of APDRP and taking steps for distribution reforms with the help of the AcCs. The programme will show results once the APDRP projects sanctioned are completed.	The billing efficiency at national level has improved from 68.12% during 2001-02 to 69.87% during 2004-05. Similarly, collection efficiency improved during the same period from 91.78% to 94.72%. Due to this improvement in billing and collection efficiency, the national average AT&C loss of the distribution companies has reduced from 38.18% in 2001-02 to 33.82% in 2004-05. Further, based on provisional accounts for 2005-06 states of Andhra Pradesh, Goa and Tamilnadu have reported AT&C loss below 20% during the year. Punjab and 2 DISCOMs of Gujarat

						(vi) to implement consumer indexing			(Madhya & Uttar) have reported AT&C loss in between 20% and 25% during 2005-06. AT&C Losses have been brought below 20% in 212 APDRP towns in the country of which 169 towns have brought AT&C losses below 15%. Similarly DT failure rate below 5% has been reported by 215 towns, out of which 71 have reported up to 1%.
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FUNDS FOR EVALUATION STUDIES AND CONSULTANCY

OUTCOME BUDGET (Achievement till DEC. 2006)

S. No	Name of the scheme/ Programme / Project	Objective/ outcome	Outlay 2006-07			Quantifiable deliverables/ physical outputs	Processes/ timeliness	Remarks/ risk factors	Achievements upto 31 th December 2006
1	2	3	4			5	6	7	8
			4(i)	4(ii)	4(iii)				
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary resources				
	Funds for evaluation studies AND consultancy	Evaluation of the projects sanctioned under revised Accelerated Power Development and Reforms Programme (APDRP) and its efficacy in achieving desired goals, through independent agencies	-	Rs. 5.31 Cr.	-	<p>The evaluation of APDRP 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 which are:</p> <p>(i) to reduce AT&C losses (ii) to reduce number of outages (iii) to increase reliability index (iv) to reduce DT failure rate (v) to increase average</p>	Component of independent evaluation has been built in for every project that is completed	APDRP has been put in place as an instrument to leverage distribution reforms in the States. Priority is given to projects from those States who commit themselves to a time-bound programme of reforms as elaborated in the Memorandum of Understanding (MoU) and Memorandum of Agreement (MoA). Signing of the above documents by the State Governments/ SEBs. The actual results depend on the proper	The billing efficiency at national level has improved from 68.12% during 2001-02 to 69.87% during 2004-05. Similarly, collection efficiency improved during the same period from 91.78% to 94.72%. Due to this improvement in billing and collection efficiency, the national average AT&C loss of the distribution companies has reduced from 38.18% in 2001-02 to 33.82% in 2004-05. Further, based on provisional accounts for 2005-06 states of Andhra Pradesh, Goa and Tamilnadu have reported AT&C loss below 20% during the

						revenue realisation (vi) to implement consumer indexing		implementation of APDRP and taking steps for distribution reforms with the help of the AcCs	year. Punjab and 2 DISCOMs of Gujarat (Madhya & Uttar) have reported AT&C loss in between 20% and 25% during 2005-06. AT&C Losses have been brought below 20% in 212 APDRP towns in the country of which 169 towns have brought AT&C losses below 15%. Similarly DT failure rate below 5% has been reported by 215 towns, out of which 71 have reported up to 1%.
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**Accelerated Generation and Supply Scheme(AG&SP)
Outcome Budget(Achievement till DEC.2006)**

Rs. crore

S l	Nam e of Sche me	Sanctioned Cost/ Cumulative exp. From beginning till 31.12.2006 Objective/ Outcome	Outlay 2006-07 10 th Plan AG&SP- Outcome Budget 2006-07	Quantifi able Physical Outputs	Proce sses/ Timel ines	Projected Outcomes/ Fate of completion of the project	Remarks/ Risk Factors	Achievements up to 31 st December' 2006																																
1	2	3	4	5	6	7	8	9																																
1	AG &SP	<p>Rs.1500 cr @ Rs. 300 cr per year. Rs. 1142.02 has been utilized through PFC.</p> <p>The objective of the AG&SP program is to provide interest subsidy to R&M schemes, R&U schemes, selected Hydel and Thermal generation projects which are scheduled for commissioning in 10th Plan. There is provision for grants for carrying out</p>	Rs. 598 cr	So far supported 24 Hydro Projects (5130 MW) and 13 Thermal Projects (3994 MW) in the 10 th Plan	Till the end of 10 th Plan period i.e., 31 st March 2007	<p>24 Hydro projects in state sector has been supported which is likely to produce 5130 MW of peak power.</p> <p>13 Thermal projects is being supported which is likely to produce 3994 MW of power.</p> <p>136 R&M schemes of thermal and hydro projects have been covered under the scheme</p> <p>26 thermal power stations have been identified under</p>	<p>24 Hydro projects in state sector has been supported which is likely to produce 5130 MW of peak power.</p> <p>13 Thermal projects is being supported which is likely to produce 3994 MW of power.</p> <p>136 R&M schemes of thermal and hydro projects have been covered under the scheme</p> <p>Out of 26 power stations identified for</p>	<p>PFC has submitted the claims to MoP as per below:-</p> <p style="text-align: right;">Rs. In crores</p> <table><tr><th>Scheme</th><th>Clai med</th><th>Recei ved</th><th>Bala nce</th></tr><tr><td>R&M Thermal</td><td>44.18</td><td>7.52</td><td>36.66</td></tr><tr><td>R&U Hydro</td><td>5.29</td><td>3.85</td><td>1.44</td></tr><tr><td>Hydro generation</td><td>69.91</td><td>31.93</td><td>37.98</td></tr><tr><td>Thermal Generation</td><td>614.09</td><td>136.54</td><td>477.55</td></tr><tr><td>Grants for studies</td><td>12.06</td><td>10.82</td><td>1.24</td></tr><tr><td>Grants under PIE</td><td>20.89</td><td>12.36</td><td>8.53</td></tr><tr><td>TOTAL</td><td>766.42</td><td>203.02</td><td>563.40</td></tr></table>	Scheme	Clai med	Recei ved	Bala nce	R&M Thermal	44.18	7.52	36.66	R&U Hydro	5.29	3.85	1.44	Hydro generation	69.91	31.93	37.98	Thermal Generation	614.09	136.54	477.55	Grants for studies	12.06	10.82	1.24	Grants under PIE	20.89	12.36	8.53	TOTAL	766.42	203.02	563.40
Scheme	Clai med	Recei ved	Bala nce																																					
R&M Thermal	44.18	7.52	36.66																																					
R&U Hydro	5.29	3.85	1.44																																					
Hydro generation	69.91	31.93	37.98																																					
Thermal Generation	614.09	136.54	477.55																																					
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Grants under PIE	20.89	12.36	8.53																																					
TOTAL	766.42	203.02	563.40																																					

		<p>studies which are detrimental to the power sector. Further, to improve the PLF of plants up to 60%, the “Partnership in Excellence” has been incorporated in the AG&SP program.</p>			<p>“Partnership in Excellence” (PIE) program of MoP to improve the PLF of these plants up to 60%.</p> <p>Date of Completion: Upto end of 10th Plan, i.e. March 2007</p>	<p>performance improvement under PIE program of GoI, 22 stations were finally considered for implementation out of which GSECL decided to carry out self O&M for Gandhinagar and Kutch Lignite Power Stations. Balance 4 nos. were not found economically viable</p>	
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CHAPTER II OF OUTCOME BUDGET 2006-07

FutureGen Project

S.No.	Name of scheme/program/project	Sanctioned cost/cumulative expenditure for beginning till 31/12/05 Objective/outcome	Outlay 2006-07			Quantifiable Deliverables/Physical Outputs	Processes/Timelines	Projected Outcomes (date of completion of the project)	Remarks/Risk Factors	Achievement till Dec.2006
1	2	3	4			5	6	7	8	
			4(i)	4(ii)	4(iii)					
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources					
1	FutureGen Project initiative by the USA	To design, build and operate the first coal-fired emission-free power plant. This basically is a research project which will benefit the Indian power sector experts/	Nil	Rs. 10 crores	Nil	Rs. 10 crores to be given to the US Government for participation in the project	March 2007	year 2015	It is a research project in which India is contributing about 1% of the cost	The first meeting of the Government Steering Committee(GSC) was held in Honolulu(Hawaii), USA between 26-27, September, 2006. This meeting was attended by Secretary(P).

		scientists								
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Chapter – IV

Sl. No.	Name of Scheme/ Program/Projects	Sanctioned cost/ Cumulative expenditure from beginning till 31.03.2006	Objective/ Outcome:	Outlay 2006-2007			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Remarks/ Risk Factor	Achievements upto December 31, 2006
1.	2.	3.	4.	4.			5.	6.	7.	8.
		3(i)	3 (ii)	4(i) Non-Plan Budget (Amount Rs/lacs)	4(ii) Plan Budget (Amount Rs/lacs)	4(iii) Complementary Extra-Budgetary Resources				
1	Joint Electricity Regulatory Commission (JERC) for Union Territories other than NCT of Delhi	Sanctioned Cost : Not Applicable Cumulative expenditure : Nil	To meet the statutory requirement for setting up Electricity Regulatory Commission	300	Nil	Nil	Setting up of the Commission would regulate tariff for supply of electricity in UTs resulting in efficiency improvements .	This will be a permanent institution.	Chairperson/Member of the Commission will be appointed and the Commission would be operationalised.	The Cabinet, in its meeting held on 21.12.2006, has approved creation of one post each of Chairperson, Member and Secretary in the JERC. Deptt of Expenditure has also approved creation of 13 additional posts.

										Action for selection to the posts of Chairperson and Member has been initiated.
2	Joint Electricity Regulatory Commission (JERC) for Manipur and Mizoram	Sanctioned Cost : Not Applicable Cumulative expenditure: Nil	To fulfill the commitment of the Government of India for assisting the States of North-Eastern region in the initial 5 years in setting of Commission. It would help in regulating tariff for supply of electricity in the States of Manipur & Mizoram	Nil	185	Nil	Setting up of the Commission would regulate tariff for supply of electricity in UTs resulting in efficiency improvements.	Government of India will meet the expenditure during the initial 5 years from the date of constitution thereafter Government of the two States will share the cost.	Chairperson/Member of the Commission will be appointed and the Commission would be operationalised.	The proposal for providing financial assistance by the Central Govt for operationalising the Joint Commission has been approved and necessary orders issued. The Selection Committee for selecting the Chairperson/Member of the JERC has been constituted by the Central Government, under the chairmanship of Justice H.K.K. Singh, a retired Judge of the Guwahati High Court, in accordance with provisions of the Memorandum of Agreement (MoA) signed by the Participating States i.e. Manipur and Mizoram with Ministry of Power.

										<p>A reference has been made to the Selection Committee for recommending a panel each of two persons for the posts of Chairperson and Member. Chief Secretary, Govt of Mizoram is the Member-Convenor of the Selection Committee, has been requested to convene the meeting of Selection Committee.</p>
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**MOP Secretariat
Outcome Budget (Achievement till DEC. 2006)**

Sr. No.	Name of Scheme/ Programme/ Projects	Objective/ Outcome: Sanctioned cost/ Cumulative expenditure from beginning till 31.12.2005.	Outlay 2007-2008			Quantifiable Deliverables/ Physical Outputs	Processes / Timelines	Projected Outcomes: Date of completion of the project	Remarks/ Risk Factor	Achievement upto 31 st December 2006
1.	2.	3.		4.		5.	6.			8.
			4(i)	4(ii)	4(iii)		!			
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources					
	(a) MOP Secretariat (Main):- Salary, wages and other establishment expenditure including over-time allowance, medical treatment, domestic travel expenses, foreign travel expenses, publications, other administrative expenditure, advertising and publicity profession services and subsidies.	(a) To meet the salary wages and other incidental expenses for support services. Total sanctioned cost: Rs.5.00 crores. Cumulative Expenditure incurred upto 31.12.2005: Rs.3.78 crores.	7.89	-----	-----	(a) The expenditure is incurred on salary and other support services and hence outputs are not measurable in quantitative/ qualitative terms.			(a) Under these provisions, salary, wages and other establishment expenses are met for all the officials of M/o Power. These are basically support services to facilitate personnel involved in framing overall policies and their implementation. Through various publications and publicity campaigns, the programmes, policy initiatives of the Ministry are disseminated to the general	Cumulative Expenditure incurred upto 31.12.2006: Rs.4.88 crores.

									public in an effective manner.	
	(b) Departmentalized Accounting Set up of Ministry of Power	To maintain all Financial /Accounting matters of Ministry of Power	1.02	NA	NA	All the requisite documents e.g. Finance Accounts , S.C.T., Appropriation of Financial transactions of Ministry of Power to be laid before Parliament through O/o the Controller General of Accounts.	-		Items at Sr.No. 5 will be furnished by due date.	Cumulative Expenditure incurred upto 31.12.2006: Rs. 63 lakhs.

MOP Secretariat
Outcome Budget (Achievement till DEC. 2006)

Sr. No.	Name of Scheme/ Programme/ Projects	Objective/ Outcome: Sanctioned cost/ Cumulative expenditure from beginning till 31.12.2005.	Outlay 2006-2007			Quantifiable Deliverables / Physical Outputs	Processes/ Timelines	Projected Outcomes: Date of completion of the project	Remarks/ Risk Factor	Achievement upto 31 st December 2006
1.	2.	3.		4.		5.	6.		8.	9
			4(i)	4(ii)	4(iii)		!			
			Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources					
	(c) Office Expenses	(b) A Plan scheme with duration of 5 years (2002-03 to 2006-07) was initiated to upgrade data, collection, sharing and dissemination of information through computerization, renovation & modernization of offices in the Secretariat of the Ministry. This is basically intended to enable quick and prompt decision making.	1.34	0.50	—————	—————	—————	Following are the major benefits when the scheme is fully implemented (i) Availability of versatile and developed centralized on-line technical data base system. (ii) Development of a well inter-connected local area network and remote connection with various power utilities. (iii) Enhanced skill of manpower in the M/o Power in the field of Information Technology. (iv) Conducive environment & aesthetic ambience created through renovation/office automation is facilitating smooth and effective discharge of official work. The project will be completed on 31.3.2007		<u>Plan Head</u> 1. Purchase of computers, 3 Laptops with other accessories Rs. 24,50,000 2. Renovation & Modernization Nirman Bhawan: Rs. 22,00,000/- payable to CPWD. 3. Payment for AN of M/o Power website Rs. 3,50,000/- Total expenditure under Plan Head : Rs. 50,00,000/- <u>Non-Plan Head</u> 1. Payment of telephone bills. 2. Printing & stationery purchase 3. Purchase of office equipment. 4. Other miscellaneous items of daily use in the Ministry. 5. Purchase of printer, cartridge etc Rs. 1,20,00,000/- (total expenditure incurred upto 31.12.2006.
					20					

Comprehensive Award Scheme for power Sector (Rs. In crore or in lakhs, as prescribed)
Outcome Budget (Achievement till DEC. 2006)

Sl.No.	Name of Scheme/ Programme/Project	Sanctioned Cost/Cumulative Expenditure from beginning till 3.12.2005	Objective/ Outcome	Outlay 2006-07			Quantifiable Deliverables/ Physical Outputs	Project Outcomes	Processes/ Timelines	Remarks/ Achievements upto 31st DEC.2006
				Non-Plan Budget	Plan Budget	Complementary Extra Budgetary Resources				
1	2	3(a)	(b)	4(i)	4(ii)	4(iii)	5	6	7	8
	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/hydel/ transmission projects, implementation of distribution reforms, environment performance, community development and safety records. However, the expected returns can not be quantified.		-	Rs.75 lakhs	-	Improvement in performance of generation, transmission and distribution segments.	To contribute in achieving reliable, affordable and quality power supply to all by 2012.	The Awards for 2006-07 are to be given in a function to be held during the year 2007-08	The Award distribution function for the year 2004-05 & 2005-06 is yet to be held. The date for the function is still awaited from PMO.

CEA
OUTCOME BUDGET (ACHIEVEMENT TILL DEC 2006)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2006-2007 (Rs. in Crores)	Quantifiable Deliverables	Processes / Timelines	Remarks / Risk Factors	Achievement upto 31 st December 2006
1	2	3	4	5	6	7	8
1.	Renovation & Modernisation (R&M) of Thermal Power Stations including Project Maintenance and PAGER Scheme (Plan)	<p>To arrest the deterioration in performance of thermal power stations by renovation & modernisation and life extension works.</p> <p>Increased production of electricity and efficiency improvement with low investment.</p>	2.0933 (209.33 lakhs)	Coordination and monitoring work for implementation of 231 nos. of R&M works and life extension works for 10 nos. of thermal units.	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. The works are in progress and likely to continue during 2006-07 and 11 th Plan.	The works are being implemented by 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 works.	CEA officers have visited Thermal Power Stations of various State Power Utilities for assisting them in the performance improvement of the old and under performing stations through R&M. Under the partnership-in-excellence programme, CEA Engineers have rendered advice to power stations in improving their O&M practices.
2.	Standing Committee for selection of sites for Thermal Power Stations	<p>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.</p> <p>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.</p>	0.5697 (56.97 lakhs)	Selection of sites for location of thermal power projects in the states of Haryana, Punjab, Orissa, Bihar and West Bengal.	<p>Approved term is 5 years beginning from the first year of 10th Plan.</p> <p>Proposal being sent to MoP for extension of terms of the committee for another five years beginning from the first year of 11th Plan.</p>	-	<p>Selection of new sites in Orissa, Haryana & Punjab carried out during the year 2006-07 upto December 2006.</p> <p>NRSA has submitted the report for new coastal sites in Tamilnadu identified through remote sensing.</p>

CEA

OUTCOME BUDGET (ACHIEVEMENT TILL DEC 2006)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2006-2007 (Rs. in Crores)	Quantifiable Deliverables	Processes / Timelines	Remarks / Risk Factors	Achievement upto 31st December 2006
1	2	3	4	5	6	7	8
3.	Strengthening of Regional Electricity Boards (Now known as Regional Power Committees)	<p>The objective of the proposal is to provide proper infrastructure support in the form of office building / staff quarters for the Secretariats of the SREB (SRPC) / NEREB (NERPC) and replacement of old non-functional lift in NREB (NRPC) building.</p> <p>Provision of proper infrastructure support to the REBs (RPCs) resulting in increasing better integrated operation of regional grid.</p>	1.0700 (107.00 lakhs)	<p>Construction of Boundary wall on the western side of the staff quarters of SREB (SRPC) Bangalore.</p> <p>Construction of boundary wall of NEREB (NERPC), Shillong</p>	<p>A case has been filed in the city civil court pertaining to land on the western side of SRPC, Bangalore staff quarters.</p> <p>Transfer of title of the land in the name of CEA / NEREB (NERPC) is under process. Construction of boundary wall will start shortly.</p>	-	<p>An expenditure of Rs.4.49 lakhs has been incurred upto 31-12-2006 for Civil maintenance work of staff quarters of SRPC, Bangalore.</p> <p>The matter regarding transfer of title of land from Powergrid to CEA / NERPC has been taken up with the Revenue Department, Shillong. Rs.50.00 lakhs have been placed with CPWD for the construction of boundary wall. Revised SFC memo based on the revised cost estimate is under preparation and would be submitted to Ministry of Power shortly.</p>

CEA
OUTCOME BUDGET (ACHIEVEMENT TILL DEC 2006)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2006-2007 (Rs. in Crores)	Quantifiable Deliverables	Processes / Timelines	Remarks / Risk Factors	Achievement upto 31 st December 2006
1	2	3	4	5	6	7	8
4.	Technology Improvement Programme in Thermal Wing	<p>Comprehensive study, analysis and assessment of implication of various design changes in major equipments / systems to reduce installation and operation costs of thermal power stations.</p> <p>1. The software shall result in optimum site selection for thermal power projects.</p> <p>2. Visits abroad will help in introduction of environmental friendly technologies in the country.</p>	<p>0.8700</p> <p>(87.00 lakhs)</p>	<p>1. Procurement of GIS software for prioritization of identified sites for setting up of large thermal power projects.</p> <p>2. Technical study tours abroad to power plants working on clean coal technologies to be undertaken.</p>	<p>The scheme is to be completed in 2007-08.</p>	<p>The scheme will be continued in 2007-08 also since the procurement of software (GIS) is time consuming and the Terms of reference is still under preparation.</p>	<p>1. CEA Engineer visited USA to study 800 MW specifications for Super Critical Units.</p> <p>2. A network printer-cum-photocopier has been procured.</p> <p>3. The scope and terms of reference for procurement of GIS software for prioritization of identified sites for setting up of large thermal power stations are under finalization.</p>

CEA
OUTCOME BUDGET (ACHIEVEMENT TILL DEC 2006)

Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2006-2007 (Rs. in Crores)	Quantifiable Deliverables	Processes / Timelines	Remarks / Risk Factors	Achievement upto 31 st December 2006
1	2	3	4	5	6	7	8
5.	Technology Improvement in Power System including Procurement of Software Package	<p>To sharpen the technical capabilities of Engineers of CEA & SEBs (RPCs) and equip them with the latest state-of-the-art technology in Substation and Transmission and to interact with the experts and associated organizations in the developed countries to acquire new technology in power system.</p> <p>Extension of life of vital sub-station equipment by early detection of faults would result in increased reliability of power supply.</p>	0.3020 (30.20 lakhs)	<p>Data for system studies, planning, analysis and design of distribution system is being collected. Studies will be taken up in the year 2006-07.</p> <p>Procurement of diagnostic tools (Partial Discharge measurement equipment and automatic capacitance and tan delta measurement instrument) under Pilot project for Residual Life Assessment (RLA) studies. With the procurement of diagnostic tools already deployed with MSETCL under the subject scheme, MSETCL have saved crores of rupees by rejecting defective distribution transformer. These transformers were having higher winding resistance than the specified values.</p>	To be completed in 2006-07	-	<p>Payment of Rs.22.20 lakhs is being made to M/s Adroitec, New Delhi for training of CEA officers and balance amount for supply of software.</p> <p>With the procurement of diagnostic tools like Partial Measuring Equipment and Automatic Capacitance and Tan Delta Kit for detection of Partial Discharge and condition of insulation in transformers, CT PT which can avert their failure are being utilized usefully. These equipments have been procured in addition to the Diagnostic Tools already deployed with MSETCL, Kolhapur. Also these equipments are being utilized extensively for condition monitoring of the substations equipments thus to avoid major failure. CEA engineers are making frequent visits to the site for the above purpose.</p>

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1	2	3	4	5	6	7	8
6.	Technology Improvement Programme in Grid Operation	<p>The objective of the Scheme is to update knowledge of CEA engineers in Grid Operation and Distribution Wing of CEA to enable them to perform their functions in a more efficient manner.</p> <p>More effective advice on grid management to the Central & State Govts., Central & State Regulatory Commissions for efficient and coordinated operation of power system in the country.</p>	2.7608 (276.08 lakhs)	<p>1. Training of 27 nos. engineers from CEA, Power Transmission Utilities and Planning Commission</p> <p>2. Purchase of software related to PTCC (Power Telecom Coordination Committee).</p> <p>3. Purchase of hardware (computer & instruments) for PTCC work.</p>	<p>To be completed during 2006-07.</p> <p>Delayed (to be completed by 2007-08)</p> <p>Delayed (to be completed by 2007-08)</p>	<p>Nil</p> <p>More market study needs to be done for purchase of software for calculation of electromagnetic induction & frequency spectrum allocation.</p> <p>More market study needs to be done for purchase of software for calculation of electromagnetic induction & frequency spectrum allocation.</p>	Bids were invited for providing training in the field Electricity Grid Operation & Management after evaluation of Technical & Price Bids, the successful bidder has been selected. Purchase order is likely to be issued in January 2007.

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1	2	3	4	5	6	7	8
7.	Modernisation of CEA with Low Height Partitioning including Provision for EPBX	The objective of the scheme is to improve the working environment to attain increased efficiency in order to achieve ultimate objective of providing better services. Increased efficiency due to improved working environment in office.	2.1613 (216.13 lakhs)	1.Low Height partitions. 2.Modular furniture. 3.Work stations. 4.Flooring and False ceiling on 3 rd & 5 th floors of Sewa Bhawan and West Block No.2 (Wing No.5).	The work is in progress and expected to be completed by 2006-07.	-	The work of 4 th floor of Sewa Bhawan is completed and staff of E&C Wing accommodated. The work on 3 rd floor is in progress and is likely to be completed by the middle of February 2007. The work on 5 th floor is likely to be started by the end of January 2007.
8.	Upgradation of IT facilities in CEA	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 to all stake holders in power sector.	6.9900 (699.00 lakhs)	(i) Networking of computers in various offices of CEA at HQrs. (ii) Procurement of servers and other hardware, development of application software and digitization of records. (iii) Furnishing of data by the various stake holders in power sector electronically and formation of data bank. (iv) Conversion of data to information and generation of reports. (v) Making available the information to various Govt. Departments and the stake holders in power sector.	Expected to be completed by 2007-08.	-	Bidding process completed and vendor finalised for implementation of Information Management System in CEA interalia covering supply, installation, testing, commissioning of servers, networking equipment, system software, development of application software, etc.

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1	2	3	4	5	6	7	8
9.	ISO-9001 Quality System Certification for CEA	Maintenance of competitive standards of working. Quality improvement in management and delivery system	0.0029 (0.29 lakhs)	ISO surveillance Audit	Annual process.	The Surveillance Audit has been planned in 3 rd Quarter.	Annual Surveillance Audit by BIS is planned in the month of January 2007.
10.	Upgradation of Planning Models	Upgradation of existing computer model to remove deficiencies and to increase its capabilities. Improved power planning in the country	0.1000 (10.00 lakhs) Additional funds amounting to Rs.0.60 crore (Rs.60 lakhs) is being arranged by re-appropriation from the scheme "Upgradation of IT facilities in CEA"	Non-quantifiable	Likely to be completed during the current financial year.	Project yet to be approved	The scheme has been dropped

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1	2	3	4	5	6	7	8
11.	Preparation of Detailed Project Reports of New Hydro Electric Schemes	Creation of shelf of DPRs for hydro-electric projects under 50,000 MW Hydro initiative. A shelf of projects in the form of bankable DPRs would be available for investment by prospective investors to give thrust to expeditious Hydro Power Development in the country.	0.2000 (20.00 lakhs)	A token provision of initial expenses after the scheme is approved.	Once approved the project will last for 2 years.	Project yet to be approved.	The scheme has been dropped
12.	All India Load Survey Scheme (Non-Plan)	To assess demand of Power over a period of time	1.1672 (116.72 lakhs)	Collection of Annual Power Survey Data from about 60 power utilities and about 5000 HV/EHV industries having electricity demand of one MW and above.	Continuous process for bringing out Annual Electric Power Survey Reports / Reviews once in 5 years.	The report of 17 th Electric Power Survey of India has been approved by the 17 th Electric Power Survey Committee. The report is likely to be submitted to the Authority in Jan 2007.	RPSOs provided assistance in holding meetings with the Utilities for finalizing the report of the 17 th <i>Electric Power Survey of India</i> . The RPSOs prepared & supplied report on energy shortages experienced by the HT Industries having electricity demand of 1 MW & above.

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1	2	3	4	5	6	7	8
13.	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.	20.8834 (2088.34 lakhs)	(i) Monitoring of 38 hydro projects (13485 MW) is in progress, out of which 6 projects (2372 MW) are likely to be completed during 2007-08. (ii) Monitoring of 64 thermal projects (26932.32 MW), out of which 29 projects (10678 MW) are likely to be completed during 2006-07. (iii) Data collection & publication of: - (1) Daily generation report. (2) Monthly review of power sector performance. (3) Monthly status reports on construction of various hydro and thermal projects. (4) All India Electricity Statistics: General Review (Annual). (5) Growth of Electricity Sector in India (Annual) (6) Review of Performance of hydro power stations (Annual). (7) Review of Performance of thermal power stations (Annual). (iv) Techno-economic appraisal and concurrence to 12 nos. of hydro-electric projects with a total capacity of 6740 MW.	Continuous process	-	9 Hydro Electric Projects of capacity 4375 MW has been accorded concurrence / techno-economic appraisal. Apart from the above the assigned activities like review of Power Sector Performance, Monitoring of construction of Generating & Transmission Station, Data collection & Publication were carried out.

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Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2006-2007 (Rs. in Crores)	Quantifiable Deliverables	Processes / Timelines	Remarks / Risk Factors	Achievement upto 31st December 2006
1	2	3	4	5	6	7	8
14.	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.	8.3891 (838.91 lakhs)	At present 23 Nos. of consultancy projects are in hand.	Continuous process	-	Consultancy work on 8 schemes in Power System, 11 schemes in Thermal generating station and 8 hydro projects were carried out.
15.	Studies & Training (Non-Plan)	To improve performance of Engineers / functionaries.	0.5000 (50.00 lakhs)	Training to CEA employees.	Continuous process	-	2796 mandays training in India to 202 participants and 35 mandays training in Abroad to 8 participants were provided.
16.	Electronic Data Processing & Support System (Non-Plan)	Operation and maintenance of computer systems provided in CEA and its sub-offices	0.4600 (46.00 lakhs)	Maintenance of IT facilities (non-quantifiable)	Continuous process	-	The scheme has contributed to operation and maintenance of computer systems installed in CEA – Continued activity.
17.	Administration of Electricity Laws (Non-Plan)	Statutory inspection of HT installations of Central Sector and UTs.	1.0300 (103.00 lakhs)	Inspection of electrical installations totaling to 1,12,000 equivalent MV.	Continuous process	-	Statutory inspection in terms of equivalent MV installation 1,25,453 as against program of 1,12,000 has been completed.
18.	National Load Despatch Center (NEPSIC) (Non-Plan)	Collection of vital power system operational data from different Regional Power Committees (RPCs) for use in CEA / Ministry of Power through a 64 KBPS communication system. It is also used for on-line coal monitoring and inter / intra-regional exchange of power.	0.2600 (26.00 lakhs)	Collection & analysis of power system operational data from different Regional Power Committees (RPCs).	Continuous process	-	The communication system of NEPSIC (NLDC) and wide area network is being utilised – continued work.

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1	2	3	4	5	6	7	8
19.	Regional Coordination (Non-Plan)	Operation of five (5) Regional Power Committees (RPCs) (erstwhile REBs) for efficient and integrated operation of power system in the country	2.3788 (237.88 lakhs)	Facilitation of coordinated operation of regional power grids in the country	Continuous process	-	The important functions of the Secretariat of 5 RPCs like Regional level of operation analysis, facilitating Inter-State / Inter-Regional transfer of Power, evolving consensus on all issues relating to economy and efficiency in the power system of region and coordinated planning of maintenance of generation and transmission schemes were carried out – Continued work.
20.	Regional Load Despatching Centres (Non-Plan)	The scheme helps in coordinated operation of the Regional Grids through functioning of various committees such as Operation Coordination Committee, Protection Committee, System Studies Sub-Committee, etc.	4.6775 (467.75 lakhs)	Facilitation of coordinated operation of regional power grids	Continuous process	-	The activities for achieving the benefits associated with integrated operation of Regional Power System, protection system coordination, analysis of grid incidents and preparation of Regional Energy Accounts were carried out – Continued work.
21.	Apprenticeship Training for Engineers (Non-Plan)	Imparting vocational training to Graduate / Diploma holders under the Apprenticeship Act, 1961.	0.0500 (5.00 lakhs)	Around 30 Vocational trainees are to be trained	Continuous process	-	2 Nos. Graduate/Diploma Apprentices, 8 Nos. D/Man apprentices and 35 Nos. vocational apprentices have undergone training under the Apprenticeship Act., 1961 during 2006-07.
22.	Contribution to International Bodies (Non-Plan)	Membership of CIGRE for engineers of CEA to keep themselves abreast of global technological developments in power sector.	0.0035 (0.35 lakhs)	Continuation of membership of CEA with CIGRE	Continuous process	-	Membership for the year 2006-07 has been obtained.

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Sl. No.	Name of Scheme / Programme	Objective / Outcome	Outlay 2006-2007 (Rs. in Crores)	Quantifiable Deliverables	Processes / Timelines	Remarks / Risk Factors	Achievement upto 31st December 2006
1	2	3	4	5	6	7	8
23.	Departmental Canteen (Non-Plan)	To provide subsidized canteen facilities to the employees of CEA	0.2005 (20.05 lakhs)	Welfare measure (not quantifiable)	Continuous process	-	The canteen is functioning as a welfare measure to the staff.
TOTAL		PLAN	18.1300				
		NON-PLAN	40.0000				

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OUTCOME BUDGET MILESTONES FOR 2006-2007

Sl.No.	Name of Scheme / Programme/Project	Objective Outcome	Outlay 2006-07	Act Exp upto Dec 06	Quantifiable Deliverables/Physical Milestones	Processes /Timelines	Remarks / Risk factors	Acievements upto dec 2006
1	2	3	4	4a	5	6	7	8
1	Vindhyachal STPP St-III (2x500 MW)	Additon of 1000 MW of generation Capacity	711.70	326.17	Unit#9 Synchronization	07/06		500 MW added in 07/06
					Unit#10 Boiler Light up	11/06		Achieved 11/06
					Unit#10 Synchronisation	03/07		
2	Sipat-I (3x660 MW)	Additon of 1980 MW of generation Capacity	1779.55	874.73	Unit#1 Commencement of TG erection	10/06		Acieved 10/06
					Unit#1 Boiler hydro test	02/07		Acieved 12/06
					Unit#2 Completion of TG Pedestals	12/06		Achieved 05/06
3	Sipat-II (2x500 MW)	Additon of 1000 MW of generation Capacity	1101.88	670.85	Unit#4 Boiler Hydro test	06/06		Achieved
					Unit#4 Turbine Box up	12/06		
					Unit#5 Boiler hydro test	12/06		
					Unit#4 Boiler light up	01/07		
					Unit#4 Synchronisation	03/07		
4	Unchahar TPP St-III (1x210 MW)	Additon of 210 MW of generation Capacity	221.49	117.13	Boiler light up	05/06	Delay in Supplies	Achieved 05/06
					Steam blowing completion	06/06		Achieved 09/06
					Synchronisation	08/06		Achieved 09/06
5	Barh STPP (3x660 MW)	Additon of 1980 MW of generation Capacity	1301.75	209.32	Commencement of Boiler erection unit#1	05/06	Delay in supplies from TPE Russia	
					U#1 commencement of boiler pressure parts erection	12/06		
					U#1 commencement of ESP erection	12/06		Achieved 11/06
					Commencement of Boiler erection Unit#2	03/07		
6	Koldam HEPP (4x200 MW)	Additon of 800 MW of generation Capacity	716.73	215.68	Unit#1 Completion of fabrication for spiral casing	10/06		Achieved 08/06
					Commencement of erection of penstock liners	11/06		Achieved 08/06
					Erection of 1 st EOT crane in service bay	12/06		Achieved 11/06
					Start of structure (Gantry/tower) erection in sw.yd.	12/06		Achieved 11/06
					Unit#1 Commencement of erection of draft tube	01/07		Achieved 09/06
7	Kahalgaoon STPP St-II (3x500 MW)	Additon of 1500 MW of generation Capacity	1651.34	867.35	Unit#5 Boiler light up	07/06	Delay in supplies from BHEL	Achieved 11/06
					Unit#6 Boiler hydro test	07/06		Achieved 07/06
					Unit#5 Synchronisation	11/06		
					Unit#6 Boiler light up	01/07		
					Unit#6 Synchronisation	03/07		
	Talcher II	Addition of 2000 MW gen capacity	245.82	33.64				All units have been commissioned
	Rihand II	Addition of 1000 MW gen capacity	235.67	30.68				All units have been commissioned
	Ramagundam III	Addition of 500 MW gen capacity	74.02	11.60				All units have been commissioned
	Sub Total (i)		8039.95	3357.15				

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OUTCOME BUDGET MILESTONES FOR 2006-2007

Sl.No.	Name of Scheme / Programme/Project	Objective Outcome	Outlay 2006-07	Act Exp upto Dec 06	Quantifiable Deliverables/Physical Milestones	Processes /Timelines	Remarks / Risk factors	Acievements upto dec 2006
1	2	3	4	4a	5	6	7	8
	New Projects							
1	Loharinag Pala HEPP (4x150 MW)	Additon of 600MW of generation Capacity	307.32	24.25	Completion of approach road to Dabrani Adit	06/06		Achieved 06/06
					Award of barrage and desilting package	07/06		Achieved 07/06
					Commencement of work of HRT package	08/06		Achieved 08/06
					Completion of Adit construction (1No.)	09/06		
					Award of Power house package	09/06		Achieved 09/06
2	Tapovan Vishnugad HEPP (4x130 MW)	Additon of 520 MW of generation Capacity	301.46	-4.36	Completion of formation of approach road to barrage	06/06		Achieved in 06/06
					Completion of formation of approach road to power house	06/06		Achieved in 06/06
					Commencement of Adit work	09/06		Achieved 09/06
					Charging of first construction power sub-station	01/07		
					Commencement of work of HRT package	03/07		
3	North Karanpura	Additon of 1980 MW of generation Capacity	530.45	4.62	Main Plant packge award	06/06	Project being taken up with JBIC funding. Main plant award in Feb 07 st approval of JBIC for all the four stages of bidding within 15 days each from the date of submission.	Loan effectuated wef 06.01.06. However due to the longdrawn negotiations with JBIC over packaging and pre-qualification issues, the clearance from JBIC for issue of pre qualification documents could be obtained only in Oct 06 (8 months after submission). Considering JBIC requirementsof two step bidding, LOA is now envisaged by Oct 07 st timely availability of multistage JBIC clearances. Based on the above commissioning of 1320 mW (2nd unit on best effort basis) is envisaged in 11th plan period.
4	Kawas- CCPP St-II (1300 MW)	Additon of 1300 MW of generation Capacity	512.03	0.00	Targets to be firmed up after signing of GSPA and Main Plant Award		These provisions were kept considering investment approval/Main Plant award during 05-06 after signing of GSPA with the supplier. Gas supply agreement not signed so far by M/s RIL (gas supplier)	Gas supply agreement not signed so far by M/s RIL (gas supplier). Matter is presently sub-judice
5	Gandhar CCPP St-II (1300 MW)	Additon of 1300 MW of generation Capacity	514.63	0.00				
6.	Other New Projects		3.66	720.17				
	Sub-Total (ii)		2169.55	744.68				
	Renovation & Modernization Schemes		428.89	80.55				
	Other Misc. Schemes		686.61	70.90				
	Sub-Total (iii)		1115.50	151.45				
	Total (i+ii+iii)		11325.00	4253.28				
	Additional							
	Korba III		0	42.16				
	GRAND TOTAL		11325.00	4295.44				

NHPC Outcome Budget 2006-07 : (Achievement upto December, 2006)

1	2	3		4		5	6	7			8		9	
								(a)	(b)	(c)				
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome		Outlay2006-07 (Rs. in Crores)		Quantifiable deliverables / Physical Output		Process/ Timelines	Activity/ Status	Projected Outcomes	Remarks/ Risk factors	Achievement upto 3rd Quarter		
		Sanctioned Cost (Rs. in crores)	Cum. Exp. Till 31.12.2005 (Rs. in crores)	GBS	IEBR	Physical Activity	Targets / Achievements					Physical	Financial Rs. in crores) -upto 2nd quarter	
A	Completed Scheme													
1	Dhauliganga-I	1578.31	1715.46	-	54		-	In progress	Completed in Oct/Nov-05	Completed in Oct./ Nov. 05	Provision for pending bill and other liabilities. Settlement of bills in progress.	-	21.39	
B	Schemes Under Execution													
2	Dulhasti	3559.77	4592.51	-	199	HRT lining (m)	135	June ,06	Activity to be completed	Schedule Completion date Aug.'06	Project delayed due to labour problem and bad geology. Anticipated date of completion is March '07	453 (completed)	191.86	
						Invert lining (m)	1000	June,2006				1529 (completed)		
3	Teesta-V HE Project 510 MW, Sikkim	2198.04	1618.95		434	Dam Concreting (Cum)	52400	Dec. 2006	Activity to be completed	Schedule Completion date Feb.'07	Project is rescheduled for completion in Jan.'08	65962	227.88	
						Desilting Chamber Lining(Cum)	6800	May., 2006				40439		
						HRT Benching (m)	950	June, 2006				3020		
						HRT Overt lining (m)	7000	Nov.2006				5778		
						HRT Invert lining (m)	12800	Dec.2006				3935		
						Lower Surge gallery lining (m)	650	Jan.2007				50		
4	Parbati-II 800 MW, HP	3919.59	1269.58		500	Dam concreting (Cum)	90000	Mar., 2007	To continue beyond March,07	Schedule Completion date Sept.'09	Work started in June'06. Less progress due to slide in Power House	54650	169.96	
						Excavation of HRT (m)	8800	Mar., 2007				4028		
						Powerhouse Concreting (Cum)	40000	Mar., 2007	To be completed	Schedule Completion date Sept.'07	Breakdown of batching plant/crushing plant, low aggregate production in monsoon.	7277	40.72	
						Excavation of right inclined Pressure Shaft (m)	1500	Dec.2006				1506		
						Electro Mechanical works (%)	30%	Mar., 2007				20%		
5	Sewa-II 120 MW, J&K	665.46	270.19		225	Dam and spillway Concreting (Cum)	100000	Mar., 2007	To continue beyond March,07	Schedule Completion date Sept.'07	Bad geology ,Local problems	36937	87.5	
						HRT excavation (m)	2700	Mar., 2007						
						Complete excavavtion of vertical Pr. Shaft (m)	86	July., 2006	To be completed			Completed		86
						Erection of generator of Unit-I	100%	Feb-07				Due for 4th quarter		0%
6	TLDP-III 132 MW, WB	768.92	164.85	1.51	210.49	Excavation of barrage (Block III-VII) (cum)	90000	Mar., 2007	To be completed	Schedule Completion date Mar.'08	completed	61000	87.5	
						Concreting in Cellular Wall (Cum)	44000	Mar., 2007	To continue beyond March,07			35936		
						Intake excavation	100000	July, 2006	To be completed		Slope failure	189549		
						Intake concreting (cum)	22000	Jan. 2007			Less progress due to delay in excavation	17085		
						PH Concreting (Cum)	59000	Mar., 07	To continue beyond March,07		Work delay due to repeated Power House failures	8630		
7	Subansiri Lower HE Project 2000 MW,Ar. Pradesh	6285.33	1062.84	300	50	Daylighting of Diversion tunnel (m)	2200	Jan.,2007	To be completed	Schedule Completion date Sept.'10	Non-signing of Agreement by State Govt., agitation by locals & non co-operation by State Govt.	2059	129.62	
						Completion of PH excavation (cum)	1375000	Mar., 2007	To continue beyond March,07			940719		
						HRT excavation (m)	1300					47		
						Power House concreting (cum)	10000					3886		
						Intake Structure excavation (cum)	400000					11870		

NHPC Outcome Budget 2006-07 : (Achievement upto December, 2006)

1	2	3		4		5		6		7			8	9	
										(a)	(b)	(c)			
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome		Outlay2006-07 (Rs. in Crores)		Quantifiable deliverables / Physical Output				Process/ Timelines	Activity/ Status	Projected Outcomes	Remarks/ Risk factors	Achievement upto 3rd Quarter	
		Sanctioned Cost (Rs. in crores)	Cum. Exp. Till 31.12.2005 (Rs. in crores)	GBS	IEBR	Physical Activity	Targets / Achievements	Physical	Financial Rs. in crores) -upto 2nd quarter						
8	Uri-II HE Project, 240 MW, J&K	1724.79	41.09	204		Excavation of Diversion Tunnel (m)	333	Oct.2006	To be completed	Schedule Completion date Sept.'10	completed		333	13.75	
						Concreting of Diversion Tunnel (m)	333	Dec. 2006			Due to delay in excavation.		239		
						Coffer Dam filling (cum)	300000	Jan-07			Due for 4th quarter. Restoration / reconstruction work in progress after earth quake of Oct., 2005 .Adit excavation start delayed.		0		
						Dam abutment excavation (cum)	80000	Feb-07					27900		
						River bed excavation (cum)	30000	Mar., 2007					0		
						Excavation of adits (m)	340	Jul-06					564		
						Excavation of HRT (m)	2500	March., 2007			HRT excavation started in June '06		852		
9	Chamera-III, 231 MW, H.P.	1405.63	86.84	130		Diversion tunnel excavation (m) (Heading)	340	March., 2007	To be completed	Schedule Completion date Aug.'10	Completed		340	26.03	
						HRT excavation (m)	2000	March., 2007	To continue beyond March,07		Weak rock strata may affect the progress of work. Work affected due to murder of persons & burning / damage of equipments in June 06.	927			
						Excavation of Desilting Chamber & Intake structure (cum)	150000	Mar., 2007			0				
10	Parbati-III 520 MW , HP	2304.56	65.65	200		Excavation of Diversion Tunnel (m)	920	Oct-06	To be completed	Schedule Completion date Nov.'10	Construction of Sainj bypass by State Govt.	831	21.16		
						Concrete lining of Diversion Tunnel (m)	920	Mar., 2007	To continue beyond March,07			269			
						Excavation of adits	1100	Mar., 2007				1156			
						Excavation of heading Excation	500	Mar., 2007				168			
11	TLDP-IV 160 MW , WB	1061.38	50.69	92.45	21.81	Erection of Bailey Bridge (m)	80	June'06	To be completed	Schedule Completion date Sept.'09	Mobilisation in progress. Schedule revised as work could not be started due to delay in transfer of forest land.	0	5.22		
						Excavation of Diversion Channel (cum)	50000	Dec., 2006	545889						
						Coffer Dam filling (cum)	111000	Dec., 2006	0						
						Dam& Spillway Excav.(cum)	50000	Mar., 2007	To continue beyond March,07			0			
						Cellular Wall Excav. (cum)	55000	Mar., 2007	0						
						Powerhouse excavation (cum)	321000	Mar., 2007	0						
	Sub Total (A)			927.96	1694.30										
C	SCHEMES UNDER SANCTION														
1	Nimoo Bazgo	1.25 (BOD NHPC for exp during 02-03) 16.18 (BOD of NHPC for Stage-II)	15.49	72.00		Open Channel excavation (cum)	300000	March,07	To continue beyond March,07	To be completed in 4 years after Govt. sanction	Work commenced. Inclement weather conditions & logistics.	125210	3.54		
						Coffer Dams & Embankments (cum)	140000					0			
						Dam excavation (cum)	50000					0			
2	Chutak	5.62 (GoI sanctioned for Stage-I works)	11.76	95.00		Excavation of Diversion tunnel/dam/barrage (cum)	140000	Mar. 2007	To continue beyond March,07	To be completed in 4 years and 6 months after Govt. sanction	Work commenced. Inclement weather conditions & logistics.	15510	2.57		
						HRT boring (cum)	50000					0			
						Power House / Pressure Shaft/ Surge shaft excavation (cum)	20000					0			

NHPC Outcome Budget 2006-07 : (Achievement upto December, 2006)

1	2	3	4	5	6	7			8	9				
						(a)	(b)	(c)						
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome		Outlay2006-07 (Rs. in Crores)		Quantifiable deliverables / Physical Output			Process/ Timelines	Activity/ Status	Projected Outcomes	Remarks/ Risk factors	Achievement upto 3rd Quarter	
		Sanctioned Cost (Rs. in crores)	Cum. Exp. Till 31.12.2005 (Rs. in crores)	GBS	IEBR	Physical Activity	Targets / Achievements	Physical					Financial Rs. in crores)-upto 2nd quarter	
3	Siyom	9.57 (BOD NHPC for exp during 02-03) 30.80 (BOD NHPC for Stage-II)	46.61		40.00	Infrastructure works - roads (Km)	4	Mar.,2007	To continue beyond March,07	To be completed in 6 years after Govt. sanction	Budget utilization is subject to availability of TEC/TAC from CEA/MoWR.	Project given to private agency by State Govt.	2.73	
						Infrastructure works including Permanent/temporary bldgs. (Sqm)	1500							
4	Kishanganga	2.45 (BOD NHPC for exp during 02-03) 45.57 (BOD NHPC - Stage-II works) 20 (BOD NHPC - for departmental execution of Diversion Tunnel)	17.52	100.00	60.00	Diversion tunnel excavation (cum)	100000	Mar. 2007	To continue beyond March,07	To be completed in 7 years after Govt. sanction	Budget utilization is subject to Govt. sanction during 2005-06. CCEA clearance not received. Land acquisition in progress.	100000	3.05	
						Infrastructure works including Permanent/temporary bldgs. (Sqm)	10000					0		
						Land acquisition/compensation (ha)	30					0		
5	Loktak Downstream	610.55	29.00		0.60	-	-	-			Estt. Cost only. Project held up for want of security. Project proposal being modified.	0	0.04	
	Sub Total (C)			267.00	100.60									
D.	S&I Schemes *													
1	Kotli Bhel Stage- I A	3.00 (BOD NHPC for Stage-II works)	18.12		11.00	Permanent / Temp. building (Sq m)	1000	Mar-07	To continue beyond March,07	To be completed in 4 years and 6 months after Govt. sanction	Budget provision is kept for 1. Survey & Investigation works and minor infrastructure works 2. EIA/EMP studies 3. Soil testing & other geological and env. studies. 4. Works to be taken after TEC. 5. DPR submitted to CEA on 3.1.06. TEC accorded on 3.10.06.	0	8.62	
						Road / Terrace cutting for roads (Km)	1					0		
						Confirmatory Investigations	Tender Drawings					In progress		
2	Kotli Bhel Stage- I B	3.00 (BOD NHPC for Stage-II works)			11.00	Permanent / Temp. building (Sq m)	1000	Mar-07	To continue beyond March,07	To be completed in 4 years and 6 months after Govt. sanction	Budget provision is kept for 1. EIA/EMP studies 2. Soil testing & other geological and environmental studies. 4. Works to be taken after TEC. 5. DPR submitted to CEA on 30.1.06. TEC accorded on 31.10.06	0		
						Road / Terrace cutting for roads (Km)	1					0		
						Confirmatory Investigations	Tender Drawings					In Progress		
3	Kotli Bhel Stage- II	3.00 (BOD NHPC for Stage-II works)				11.00	Permanent / Temp. building (Sq m)	1100	Mar-07	To continue beyond March,07	To be completed in 4 years and 8 months after Govt. sanction	Budget provision is kept for 1. EIA/EMP studies 2. Soil testing & other geological and environmental studies. 4. Works to be taken after TEC. 5. DPR submitted to CEA on 30.1.06. TEC accorded on 30.11.06		0
							Road / Terrace cutting for roads (Km)	1						0
							Confirmatory Investigations	Tender Drawings						In progress

NHPC Outcome Budget 2006-07 : (Achievement upto December, 2006)

1	2	3		4		5	6	7			8	9	
								(a)	(b)	(c)			
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome		Outlay2006-07 (Rs. in Crores)		Quantifiable deliverables / Physical Output		Process/ Timelines	Activity/ Status	Projected Outcomes	Remarks/ Risk factors	Achievement upto 3rd Quarter	
		Sanctioned Cost (Rs. in crores)	Cum. Exp. Till 31.12.2005 (Rs. in crores)	GBS	IEBR	Physical Activity	Targets / Achievements					Physical	Financial Rs. in crores)-upto 2nd quarter
4	Pakal Dul	38.66 (GoI sanctioned for Stage-II works)	37.52		19.00	Confirmatory Investigations	Tender Drawings	Mar-07	To continue beyond March,07	To be completed in 6 years and 6 months after Govt. sanction	Budget includes provision for security. Law & order is the risk factor. DPR submitted to CEA on 3.8.05. TEA accorded on 3.10.06	In Progress	7.03
						Road / Terrace cutting for roads (Km)	4					In Progress	
5	Dibang	30.83 (BOD of NHPC for DPR)	31.37		18.00	Confirmatory Investigations	Tender Drawings	Mar-07	To continue beyond March,07	To be completed in 9 years after Govt. sanction	Budget provision is kept for 1. EIA/EMP studies 2. Soil testing & other geological and environmental studies. DPR submitted to CEA on 29.12.05. TEA awaited. Project to be taken up on JV by NHPC and state Govt	In Progress	3.66
						Road / Terrace cutting for roads (Km)	10					In Progress	
						Permanent / Temp. building (Sq m)	1000					In Progress	
6	Bav II	3.00 (BOD of NHPC for stage-II)	7.79		11.00	Confirmatory Investigations	Tender Drawings	Mar-07	To continue beyond March,07	To be completed in 3 years and 3 months after Govt. sanction	DPR submitted to CEA in Mar-06. Budget provision is kept for 1. EIA/EMP studies 2. Soil testing & other geological and environmental studies.	Project declared unviable by CEA, alternative action under consideration.	0.69
						Permanent / Temp. building (Sq m)	2000						
						Road / Terrace cutting for roads (Km)	3						
7	Lakhwar Vyasi	2.20 (BOD NHPC for Stage-II) 3.00 (BOD of NHPC for exp. During 03-04)	9.62		17.00	Confirmatory Investigations	Tender Drawings	Mar-07	To continue beyond March,07	To be completed in 4 years and 6 months after Govt. sanction	DPR to be submitted in Mar-06 subjected to settlement of sharing of cost by beneficiary states for irrigation and drinking water component. Budget provision is kept for 1. EIA/EMP studies 2. Soil testing & other geological and environmental studies.	Vyasi Project being taken up separately. DPR of Vyasi Project submitted to CEA on 2.8.06. TEC awaited	3.87
						Permanent / Temp. building (Sq m)	500						
8	Siang (Lower)	23 (BOD NHPC Stage-I) 11 (BOD NHPC Stage-II)	31.42		8.00	Confirmatory Investigations	Tender Drawings	Mar-07	To continue beyond March,07	To be completed in 7 years and 11years after Govt. sanction	DPR to be submitted in Mar-06. Budget provision is kept for 1. EIA/EMP studies 2. Soil testing, model studies & other geological and environmental studies.	Project given to private agency by State Govt.	1.93
9	Bursar	13.85 (BOD NHPC exp during 02-03) 28.76 (BOD NHPC Stage-II)	21.30		19.00	Survey & Investigation		Mar-07	To continue beyond March,07	To be completed in 6 years and 6 months after Govt. sanction	DPR to be submitted to CEA in Dec-06. Budget includes provision for security and 1. EIA/EMP studies 2. Soil testing, model studies & other geological and environmental studies. Law & order is the risk factor.	In progress	4.09
						Road / Terrace cutting for roads (Km)	4						
10	Subansiri(Middle)	7.89 (BOD NHPC exp during 02-03) 24.09 (BOD NHPC Stage-II)	28.18		19.00	Survey & Investigation works	DPR submission	Mar-07	To continue beyond March,07	To be completed in 6 years after Govt. sanction	DPR submission is subjected to availability of Site Clearance Stage-II from MOEF as the same has been rejected by Hon'ble Supreme Court vide order dated 19.04.2004.	Work held up due to Hon'ble supreme Court order.	0.93
11	Subansiri (Upper)	8.06 (BOD NHPC exp during 02-03) 21.36 (BOD NHPC Stage-II)	32.63		3.00	Survey & Investigation works	DPR submission	Mar-07	To continue beyond March,07	To be completed in 6 years after Govt. sanction			0.89

NHPC Outcome Budget 2006-07 : (Achievement upto December, 2006)

1	2	3		4		5	6	7			8	9	
								(a)	(b)	(c)			
Sl. No.	Name of Schemes / programmes / Projects	Objective/ Outcome		Outlay2006-07 (Rs. in Crores)		Quantifiable deliverables / Physical Output		Process/ Timelines	Activity/ Status	Projected Outcomes	Remarks/ Risk factors	Achievement upto 3rd Quarter	
		Sanctioned Cost (Rs. in crores)	Cum. Exp. Till 31.12.2005 (Rs. in crores)	GBS	IEBR	Physical Activity	Targets / Achievements					Physical	Financial Rs. in crores)-upto 2nd quarter
12	Siang (Upper)		28.60		4.00	Budget provision is for S&I works for preparation of Feasibility Repor.	Mar-07	To continue beyond March,07		FR to be submitted in Jun-07 to CEA for Commercial Viability. Non-signing of MOU with State Govt. and resistance from local for the construction activities.	work could not be started due to local agitation and non cooperation by State Govt.	1.33	
13	Siang (Intermediate)	9.88 (GoI sanctioned for Stage-I))		3.00									
E.	Other New Schemes			10.00						Provision is for S&I works for preparation of FR/DPR for new schemes in J&K, Utranchal and Sikkim.		0.78	
	Sub Total (D+E)			10.00	154.00								
F.	Mini Hydro Schemes		34.85		7.00								
	Kambang					Concreting (cum)	900	Mar-07	Complete	Budget provision is for two small hydro schemes in Arunachal i.e. Kambang, 6 MW and Sippi, 4 MW. Delay due to law & order problem and agitation by local people & non availability of grid. Two units of Kambang & one unit of Sippi have been commissioned.	129	4.58	
						E&M works	15%				14%		
	Sippi					Concreting (cum)	3000	May-06	Complete		3000		
						E&M works	10%				9%- mechanical testing of units completed.		
G.	R&M Of Power Houses		1.61		22.00					Provision is for Renovation and modernisation of Loktak and Salal Power Station		-	
H.	R&D Works				0.78							-	
	Total			1204.96	1978.68							985.42	
* Capacity addition and generation of S&I schemes is subject to TEC from CEA.													

POWER GRID CORPORATION OF INDIA LTD.

OUTCOME BUDGET 2006-07

1. Projections are based on the Approved BE 2006-07.

2. Besides physical works like Stringing and Transformer & Reactor erection, Outlays also cover developmental & preparatory, advance payments for supplies/erection/engineering, Foundation, Tower Erection, Equipment, & Cable laying and supply of equipment/material and last payments, depending upon the progress/status of the project as the case may be.

3. Only POWERGRID's Outlay has been considered in Column No. 4

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective Outcomes	Outlay BE 06-07 (Rs. Cr.)	Physical Outputs/ Quantifiable			Remark, Risk Factors	Actual for 3rd Qtr	
		Objective / Outcomes	BE	Stringing (ckm)	Transformer & Reactor Erection (no.)	PROCESSES / TIMELINESS		Stringing (ckm)	Transformer & Reactor Erection (no.)
1	2	3 (iii)	4 (iii)	5		6	8		
I.	COMPLETED SCHEMES								
1	Sasaram-HVDC B/B	Inter-regional power transfer	3.97	Projects already completed. Outlay kept for pending final paymentets linked to completion of left-over works/ settlement of Contractual disputes/ Court cases which are under process.			Project Completed		
2	Bihar Grid Strengthening	Grid Strengthening	1.40						
3	LILO of Bongaigon-Malda at Siliguri	Grid Strengthening	1.16						
4	LILO of Bongaigon - Malda at Purnea	Grid Strengthening	0.07						
5	Ranganadi-Ziro	Grid Strengthening	2.93						
	SUB TOTAL (I)		9.54						
II.	ON-GOING SCHEMES								
1	Dulhasti Combined (Kishenpur - Wagoora Line)	Power Evacuation + Grid Strengthening	30.97	48	Physical works for sub-station extn. Completion by Mar'06	Jul'06	Completed in Oct'06		
2	Tehri	Power Evacuation	12.78	Physical activities planned for completion by Mar'06. Outlay kept for final payments.			Mar'06 (matching with Generation project)	Tehri - Meerut line commissioned in July'06 matching with Gen. Project.	
3	Dhauliganga	Power Evacuation	0.18	Project completed. Outlay kept for final payments.			-	Project completed	
4	Tala -Siliguri	Power Evacuation	9.00	Physical activities planned for completion by Mar'06. Outlay kept for final payments.			Mar'06 (matching with Generation project)	Spill over work of last year. LILO lines completed & commissioned in May.'05 & May.'06. Tala-Siliguti Line-I completed & commissioned in Sept.'06. Ckt-I of Tala-Siliguri Line-II commissioned in Aug'06. Lines associated with transmission system commissioned in July'06 matching with generation project.	
5	Tarapur 3&4	Power Evacuation	7.96	Project completed. Outlay kept for final payments.			-	Project completed	
6	Rihand-II	Power Evacuation	33.87	Physical activities planned for completion in 2005-06. Outlay kept for final payments.			-	Project completed	

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective Outcomes	Outlay BE 06-07 (Rs. Cr.)	Physical Outputs/ Quantifiable			Remark, Risk Factors	Actual for 3rd Qtr	
		Objective / Outcomes	BE	Stringing (ckm)	Transformer & Reactor Erection (no.)	PROCESSES / TIMELINESS		Stringing (ckm)	Transformer & Reactor Erection (no.)
7	Sipat-I	Power Evacuation	614.94	1020	17	Feb'07	LILO of 400Kv S/C Korba - Raipur at Sipat commissioned in April.'06. Sipat-Seoni line-I and two LILO ines shall be ready by Feb.'07. However, Sipat-Seoni Line-II delayed due to delay in placement of award due to change in funding. Further Nagda - Dehgam line delayed due to delay in award on a/c of CERC issue. Due to delay in some of lines , work of associated substations rescheduled.Balance work expected by Sept.'07.	173	8
8	Teesta-V	Power Evacuation	85.61	64	0	Mar'07	Efforts being made to commission the line matching with generation project when expected by June.'07 as against the Govt. schedule of May.'08	38	
9	Sipat-II	Power Evacuation	178.45	255	0	Mar'07		178	
10	Vindhyanchal-III	Power Evacuation	135.24	306	0	Mar'07	Ckt. I & II of Vindyachal - Satna commissioned in Sept.'06 & Nov.'06 respectively against schedule of Jul.'07.	140	
11	Kahalgaon -II ,(Phase -I)	Power Evacuation	891.60	1190	3	Mar'07	* Due to delayed acquisition of land for Ranchi S/S (acquired on 04.10.06), completion of Maithon - Ranchi line & Ranchi S/S by July.'07 is critical and anticipated to be completed by Sept.'07. Progress of Balia S/S affected due to heavy water logging & high rise in ground water table. However, efforts are being made to complete lines & associated s/s (except for Maithon - Ranchi line & Ranchi S/S) by Mar.'07 as against the sch.of July.'07 to match with the generation proj.	824	
12	Koteshwar	Power Evacuation	9.12	0	-	Mar'07	Progress of Koteshwar S/S, is affected due to stiff resistance by local people and difficult terrain.		
13	Kahalgaon -II ,(Phase -II)	Power Evacuation	184.22	836	2	Mar'07	* Due to delayed acquisition of land for Ranchi S/S (acquired on 04.10.06), commissioing of Ranchi - Sipat line & Ranchi S/S is affected, now expected to be completed by Oct.'07. However all out efforts are being made to complete it matching with Generation Projects. (Ant. Mar.'07)	72	
14	Kudankulam APP	Power Evacuation	255.00	43	0	Mar'07	Transmission line scheduled for completion matching with Generation project units.	18	
15	NLC-II Expansion	Power Evacuation	219.16	85	0	Mar'07	Stringing planned in subsequent quarter. Land for Arasur S/S acquired in Sept.'06. Delayed acquisition may affect the completion of Arasur S/S & asociated line beyond approved Schedule.		

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective Outcomes	Outlay BE 06-07 (Rs. Cr.)	Physical Outputs/ Quantifiable			Remark, Risk Factors	Actual for 3rd Qtr	
		Objective / Outcomes	BE	Stringing (ckm)	Transformer & Reactor Erection (no.)	PROCESSES / TIMELINESS		Stringing (ckm)	Transformer & Reactor Erection (no.)
16	RAPP 5&6	Power Evacuation	124.44	43	0	Mar'07	Stringing planned in subsequent quarter. All out efforts are being made to complete RAPP - Kota line along with associated S/S matching with Generation project. (Ant. June / July '07).		
17	Kaiga 3&4	Power Evacuation	207.48	85	0	Mar'07		7	
18	Unchahar-III	Power Evacuation	36.84	0	0	-			
19	SEWA-II	Power Evacuation	37.38	0	-	-	Associated bay extension work of substation are being executed by PDD Deptt., J&K.		
20	Gazuwaka HDVC Augmentation	Inter-regional power transfer	4.41	Physical activities planned for completion in 2005-06. Outlay kept for final payments.			-	only spill over works left	
21	Trans. System for TALA (POWERGRID Portion)	Inter-regional power transfer	159.05	214	1	Jun'06	Project Completed & commissioned progressively by Aug'06 except Delhi sub station & LILO of Dadri- Ballabgarh line at Delhi has been rerouted due to severe ROW problems in NOIDA. Work re-commenced from June.'06. Balance works anticipated to be completed by Mar.'07.	7	
22	Trans. System for TALA (POWERGRID Equity)	Inter-regional power transfer	18.45	Physical activities planned for completion by Mar'06. Outlay kept for final payments.			-		
23	Kaiga-Narendra	Grid Strengthening	1.47	Project completed. Outlay kept for final payments.			-	Project completed	
24	Narendra S/S	Grid Strengthening	3.01	Physical activities planned for completion by Mar'06. Outlay kept for final payments.			-	First transformer commissioned along with associated transmission line in Oct.'05. 2nd Transformer commissioned in Aug.'06.	
25	Madurai-Thiruvananthapuram	Grid Strengthening	2.24	Project completed. Outlay kept for final payments.			-	Project completed	
26	LILO of Kolaghat Rengali at Baripada	Grid Strengthening	4.39	Project completed. Outlay kept for final payments.			-	Project completed	
27	LILO of Rangit- Siliguri at Gangtok	Grid Strengthening	2.90	Project completed. Outlay kept for final payments.			-	Project completed	
28	LILO of Siliguri- Gangtok at Melli	Grid Strengthening	0.10	Project completed. Outlay kept for final payments.			-	Project completed	
29	Raipur - Chandrapur	Grid Strengthening	2.04	Project completed. Outlay kept for final payments.			-	Project completed	
30	2nd ICT at Indravati (OHPC)	Grid Strengthening	0.26	Physical activities planned for completion in 2005-06. Outlay kept for final payments.			-	Project completed	
31	System strenthening scheme in NR-ER	Grid Strengthening	97.14	140	6	Jul'06	NR portion commissioned from Apr.'06 to Oct.'06. Biharshriff-Muzafarpur line commissioned in Oct'06. Commissioning of balance portion expected by March'07.	11	

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective Outcomes	Outlay BE 06-07 (Rs. Cr.)	Physical Outputs/ Quantifiable			Remark, Risk Factors	Actual for 3rd Qtr	
		Objective / Outcomes	BE	Stringing (ckm)	Transformer & Reactor Erection (no.)	PROCESSES / TIMELINESS		Stringing (ckm)	Transformer & Reactor Erection (no.)
32	Neelamangala Mysore	Grid Strengthening	7.70	Physical activities planned for completion in 2005-06. Outlay kept for final payments.			-	Commissioned in April'06.	
33	System Strengthening in Singrauli-Vindhyachal Corridor	Grid Strengthening	1.88	5	-	Aug'06	Final checking under progress. S/D awaited for Gantry connection. Ant. compln. Jan.'07.	5	
34	Northern Region System Strengthening Scheme -I	Grid Strengthening	90.49	170	-	Mar'07	Kanpur - Auriya line commissioned in Sept.'06 as against the Govt. schedule of July.'07. Balance system is expected to be completed by Mar.'07.	61	
35	Northern Region Strengthening Scheme -II	Grid Strengthening	48.60	130	4	Dec'06	Commissioned on 31.12.06.	53	4
36	System Strengthening-IV Southern Region Grid	Grid Strengthening	9.73	30	-	Feb'07	Commissioned in May.'06 ahead of schedule.		
37	Vindhayanchal-Korba	Grid Strengthening	35.88	85	-	Feb'07		66	
38	Bhadravati -Chandrapur	Grid Strengthening	19.79	46	-	Mar'07	Commissioned in April'06 against the sch. of Mar.'07.		
39	Bina - Nagda	Grid Strengthening	42.40	85	-	Mar'07		64	
40	Western Region System Strengthening Scheme - I	Grid Strengthening	36.25	43	0	Mar'07		12	
41	System Strengthening Scheme in Uttaranchal	Grid Strengthening	31.20	50	1	Mar'07	Project anticipated to be completed by Sept'07.		
42	Northern Region System Strengthening-III	Grid Strengthening	93.15	20	0	Mar'07			
43	System Strengthening-V in Southern Regional Grid	Grid Strengthening	67.56	No TL involved		3	Mar'07		
44	System Strengthening-VII of Southern Regional Grid	Grid Strengthening	41.41	0	0	Mar'07			
45	System Strengthening-III of Southern Region Grid	Grid Strengthening	195.09	360	-	Mar'07		96	
46	Sipat Stage-II Supplementary	Grid Strengthening	88.25	0	0	Mar'07			
47	Augmentation of Transformation Capacity at MOGA & Amritsar in NR	Grid Strengthening	15.53	No TL involved		0	Mar'07		
48	Upgradation of Talcher-Kolar HDVC Bipole	Grid Strengthening	10.00	No TL involved		0	Mar'07		
49	System Strengthening -VI in Southern Regional grid	Grid Strengthening	59.01	0	0	Mar'07			
50	ULDC - ER	Grid Control	14.41	Project completed. Outlay kept for final payments on completion of left-over works under progress.			-		
51	ULDC -WR	Grid Control	9.94	Physical activities completed in Aug'05. Outlay kept for final payments.			Mar'06		
52	National Load Despatch Centre(NLDC)	Grid Control	4.55	Outlay provided for IA & Engg. advances			Mar'07		
53	Gurgaon Complex	Infrastructure Development	0.97	Project expected to be completed by Mar'06. Outlay kept for final payments.			Mar'06		
54	EWIT	IT enablement	1.48	ERP Consultancy and LAN augmentation at RHQ & Sub-stations.			Mar'07		

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective Outcomes	Outlay BE 06-07 (Rs. Cr.)	Physical Outputs/ Quantifiable			Remark, Risk Factors	Actual for 3rd Qtr	
		Objective / Outcomes	BE	Stringing (ckm)	Transformer & Reactor Erection (no.)	PROCESSES / TIMELINESS		Stringing (ckm)	Transformer & Reactor Erection (no.)
55	Telecom Base Network	Diversification	3.68	All physical activities are planned to complete by Mar.'06. Outlay kept for final payments.		Mar '06.			
	SUB TOTAL (II)		4298.66						
III.	NEW SCHEMES								
1	Trans. System for Barh	Power Evacuation	339.71	0	0	-	Awards are being placed progressively from May'06		
2	Tehri PSP	Power Evacuation	0.11	Project under planning/ formulation. No physical activities planned for 2006-07. Only token outlay provided.		-			
3	Kawas Stage -II	Power Evacuation	1.00	firm commitment regarding generation project awaited. Only token outlay provided.		-			
4	Gandhar Stage-II	Power Evacuation	1.00	firm commitment regarding generation project awaited. Only token outlay provided.		-	Fuel supply agreement to be finalised by NTPC		
5	Lower Subansiri	Power Evacuation	2.05	Outlay kept for Survey, land acquisition & other pre-investment expenditure.		-	Project under investment approval. Project renamed as North east-NR/WR Interconnector.		
6	North Karanpura	Power Evacuation	3.64	Project under FR stage. Only token outlay provided for survey & other initial activities.		-	Project proposed under private investment by MOP.		
7	Koldam (POWERGRID)	Power Evacuation	20.00	0	Extns. award expected by Sep'06	-			
8	Lohari-Nagpala	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
9	Prabati-III	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
10	Koldam (POWERGRID Equity Portion)	Power Evacuation	2.00	0	No S/S involved	-			
11	RAPP 7&8	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
12	URI-II	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
13	Maithon (POWERGRID Portion)	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
14	Kayamkulam -II	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
15	Kaiga 5&6	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
16	Karcham Wangtoo	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
17	Chamera-III	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			
18	Kishen Ganga	Power Evacuation	0.10	Project under planning/ formulation. Only token outlay provided.		-			

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective Outcomes	Outlay BE 06-07 (Rs. Cr.)	Physical Outputs/ Quantifiable			Remark, Risk Factors	Actual for 3rd Qtr	
		Objective / Outcomes	BE	Stringing (ckm)	Transformer & Reactor Erection (no.)	PROCESSES / TIMELINESS		Stringing (ckm)	Transformer & Reactor Erection (no.)
19	Rampur	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
20	Tapovan Vishnu Garh	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
21	Lata-Tapovan	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
22	Ennore JV with TNEB	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
23	ANTA-II	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
24	Auraiya-II	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
25	Dadri -II	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
26	Tipaimukh	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
27	Kemeng	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-	Part of transmission system of North East-NR/WR Interconnector. Project under investment approval.		
28	Turial	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
29	Maithon (POWERGRID JV Portion)	Power Evacuation	0.05	Project under planning/ formulation. Only token outlay provided.		-			
30	Parbati-II (POWERGRID JV Portion)	Power Evacuation	2.00	0	0	-			
31	Indian Bangladesh (India Portion)	Inter-regional power transfer	0.05	Project under planning/ formulation. Only token outlay provided.		-			
32	WR Strengthening Scheme-II	Grid Strengthening	5.80	Being planned to be implemented through IPTC route. Outlay kept for survey & development expenses etc.		-			0
33	Misa-Byrnihat Project (POWERGRID Equity)	Grid Strengthening	15.15	0	0	-	Tendering & execution linked to signing of agreement with MeSEB for JV formation, which is still awaited.		
34	East West Corridor Strengthening	Grid Strengthening	40.00	0	0	-			
35	System Strengthening -VI in NR	Grid Strengthening	5.00	Outlay kept for land acquisition & other pre-investment expenditure.		-			

SL. NO.	NAME OF SCHEME / PROGRAMME/PROJECT	Objective Outcomes	Outlay BE 06-07 (Rs. Cr.)	Physical Outputs/ Quantifiable			Remark, Risk Factors	Actual for 3rd Qtr	
		Objective / Outcomes	BE	Stringing (ckm)	Transformer & Reactor Erection (no.)	PROCESSES / TIMELINESS		Stringing (ckm)	Transformer & Reactor Erection (no.)
36	ER Strengthening Scheme	Grid Strengthening	10.00	Outlay kept for Initial advance & other initial activites.		-	Project approved now known as ER strengthening Scheme-I.		
37	North West Corridor Strengthening	Grid Strengthening	12.00	0	0	-			
38	System Strengthening In Roorkee Area	Grid Strengthening	10.00	Outlay kept for Initial advance, land acquistion & other infrastructure activities.		-			
39	II nd Spare Converter Transformer for Talcher Kolar	Grid Strengthening	7.25	No TL involve	Outlay provision for initial advance.	-	Being taken up as part of on-going project.		
40	WR System Strengthening-III	Grid Strengthening	6.15	Outlay kept for survey & development expenses etc.		-	Project approved		
41	System Strenghtening-V in NR	Grid Strengthening	40.00	Outlay kept for Initial advance & other initial activities.		-			
42	System Strengthening in South Western of Northen Grid (part-A & B)	Grid Strengthening	10.00	0	0	-			
43	System Strengthening in NR-VII & NR-VIII	Grid Strengthening	2.00	Award expected by 3rd qtr. of 2006-07. Outlay kept for initial activities.		-			
44	System Strengthening-II in ER	Grid Strengthening	0.20	Project under planning/ formulation. Only token outlay provided.		-			
45	System Strengthening -IV in NR	Grid Strengthening	0.05	Project under planning/ formulation. Only token outlay provided.		-			
46	SR-I & II complex	Infrastructure Development	3.82	Outlay kept for land acquistion and other infrastructure activities.		-			
47	Other New Schemes		0.20	Token outlay provided for miscellaneous expenses for contingency projects.					
	SUB TOTAL (III)		540.79						
	TOTAL (I+II+III)		4849.00						

Annexure-II

CHAPTER-V
FINANCIAL REVIEW
Outcomes Budget (Achievement till DEC. 2006)

Sl. No.	Name of Scheme /Programme/ Project	Sanctioned Cost/ Cumulative Expenditure as on 31.12.2006	Objective /outcome	BE 2006-07(Rs. In Crores)	Quantifiable Deliverables	Processes	Projected Outcomes	Timeliness	Actual Achievements TILL dec 2006
1	Nathpa Jhakri Hydro Electric Project	3887.757	Completion of 1500 MW Power Project		Major Civil Works		Nathpa Jhakri Hydro Electric Project has been fully commissioned on May 18,2004		
		3704.24		19.51	Raising of Dam & Remodelling of Bhabha HEP TRT	Compensation to be paid to HPSEB on account of closure of Bhabha Power House.		March 07	The excavation of underground pump house has been completed. 100% underground pump house excavation & 54 % concreting has been done . 70 % concrete Lining in Discharge tunnel and 90 % lining in Tail race tunnel has been completed.
		1521.11			Electro-Mechanical Packages				
		1384.09		40.00	Procurement of capital spares	Runners		July, 07	Work awarded. Advance payment of Rs. 11.90 crores released.
						Guide Vanes		July, 07	Work shall be awarded in IV th quarter.
		401.503				Labyrinth Seals		July, 07	Work awarded. Rs. 12.97 crores released.
					Infrastructural Works				
		384.66		10.00	Liabilities on a/c of Land acquisitions due to enhanced compensations by Hon'ble Courts and R&R liabilities.	Subject to courts decision		March, 07	No expenditure has been incurred
					Construction of Headquarter Building	Land acquisition		March, 07	Identification of Land is being done
					Partial Completion of CAT Plan	To be released to GOHP on furnishing utilisation certificate against already released amount.		March, 07	Rs. 3.50 Crores has been released .
		2569.52		0.00	IEDC, IDC, Recovery of ICF Cost, recovery of Revenue from infirm power				
		8379.88**		69.51	Sub Total				

		8042.51*							
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2	Rampur Hydro Electric Project	2047.03	Generation of 412 MW Power		Infrastructural Works				
				5.00	Acquisition of land/houses	Land acquisition from Government & private owners.	Construction of Rampur Hydro Electric Project to be completed within 5 years of CCEA clearance	June, 06	Compensation paid for Private land for main project features(area 69 Bighas), main dumping area(area 48 Bighas), quarry , road, crusher and job facilities(area 48-12 Bighas),Office complex, Field hostel etc (area 15-16 Bighas). Private land in Duttnagar, Distt. Shimla for residential and job facilities (area 195-10 Bighas) –Proceeding under section-VIII & IX in progress. For Forest land required for Power House, Penstock, Adits and Approach roads to Adits etc.(area 48 hac. + 21 hac. Notional) – Final approval for diversion for Forest land accorded by MOEF,GOI on 07.04.2006, NPV and compensatory afforestation amount deposited with HP Forest Deptt.
		73.69*		20.00	Construction of buildings at Jhakri and Bayal			March, 07	Construction of type B quarters: - 1st Package- 1st & 2nd floor slab of two blocks complete .90% brick work is complete . In 3rd block ,work for laying 1st floor slab is in progress & in 4th block , work on excavation of footing in progress. 2nd Package- 1st floor slab of 3 blocks & 2nd floor slab of two block laid & and brickwork is in progress. D Type Quarters at Jhakri: Structure work and brick work completed in all blocks.Finishing works is in progress. Sub-ordinate Rest House at Jhakri: RCC slab for groundfloor has been laid and preparation are being done for casting of roof slab Office Building at Jhakri: In ground and first floor finishing work is in progress. 50% roof slab including Water tanks slab laid.Form work for balance 50% roof slab Office Building at Bayal: Finishing work is in progress

									Field Hostel at Bayal: RCC frame work complete in all the three blocks. RCC work for central atrium in progress. Fabrication/erection of truss in progress. Brick work in all the 03 blocks complete.Plasterng work in 02 blocks complete.
				15.00	Construction power			June, 06	Completed
				5.00	Construction of Roads and Bridges	Deposit work by HPPWD and construction of approach roads of 5.5 km length		March, 07	Roads: Approach Road to Kajo Adit - completed Road : Approach Road to Surge Shaft:- completed Bridges: Duttnagar :- 26% completed .
				3.00	Environment and Ecology	CAT Plan & R&R		March, 07	CAT Plan has been approved by MOEF, GOI amounting to Rs. 23.37 Crores and 1st instalment of Rs. 4.30 crores has been released .
				2.00	Misc. including establishment.	Continous process.		March, 07	
				118.00	Advances to the Contractor for Mobilisation	Award of Major Civil Works Contracts		Sep, 06	Award of Major Civil Work packages shall be made after the CCEA clearance is obtained from Govt. of India which is expected shortly.
				32.00	Civil Works	Construction of Adits and main component of civil packages 1 & 2.		March, 07	The work for adit has been awarded on 12.1.06 to M/s Coastal Project Pvt. Ltd. Kunni Adit :- 52 % completed and work is in progress. Goshai Adit :- 20 % completed and work is in progress.
				200.00	Sub Total				
3	Luhri Hydro Electric Project	8.49*	Capacity addition of 700 MW	7.00	Survey & Investigation and DPR preparation.	DPR Preparation	Accordance of Techno - Economic Clearance by 30.04.07	Running payments upto March, 07	Pre-Feasibility Report (PFR) for Luhri was prepared by HPSEB for an installed capacity of 465 MW. However, SJVN revised the PFR for proposed enhanced installed capacity of 700 MW and submitted the same to CEA in October, 2005. However, in order to utilize the complete head the same has again been revised and submitted to CEA on October 13 , 2006 . CEA has accorded commercial viability for 776 MW Luhri HEP with twin tunnel option.

4	Khab Hydro Electric Project	2.37*	Capacity addition of 1080 MW.	7.00	Survey & Investigation and DPR preparation.	DPR Preparation	Accordance of Techno - Economic Clearance by 31.05.07	Running payments upto March, 07	Pre-Feasibility Report (PFR) for Khab-I(450 MW) and Khab-II(186 MW) was prepared by SJVN. However in view of silt problems & flash floods arising every year. SJVN revised the PFR with an alternative proposal combining Khab-I(450 MW) and Khab-II 186 (MW) to one storage type of scheme namely Khab HEP (1020 MW) and submitted the same to CEA. However, to reduce the cost of the project revised Pre-Feasibility Report (PFR) for Khab (1020 MW) storage type of scheme is under preparation with Rock fill Dam of 275 M height.
5	Uttranchal Projects	2.53*	Capacity addition of 366 MW.	7.00	Preliminary works for the updation of Pre Feasibility Report for Devsari Dam HEP, Jakhol Sankari HEP & Devra Mori HEP and Preparation of DPR for these projects	Starting the preliminary works under Stage-I activities for the updation of Pre Feasibility Report for Devsari Dam HEP, Jakhol Sankari HEP & Devra Mori HEP and Preparation of DPR for these projects	Accordance of Techno - Economic Clearance by 30.06.07	March, 07	SJVN is carrying out survey and investigation for preparation of revised Pre Feasibility Report for these projects. Revised updated Pre Feasibility Report of Naitwar Mori HEP was submitted to CEA on September 12, 2006, for which commercial viability has been accorded by CEA. Revised updated Pre Feasibility Report of Jakhol Sankari HEP has also been submitted to CEA for accordance of commercial viability and PFR of Devsari HEP is being prepared.
		8129.58*	Total BE	290.51					

* Cumulative Expenditure

** Sanctioned Cost

CHAPTER-IV

ACHIEVEMENT AGAINST THE OBJECTIVES/OUTCOMES & QUANTIFIABLE DELIVERABLES UP TO DEC'2006

Sl. No.	Name of Schemes/ Programme	Objective /Outcome	Outlay 2006-07 (Rs. in Crs.)		Quantifiable Deliverables	Processes/ Timelines	Remarks/ Risk factors	Achievements upto 31 Dec'2006
			Plan Budget	Complementary Extra-Budget Resources				
1	2	3	4		5	6	7	8
1	Tuirial HE Project (60MW)	Hydro Power Generation.	0.00	1.00	Work held-up.	March'09	----	Due to agitation called by Tuirial Crop Compensation Claimants Association (TCCA) with effect from 09/06/04, the project works of Tuirial H.E.P came to a total stop.
2	Kameng Hydro Electric Project (600 MW)	Hydro Power Generation.	201.48	148.52	Enclosed as Annexure-I	Nov'09	Geological surprise,landslide s obstructing major approach roads of the project.	Enclosed as Annexure-I
3	Tipaimukh HEP (1500 MW)	Hydro Power Generation & Flood Moderation.	100.00	0.00	Not yet sanctioned.	87 months from the date of CCEA clearance.	Law and Order is the risk factor.	CCEA Clearance is still awaited.
4	Ranganadi HE Project. St-II (130 MW)	Submission of DPR	20.00	0.00	--	March'2006.	--	DPR submitted to CEA on17-03-06.
5	Pare Hydro Electric Project (110 MW)	Submission of DPR	50.00	0.00	--	--	---	DPR submitted to CEA on17-03-06.
6	Survey & Investigation	To carry out Survey & Investigation works of different hydro projects.	10.00	0.00	--	--	---	Work on survey & investigation is under progress.
	TOTAL		381.48	149.52				

CHAPTER-IV
KAMENG HEP(600 MW), ARUNACHAL PRADESH
ACHIEVEMENT/PROGRESS MADE TILL THE END OF 3RD QUARTER (UPTO DEC'2006)

NAME OF PSU : NEEPCO LTD.

NAME OF PROJECT : KAMENG HYDRO ELECTRIC PROJECT, ARUNACHAL PRADESH.

SL.NO	ACTIVITY	UNIT	TOTAL ESTD. QTTY.	COMPLETED BY 31-03-06	BALANCE QTTY.	TARGET FOR 2006-07	Target upto 3rd Qtr. (April' 06 to	Achievement upto 3rd Qtr. (April'	Milestone (%)	REMARKS
1	2	3	4	5	6	7	8	9	10	11
Under BDC (Package-I) :-										
1	Completion of 2nd stage coffer dam for Bichom	CUM	100%		100%	100%	100%	-	-	The construction of Stage-I river diversion works re-started w.e.f. 26-10-06 and the river has been diverted towards right bank, as the Pre-Cofferdam was washed out by flood water and overtopped the Cofferd Dam on 28-05-06 due to which the concreting fr
2	Completion of Excavation of Bichom Dam	CUM	290000	156100	133900	133900	107120	128681	120.13%	
3	Concreting of Bichom Dam	CUM	279320	3126	276194	131000	85600	176	0.21%	Targeted progress could not be achieved due to hold up of concreting work owing to the decision for lowering of the Spillway Crest level of Bichom Dam from EL 755.00 m to EL 735.00 m. The said decision was initially taken on 17-08-06 and the same was fina
4	Completion of various Adits of HRT(Under Package-I,II & III)	Rm	1100.18 (Rev= 1095.22)	903.15	197.03 (Rev = 192.07)	197.03 (Rev = 192.07)	197.03 (Rev = 192.07)	192.07	100%	
5	Boring of HRT (0.00 to 4.40 Km)	Rm	4400	32	4368	1500	1090	807.10	74.05%	Non-achievement of the target due to poor geology.
6	Completion of Excavation of Tenga Dam	CUM	30,000	500	29,500	29500	23500	0.00	-	As per the model studies report, the alignment of the dam axis was required to be changed because of assymetrical flow as observed in the model studies. However, Dam axis was finally firmed up after carrying out further investigation in the Up-
7	Concreting of Tenga Dam (At Blocks -2, 3 & 4)	CUM	12700	0	12,700	7100	5100	-	-	----- Do -----

SL.NO	ACTIVITY	UNIT	TOTAL ESTD. QTTY.	QTTY. COMPLETED BY 31-03-06	BALANCE QTTY.	TARGET FOR 2006-07	Target upto 3rd Qtr. (April' 06 to Dec' 06)	Achievement upto 3rd Qtr. (April' 06 to Dec' 06)	Milestone (%)	REMARKS
8	Boring of HRT (4.40 Km to 11.60 Km)	Rm	7150	8.90	7,141	1990	1500	728.70	48.58%	Poor geology rendered slow progress.
UNDER KPC (Package –III) :-										
9	Boring of HRT (11.60 Km to Surge shaft)	Rm	2924.56	0	2924.56	610	460	363.50	79.02%	Poor geology rendered slow progress.
10	Boring of Surge Shaft	Cum	43000.00	0	43000.00	23500	16000	5200	32.50%	Open excavation completed on 12-05-06. Boring started on 16-10-06 after completion of slope protection work.
11	Boring of Underground Pressure Shaft	Rm	* 2068.56			700	600	-	-	Due to review of HPT alignment from underground to partially underground & partially overground, the drawings could not be finalised during 2005-06 for which physical activity at site could not be started. The HPT profile has been finalised on 04-01-07 and
15	Fabrication of gates and hoists and their embedded parts	Lot	100%	(Achievement as on 31-03-06 reads 0.50 MT)	100%	20%	15%			The 1st stage embedded parts for 4 nos. of construction sluice gate have been fabricated and despatched to Bichom Dam site
Electro Mechanical Works (Package - V):-										
16	i) Erection of EOT Crane Ser	Lot	1	0	1	50%	10%	-	-	
	ii) Erection of D/Tube Liner in	Lot	1	0	1	50%	-	-	-	

NOTE : The targets shown for the year 2006-07 are inclusive of the shortfalls in achievements during the year 2005-06.

[Rs. Crs.]

[Sh. 1 of 5]

Sl. No.	Name of Scheme/Programme	Objective/Outcome			Outlay 2006-07			Quantifiable Deliverables/ Physical Outputs/Milestones	Projected Outcomes	Processes / Timelines	Cummulative Expenditure upto 12/06	Achievements w.r.t. Col (6) as on 31.12.2006	Remarks, Risk Factors
1	2	3(i)	3	3(iii)	4(i)	4	4(ii)	5	6	7	8	9	10
		Santioned cost (Rs. Crs.) /Estd. Cost	Cumulative Expenditure up to 12/05	Objective/Outcome	Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources						
A. Ongoing Projects													
1	Mejia TPS Extn. Unit # 4(1X210 MW), Actual COD: 13.2.2005	797.819	712.2736	Capacity addition of 210 MW with Actual COD: 13.2.2005		0.00					712.22	Under Commercial Operation since 13.02.2005.	
2	Mejia TPS Extn. Unit # 5 & 6 (2x250 MW), Scheduled COD: U-5: 12/1/2007, U-6:12/3/2007	2012.50	496.2734	Capacity addition of 500 MW with COD: U-5 (250 MW): 12/1/2007 & U-6(250 MW):12/3/2007		921.42		Unit-5: 1) Boiler Hydro Test (Drainable parts) 2) TG Box Up complete 3) Boiler Light up - Chemical cleaning 4) Oil Flushing complete Unit-6: 1) Boiler Hydro Test (Drainable parts) 2) TG Box Up complete 3) Boiler Light up - Chemical cleaning 4) Oil Flushing complete.	a) Synchronisation -by 11/06 b) Commercial Operation -by 12/1/07 a) Synchronisation -by 01/07 b) Commercial Operation -by 12/3/07 3) by 11/06 4) by 11/06	1) by 05/06 2) by 08/06 3) by 09/06 4) by 09/06 1) by 07/06 2) by 10/06 3) by 11/06 4) by 11/06	1291.68	Drum Lifting completed on 30.11.05. Hydro Test completed on 15.8.06. TG Box up completed on 9.12.06 Boiler lit-up done on 1.1.2007. Work under progress. Expected completed by Feb-07. Drum Lifting completed on 18.01.06. Hydro Test (drainable) completed on 10.11.06. TG Erection started on 8.10.06. Work under progress. However timely supply of materials by BHEL is required. Work under progress. BLU expected by 02/2007 Work under progress. Depends on completion of TG Box up activity.	Commissioning of Mejia U# 5&6 subject to execution of Civil/Erection works and Materials Supply for all work packages under EPC contract as per L1 schedule by M/s BHEL
3	Chandrapura TPS Extn. Unit # 7 & 8 (2x250 MW), Scheduled COD: U-7: 27/1/2007, U-8:27/3/2007	2066.45	403.753	Capacity addition of 500 MW with COD: U-7(250 MW): 27/1/2007 & U-8(250 MW):27/3/2007		925.38		Unit-7: 1) Boiler Hydro Test (Drainable parts) 3) TG Box Up complete 4) Boiler Light up - Chemical cleaning 5) Oil Flushing complete Unit-8: 1) Boiler Hydro Test (Drainable parts) 2) TG Box Up complete 3) Boiler Light up - Chemical cleaning 4) Oil Flushing complete Common for Unit-7&8: 1) Complete Chimney for Duct connection	a) Synchronisation -by 11/06 b) Commercial Operation -by 27/11/07 3) by 10/06 4) by 10/06 a) Synchronisation -by 01/07 b) Commercial Operation -by 27/3/07 3) by 12/06 4) by 12/06 1) by 09/06	1) by 07/06 2) by 09/06 3) by 10/06 4) by 10/06 1) by 09/06 2) by 11/06 3) by 12/06 4) by 12/06 1) by 09/06	994.21	Boiler Drum lifting achieved on 25.4.2006. Work under progress. Foundation/Erection work slowed down due to non-availability of materials & poor mobilisation of man & machinaries. Hydro test now expected in 02/07. Casting of deck slab completed on 1.7.06. Condenser erection started on 1.9.06. Work under progress. Foundation/Erection work slowed down Work under progress. However Boiler light-up depends on speed up work progress and availability of material in time Will be taken up on completion of TG Box up activity. Erection started on 31.1.06. Foundation work was very slow due to poor mobilisation of man & machineries. Drum lifting completed on 14.8.06. Hydro test depends on availability of materials in a sequential manner. Programme for Hydro test scheduled in 02/07. Deck slab casting completed on 20.12.06. Foundation/Erection work slowed down due to poor mobilisation of man & machinaries. TG Box up expected by 07/2007. Work under progress. BLU expected by 30.6.07 Will be taken up on completion of TG Box up activity. Expected completion by 07/2007. Fdn. completed. Shell concreting completed up to +215 M level. Work under progress but very slow.	Commissioning of Chandrapura U# 7&8 subject to execution of Civil/Erection works and Materials Supply for all work packages under EPC contract as per L1 schedule by M/s BHEL
4	Pollution: [1] Addl. ESPs at BTPS'B'	22.5147	19.5443	All 3 Addl. ESPs commissioned in 2004-05/2005-06.		0.40		1) Settlement of Final Bills		1) by 03/07	21.61	Under Process.	
	[2] Dry Ash Disposal System for BTPS'B' (3X210 MW)	25.00	0	Establishment of Dry ash Disposal system for U-1: 16 months, U-2: 18 months & U-3: 20 months from date of LOA		11.00		1) Completion of civil works U-1: 80%, U-2: 70%, U-3: 60%; 2) Completion of supply & erection of dry Ash sys. Plant & eqpt.U-1: (60%); U-2: 50%; U-3: 40%	a) Erection of Mech. Items -U-1: 12 months, U-2: 14 months & U-3: 16 months from date of LOA; b) No-Load Pre-commissioning check - U-1: 15 months, U-2: 17 months & U-3: 19 months from date of LOA c) Commissioning of Dry Ash System for U-1: 16 months, U-2: 18 months & U-3: 20 months from date of LOA	1) by 03/07; 2) by 03/07	0.00	Work under progress.	
	Sub Total Pollution : [1] + [2]	47.5147	19.5443			11.40					21.6081		
	Total Ongoing schemes	4924.28	1631.84			1858.20					3019.73		

Sl. No.	Name of Scheme/Programme	Objective/Outcome			Outlay 2006-07			Quantifiable Deliverables/ Physical Outputs/Milestones	[Rs. Crs.] Projected Outcomes	Annexure- 'A' Processes / Timelines	Cumulative Expenditure upto 12/06	Achievements w.r.t. Col (6) as on 31.12.2006	Remarks, Risk Factors
		3(i)	3(ii)	3(iii)	4(i)	4(ii)	4(iii)		6	7			
		Santioned cost (Rs. Crs.) /Estd. Cost	Cumulative Expenditure up to 12/05	Objective/Outcome	Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources						
B.	<u>New Projects/Schemes</u>												
	<u>DVC alone</u>												
1	Durgapur Steel TPS U # 1&2 (2x500 MW)	4425.74	0.03	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2:45 months from date of EPC contract award		10.00		Depositing of advance payment, if any against land acquisition subject to receipt of Cabinet approval from Govt. of WB		by 03/07	0.452	Cabinet Approved Land acquisition of 979.955 acres and same was intimated to DVC by Govt. of WB on dtd. 29.9.04. DVC Board accorded approval for expenditure of Rs. 25.68,38,461 towards acquisition of 979.955 acres of Rayail land with permission for release of Rs. 12,84,19,231 (i.e. 50% of estimated amount) as advance payment to Govt. of WB, subject to MOEF clearance for the project. MoEF clearance received on 27.11.06	Depends on receipt of MoE&F clearance for the project
2	Kodarma Stage-I:U # 1 & 2 (2x500 MW)	4425.74	0	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2:45 months from date of EPC contract award		10.00		Physical Receipt of Land (40%)	Award of EPC contract by 12/07(tentative)	by 03/07	24.7166	Govt. of Jharkhand is being pursued for receipt of land comprising total of 1855.29 acres [1848.17 acres in Kodarma Dist. and 7.12 acres in Hazaribagh] for which payment has already been made by DVC. Advance of Rs. 24.17 Crs. paid to GoJ to initiate land acquisition process.	Land receipt is dependent on Govt. of Jharkhand's cooperation/quick response. Also Water clearance from DVRRC yet to be received.
	<u>Through Joint Venture</u>												
3	Mailthor RB TPS:U # 1 & 2 (2x500 MW) [Equity contribution @26% from DVC to MPL, proposed Joint Venture of TPC & DVC], [Estd. project cost= Rs. 4425.74 Crs.]	345.2077	37.8106	a) COD of Unit # 1 (500 MW)- by Dec 2009 & b) COD Unit # 2 (500 MW) - by June 2010		1.00		1) To achieve about 10% progress of Project constn. work	Selection of EPC Contractor by Sept 2006 (tentative)	1] by 03/07	41.691	Main Plant specification by keeping the unit size open, as above, are done and NIT issued on July 14, 06 inviting bids for EPC contract. Due date of submission extended till 30.10.06 Bids opened on 30.10.06. BHEL—2x500 MW. Shanghai Electric Group Co. Ltd (3x 350MW)	
4	Bokaro Steel TPS U # 1&2 (2x250 MW) [Equity Contribution @50% from DVC to BPSCL, a Joint Venture of DVC & SAIL], [Estd. project cost= Rs. 2100 Crs.]	315.00	0	Capacity addition of 500 MW with COD : U-1: 31 months & U-2:33 months from date of EPC contract award		0.10		1) Equity contribution to BPSCL as per requirement of implementation of project 'Bokaro Steel TPS(2x250 MW)'	Award of EPC contract by 3/07(tentative)	1] by 03/07	0.242	BPSCL Board, in its meeting on 1.8.2005, approved Feasibility Report (FR) prepared by MECON. Final Financial Appraisal report has been submitted by M/s IFCL, New Delhi in June, 2006 after presentation in BPSCL Board in 37th meeting. BPSCL has placed W.O. to M/s Development Consultant Private Limited, Kolkata on 14.07.06 for EIA Study (Rapid & Comprehensive). Engagement of consultant by Jan-07.	Execution depends on availability of clear land in M/s SAIL's premises.
5	Panchet Hill TPS U#1&2 (2x500 MW)	4425.74	0	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2:45 months from date of EPC contract award		10.00		1) Physical Receipt of Land (10%)	a) Formation of joint Venture Company - by 9/07; b) Award of EPC contract - by 12/07(tentative)	by 03/07	0.3875	As the location of Project site selected earlier for Panchet Hill TPS would not meet Pollution norms, a new location at Raghunathpur, Dist. Purulia was identified. DVC Board on 9.6.06 accorded approval for execution of Raghunathpur TPS Stage-I: 2 X (500 / 500+20% /660 MW) by DVC under revised capacity addition programme in 11th Plan. Order placed on M/s. DCPL on 31.10.06 for preparation of DPR & finalisation of EPC contract.	Land receipt is dependent on Govt. of West Bengal's cooperation/quick response
6	Ramgarh Stage-I:U # 1 & 2 (2X500 MW)	4425.74	0	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2:45 months from date of EPC contract award		0.50		1) Notice inviting "Expression of Interest" from Joint Venture partners	a) Formation of Joint Venture Company - by 9/07; b) Award of EPC contract - by 3/08(tentative)	by 03/07	0.1227	"Expression of Interest" from prospective Companies for participation in Joint Venture has been received. However now it has been decided to implement the project in 12th five year plan.	Execution of project depends on formation of Joint Venture company.
7	Mailthor LB TPS Stage-I:U # 1 & 2 (2x500 MW)	4425.74	0	Capacity addition of 1000 MW with COD : U-1: 39 months & U-2:45 months from date of EPC contract award		0.10		1) To approach Govt. of WB for Cabinet approval for Land acquisition		by 03/07	0.4250	The project was decided to implemented in 12th five year plan.	Execution of project depends on early availability of land from Govt. of WB.
8	Investigation / Feas. Studies / DPR etc.	6.343	2.2399	To complete Balance scope of work, if any and settlement of final Bills with the Consultants (M/s.MECON, M/s.DESEIN)		1.13		To complete Balance scope of work, if any and settlement of final Bills with the Consultants (M/s.MECON, M/s.DESEIN)		by 03/07	2.1329	Work under progress.	
	Total New Schemes	22795.25	40.0805			32.83					3089.90		

									[Rs. Crs.]	Annexure- 'A'				[Sh. 3 of 5]
Sl. No.	Name of Scheme/Programme	Objective/Outcome			Outlay 2006-07			Quantifiable Deliverables/ Physical Outputs/Milestones	Projected Outcomes	Processes / Timelines	Cummulative Expenditure upto 12/06	Achievements w.r.t. Col (6) as on 31.12.2006	Remarks, Risk Factors	
1	2		3			4		5	6	7			8	
		3(i)	3(ii)	3(iii)	4(i)	4(ii)	4(iii)							
		Santioned cost (Rs. Crs.) /Estd. Cost	Cumulative Expenditure up to 12/05	Objective/Outcome	Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources							
C.	T & D schemes													
	T & D													
1	220 KV Lines			Commissioning within the scheduled time frame		13.41		Erection, Commissioning of the lines	Survey, Arranging approval of Authority, Finalisation of contracts	Within the financial year of 2006-07		* 2 nos. bays at BTPS for BTPS- Ramgarh line commissioned on 11/06. MTPS-DGP 220 KV Line 30% Stub setting completed . Bay extension at DGP awaits commissioning. BTPS- Ramgarh line commissioned on 09/06. CEA clearance awaited for KODERMA R/S. Delay in receiving CEA clearance for Koderma R/S	Linked with arranging land for the terminating S/S. Arranging approval of	
2	132 KV Lines			Commissioning within the scheduled time frame		2.99		Erection, Commissioning of the lines	Survey, Arranging approval of Authority, Finalisation of contracts	- do -		Patherdih-Govindipur stub setting done at 35 locs. LILO of CTPS-Meja line at KLN : Under tendering stage. LoA placed for MTPS-Gola line.	concerned Authority and ROW are the key factors.	
3	33 KV Lines			Commissioning within the scheduled time frame		8.94		Erection, Commissioning of the lines	Survey, Arranging approval of Authority, Finalisation of contracts	- do -		Construction completed for pending applications of consumers. Balance work in progress.	Arranging ROW in time is important.	
4	220 KV Sub-stations			Commissioning within the scheduled time frame		20.15		Erection, Commissioning of the S/S	Arranging land & Finalisation of contracts	- do -		* Burnpur S/S commissioned by 05/06. Barjora S/S commissioned on 01/06. Dhanbad s/s under tendering stage & land acqn. in process for others. Delay due to delay in land acqn. Belmudi s/s awaits commissioning. Commissioning expected by 3/07.	To make available the S/S land in time is all important for the purpose.	
5	132 KV Sub-stations			Commissioning within the scheduled time frame		29.98		Erection, Commissioning of the S/S	Arranging land & Finalisation of contracts	- do -		LOA placed on 03/06 for 132 kv Jamuria S/S. Application for revised land made to Govt. of WB for Poradih. Delay in land acqn. for Poradih		
6	33 KV Receiving Sub-stations			Commissioning within the scheduled time frame		0.88		Erection, Commissioning of the S/S	Arranging land & Finalisation of contracts	- do -		CEA clearance awaited for KODERMA R/S. Delay in receiving CEA clearance for Koderma R/S		
7	Surveys, Land acquisition, Forest clearance etc.			Arranging possession / clearance		9.00		Acquiring of land / Arranging clearance	Preparation of proposals	- do -		Discussion with local authorities are under progress. Clearance for ROW awaited.	To arrange requisite land and approval of the concerned authority.	
	Total T & D	717.0519				85.35								
	R&A of T&D											Physical progress achieved, considerably.		
8	R&A activities	110.404		Commissioning within the scheduled time frame		58.43		Changing of Eqpts. / Reconductoring	Finalisation of contracts	- do -				
	Total T& D & R&A schemes	827.4559	204.7825			143.78					414.93			

Sl. No.	Name of Scheme/Programme	Objective/Outcome			Outlay 2006-07			Quantifiable Deliverables/ Physical Outputs//Milestones	[Rs. Crs.] Projected Outcomes	Annexure- 'A' Processes / Timelines	Cumulative Expenditure upto 12/06	Achievements w.r.t. Col (6) as on 31.12.2006	Remarks, Risk Factors
		3(i)	3(ii)	3(iii)	4(i)	4(ii)	4(iii)		6	7			
		Santioned cost (Rs. Crs.) /Estd. Cost	Cumulative Expenditure up to	Objective/Outcome	Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary						
D.	Communication schemes												
1	Power Line Carrier Communication (PLCC)	2.4453		Establishment of Communication between Mejia TPS & Durgapur 220 KV and between existing CTPS 220 KV (CTPS A) & new CTPS 220 KV (CTPS B) (03/2007).		1.09		1) Obtaining operating freq. clearance, 2] Procurement of material, 3] Erection.	a) Testing & pre-commissioning (by 02/2007). b) Commissioning (by 03/2007).	1] 09/2006, 2] 12/2006, 3] 02/2007		1] Frequency clearance obtained for only one channel of twin channel equipment. 2] Purchase order placed for Procurement of material 3] Erection not done	Establishment of connectivity dependent on progress of corresponding T&D works.
2	Very High Frequency (VHF) Communication	0.0467		Establishment of Communication in upcoming sub-stations (03/2007).		0.01		1] SACFA clearance from W.A. 2] Procurement of material	a) Testing & pre-commissioning (by 02/2007) b) Commissioning (by 03/2007).	1] 09/2006 2] 03/2007		1] SACFA clearance not obtained; request letter for SACFA clearance forwarded to Wireless Adviser in Nov. 2006 2] Not procured.	-do-
3	Satellite Communication (VSAT)	7.4774		Establishment of satellite Communication in additional stations (03/2007).		0.45		1] Placement of W.O.	a) Testing & pre-commissioning (by 02/2007) b) Commissioning (by 03/2007).	1] 12/2006		Wok Order not placed	-do-
4	Unified Load Despatch & Communication (ULDC) Schemes	109.0737		Speech and data integration among constituents of Eastern Region (01/2007)		14.84		1] Integration of non-critical stations 2] Integration of Barjora, Durgapur 220 KV, Mejia TPS U#5& 6, 3] Development of area around Microwave Tower and shelter at Bokaro TPS, Kalipahari.	a) Installation of RTUs at non-critical stations (09/2006) b) CT/ PT connection for non-critical stations (by 12/2006), c) Procurement of RTU/ SICs for Barjora, Durgapur 220 KV, Mejia TPS U# 5& 6 (09/2006), d) CT/ PT connections for Barjora, Durgapur 220 KV, Mejia TPS U# 5& 6 (12/2006), e) Placement of W.O. for Development of area around	1] 06/2006, 2] 03/2007, 3] 08/2006		1] 5(five) non-critical stations Integrated 2] Not integrated 3] Work under progress	Integration of Critical stations to be completed by 03/2006
5	Carrier Replacement	1.7422		Replacement of outdated equipment for Kharagpur - Kolaghat, Kharagpur – Mosaboni section (03/2007)		1.54		1] Procurement of material	a) Testing & pre-commissioning (02/ 2007).	1] 12/2006		Purchase order placed. Scheduled time of delivery March 2007	-----
Total Commn. Schemes		120.7853	3.9114			17.94					10.17		

Sl. No.	Name of Scheme/Programme	Objective/Outcome			Outlay 2006-07			Quantifiable Deliverables/ Physical Outputs/Milestones	Projected Outcomes	Processes / Timelines	Cumulative Expenditure upto 12/06	Achievements w.r.t. Col (6) as on 31.12.2006	Remarks, Risk Factors
		3(i)	3(ii)	3(iii)	4(i)	4(ii)	4(iii)						
		Santioned cost (Rs. Crs.) /Estd. Cost	Cumulative Expenditure up to 12/05	Objective/Outcome	Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources						
E. R&M Schemes													
1	Durgapur TPS, U-3: Comprehensive R&M / LE	177.2242		Restoration of original cap. (MW) and improved Performance (PLF 70%)		96.00		1) Consultancy Services for R & M, 2) Material Receipt for R&M work – 80 %, 3) R&M Work Execution –35 %	1) Completion of R&M work-2/08	By 1) 3/07, 2) 3/07, 3) 3/07		Techno Commercial offer opened. The lone bidder L&T did not agree for certain guarantees.	Work schedule depends upon (1) Final bid (Techno-comm) evaluation by NTPC and Opening of Price bid.
2	Bokaro 'A' TPS, U-1,2&3: including installation of new ESP	217.1240		Restoration of original cap.(MW) and improved Performance (PLF 70%)		18.00		1) Design & Engineering for ESP Package, 2) Execution of RLA/Refurbishment, 3) Performance evaluation test and submission of RLA report of U #1 &3, 4) Material procurement for ESP Package, 5) Consultancy services for RLA/R&M/LE - 30%, 6)ESP Package –Work Execution – 45%	1) Comm. Of ESP-4/08, 2) Completion of R&R/RLA/PET-12/06, 3) Completion of R&M work-12/08	1) 5/06, 2) 8/06, 3)10/06, 4)2/07, 5) 3/07, 6) 3/07		Re tendering of ESP Package done.	Work schedule depends upon (1) Opening of techno commercial bid and its evaluation by NTPC (2) Opening of Price bid.
3	Chandrapura TPS, U-1 to 6 Comprehensive R&M/LE	960.6722		Restoration of original capacity (MW) and improved Performance (PLF 70%)		115.00		1) Placement of order for R&M of Unit 1,2&3, 2)Execution of RLA of 2nd unit (U-1 or U-3), 3) Performance evaluation test and submission of RLA report of Unit 1&3, 4) Design and Engg. for R&M of Unit 1,2&3, 5) Material procurement for R&M of U# 1,2&3-95%	1) Completion of R&M of U#1-6/08, 2) Completion of R&M of U#2-5/09, 3) Completion of R&M of U#3-4/10	By 1) 4/06, 2)5/06, 3)7/06, 4)7/06, 5)3/07		Techno Commercial offer opened. Deviations could not be settled.	Work schedule depends upon (1) Opening of techno commercial bid and its evaluation by NTPC (2) Opening of Price bid.
4	Maithon HEP, U-1,2 &3 : RM &U/LE	91.1390		Achieving up-rated capacity (MW)		5.80		1) Unit– 1& 3:- Placement of order for RLA Study subject to satisfactory performance of Unit no.# 2, 2) Unit no.# 2 –Settlement of final claim.	Rectification & PG Test – 6/06	By1) 3/07, 2) 3/07		R&M on piecemeal basis to be taken up.	Final rectification work is in progress to solve the sound problem and to achieve the up rated load.
5	Panchet HEP, U-1 : RM &U/LE	44.9600		Achieving up-rated capacity (MW)		4.60		1) Submission of RLA report, 2) Placement of LOI for R&M Work, 3) R&M Consultancy (partly), 4) R&M work execution – 10%	1) RLA Work – 3/06R&M LOA by 5/07 R&M Work by 5/08	1) 4/06, 2)10/06, 3)3/07, 4)3/07		RLA Study completed in 3/06.DPR preparation in progress.	Work schedule depends on submission of RLA report
6	Others	95.9084		Improved Performance		0.56		1) Completion of balance 9th Plan Activity & Closing of 9th Plan Contract	----	1) 3/07		Activities almost completed.	---
Total R & M schemes		1587.03	139.097			239.96					148.84		
F.	Equity Contribution to BPSCL	5.0000	0			5.00		Equity contribution to BPSCL as per requirement of Renovation works of existing Power Plant at Bokaro Steel city		by 03/07	0.00	Equity amount will be paid to BPSCL as per requirement.	
G.	Misc. Spill Over Works [Mejia TPS (3X210 MW)]	6.6265	0	Completion of balance Residual works & settlement of final Bills.		4.98		Completion of balance Residual works & settlement of final Bills.		by 03/07	0.39	Balance works under progress	
Grand Total in Rs. Crs. :		30266.4	2019.716			2302.7					3664.243		

[Rs. Crs.]

Annexure- 'A'

[Sh. 5 of 5]

Tehri Hydro Development Corporation Limited
Outcome Budget 2006-07(Achievement till Dec. 06)

Sl. No.	Name of Schemes/Program/ Project	Objective / Outcome		Outlay 2006-07 (in Rs. crore)			Quantifiable Deliverables/ Physical outputs	Processes/ Timelines	Remarks/ Risk Factor	Status/ Progress
		Sanctioned cost	Expenditure upto 12/06	Non-Plan Budget	Plan Budget	Complementary Extra-Budgetary Resources				
1	2	3(i)	3(ii)	4(i)	4(ii)	4(iii)	5	6	7	8
1.	Tehri Dam & HPP (1000 MW)	Rs. 6621.32 crs. at 3/03 PL	Rs. 7955.55 crs.	-	0.00	244.84	Completion LBSS T-1 & T-2	Dec.'06	-	Completed
2.	Koteshwar HEP (400 MW)	Rs. 1301.56 crs. at 10/99 PL	Rs. 431.64 crs.	-	0.00	370.83	i) Excavation Vertical Penstocks ii) Excavation in Dam iii) PH concreting upto EL570m iv) Excavation Tailrace channel v) Dam & spillway concrete upto EL550.5m	April'06 April'06 Jan.'07 Feb.'07 Feb.'07	- - - -	Completed Completed - - -

3.	Vishnugad Pipalkoti (444MW)	Rs. 2091.43 crs. at March'06 as per TEC.	Rs. 10.80 crs.	-	5.00	62.50	St.-II development works & Award of Major package	Nov.'06	Investment approval of the Project	TEC accorded by CEA in Sept.'06. Material for PIB submitted to Ministry. Project funding is under consideration by World Bank. NIT for major package being issued after clearance of PQ Criteria/ documents by World Bank. Award is expected by March'08.
4.	Tehri PSP (1000MW)	Rs. 1657.60 crs. at Dec.'05 PL	168.84	-	Included in New Projects	Included in New Projects	Award of Major package for Tehri PSP	Nov.'06	-	Consultancy under ICB awarded in Jan.'07. Consultant shall prepare bid documents for EPC Package and award is expected by Nov.'07

5.	New Projects i) Karmoli (140MW) ii) Gohana Tal (60MW) iii) Jadhganga (50MW) iv) Maleri Jhelam (55MW) v) Jhelam Tamak (60 MW) vi) Bokang Bailing (330MW)	- - - - - -	} Rs. 2.03 crs.	-	5.00	100.00	Preparation of feasibility reports for (i) to (v)	Dec.'06	(\$)	Work is in progress on Jhelam Tamak and Maleri Jhelam Projects. Site is inaccessible due to snow bound area. Submission of FR of Jhelam Tamak and Maleri Jhelam Projects. is now scheduled for March'07 and June'07 respectively.
	Total				10.00	778.17				

Note : Col. 4(iii) indicates IEBR including GOUP share as per approved Annual Plan outlay.

(\$) MOEF stage-I clearance not accorded for Bokang Bailing Project as the proposed project site is coming in Askot Musk Deer Sanctuary. Also, It has been intimated by Forest Deptt. in Aug.'06, GOUA that Project sites of Karmoli (140 MW) & Jadhganga (50 MW) comes under “ Gangotri National Park”. To carry out any Survey & Investigation on these three Project sites, permission of Hon'ble Supreme Court would be required. Regarding Gohana Tal, GOUA has allotted three small projects to private developers in the reach of Project. Matter has been taken up with GOUA and CEA for optimal utilization of available potential.

Chapter-V

Financial Review

Overall Picture of Ministry of Power with reference to 10th Plan projection

Planning Commission assessed an outlay of Rs.143399 crores during the 10th Plan period for the Central Sector under the Ministry of Power comprising of Rs.1,18,399 crores of Internal and Extra Budgetary Resources (IEBR) to be raised by the CPSUs themselves and Rs.25,000 crores of Gross Budgetary Support (GBS). Out of the above amount, an amount of Rs.140070 crores was by way of capital investment through various CPSUs and Rs.3329 crores of revenue expenditure for different schemes and programmes to be implemented either through CPSUs of the Ministry of Power or the autonomous bodies like NPTI/CPRI or the CEA. The activity and Corporation-wise break-up of the amount is as under:-

10th Plan Estimates (2002-2007)

(Rs. in crores)				
S.N.	Activity/ organization	IEBR	GBS	Total
A.	Investment in PSUs			
1.	N.T.P.C.	58680.00	3000.00	61680.00
2.	N.H.P.C.	18026.00	14200.00	32226.00
3.	POWERGRID	20370.00	1150.00	21520.00
4.	D.V.C.	13509.50	10.00	13519.50
5.	T.H.D.C.	3046.50	600.00	3646.50
6.	N.J.P.C.	2554.00	700.00	3254.00
7.	NEEPCO	2213.00	2011.00	4224.00
	Total (A)	118399.00	21671.00	140070.00
B.	MOP Schemes			
1.	AG&SP	0.00	1500.00	1500.00
2.	Rural Electrification Scheme	0.00	1477.00	1477.00
3.	N.P.T.I. (Training & HR)	0.00	75.00	75.00
4.	C.P.R.I. (Research & Testing)	0.00	90.00	90.00
5.	Programme & Infrastr-cture improvement of CEA	0.00	130.00	187.00
6.	Other MOP Schemes	0.00	57.00	57.00
	Total (B)	118399.00	3329.00	3329.00
	Total	118399.00	25000.00	143399.00

During the mid term review, Ministry of Power assessed the requirement to Rs.110069.59 crores. The assessed outlay of Rs.110069.59 crores is allocated over different segments and programmes as follows: -

Mid Term Assessment by Ministry of Power

(Rs. In crores)				
S.N.	Activity/ organization	IEBR	GBS	Total Plan outlay
A.	Investment in PSUs			
1.	NTPC	40537.33	0.00	40537.33
2.	NHPC	9462.30	10645.02	20107.32
3.	PGCIL	20182.28	838.00	21020.28
4.	DVC	8364.16	0.00	8364.16
5.	THDC	2652.74	769.22	3421.96
6.	SJVN	2016.10	0.00	2016.10
7.	NEEPCO	2033.00	1421.60	3454.60
	Total (A)	85247.91	13673.84	98921.75
B.	MOP Schemes			
1.	AG&SP	0.00	3902.00	3902.00
2.	Rural Electrification Scheme	0.00	6300.00	6300.00
3.	N.P.T.I. (Training & HR)	0.00	75.00	75.00
4.	C.P.R.I.(Research & Testing)	0.00	90.00	90.00
5.	Programme & Infrastructure improvement of CEA	0.00	483.84	483.84
6.	Other MOP Schemes	0.00	397.00	397.00
	Total (B)	0.00	11147.84	11147.84
	Total	85247.91	24821.60	110069.59

However Planning commission has assessed the requirement at Rs. 92941 crores.

The total outlay performance for the 10th plan period (including RE 2006-07) has been Rs.74478.38 crores. An amount of Rs.33153.26 crores is the approved outlay by the Planning Commission for the year 2007-08. The details are as given hereunder: -

Annual Plan 2007-08

(Rs. in crores)

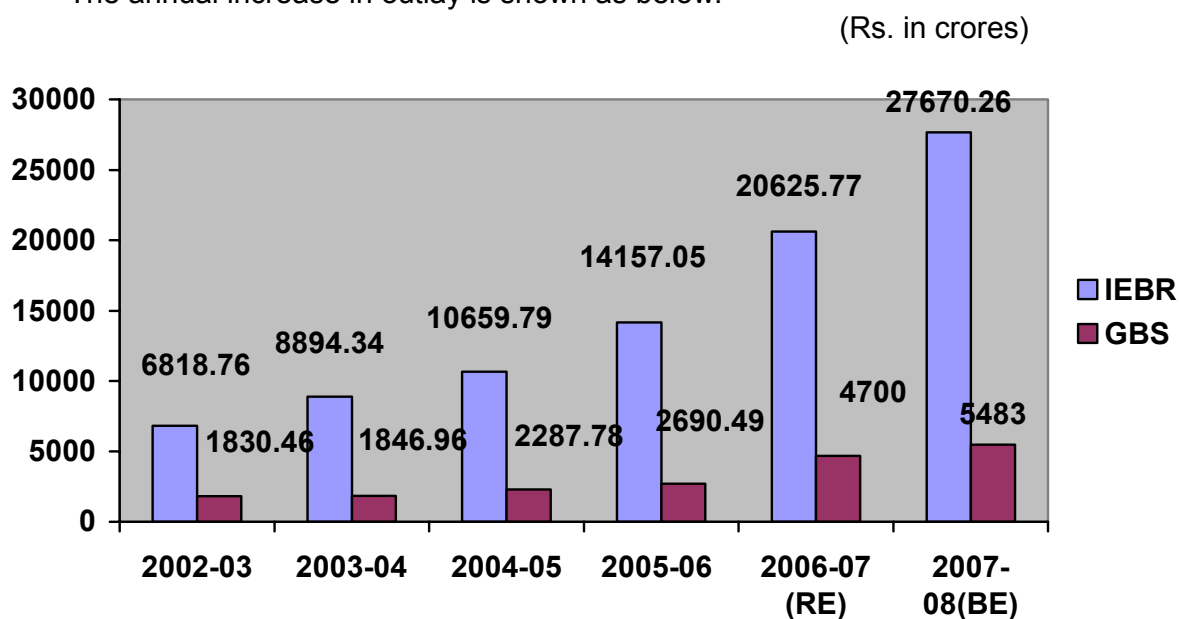
		INTERNAL & EXTRA BUDGETARY RESOURCES (IEBR)						
SL. NO.	ORGANISATION / SCHEMES	INTERNAL RESOURCES	BONDS/DEBENTURES	ECB/ SUPPLIER CREDIT	OTHERS	TOTAL (IEBR)	GBS	TOTAL PLAN OUTLAY
1	2	3	4	5	6	7	8	9
A. CENTRAL PLAN								
1.	N.T.P.C.	4998.00	5279.00	2515.00	0.00	12792.00	0.00	12792.00
2.	N.H.P.C.	740.99	1730.61	29.35	0.00	2500.95	1.00	2501.95
3.	POWERGRID	1104.00	3802.00	1594.00	0.00	6500.00	0.00	6500.00
4.	D.V.C.	1733.14	500.00	0.00	2038.24	4271.38	0.00	4271.38
5.	T.H.D.C.	6.34	0.00	0.00	404.56	410.90	10.00	420.90
6.	S.J.V.N.	220.07	0.00	0.00	422.73	642.80	0.00	642.80
7.	NEEPCO	11.35	0.00	2.35	538.53	552.23	706.47	1258.70
8.	MOP(OTHER)	0.00	0.00	0.00	0.00	0.00	4765.53	4765.53
	A.TOTAL CENTRAL PLAN	8813.89	11311.61	4140.70	3404.06	27670.26	5483.00	33153.26
B. MOP SCHEMES								
Rural Electrification Scheme		0.00	0.00	0.00	0.00	0.00	3983.00	3983.00
N.P.T.I. (Training & HR)		0.00	0.00	0.00	0.00	0.00	28.13	28.13
C.P.R.I. (Research & Testing)		0.00	0.00	0.00	0.00	0.00	67.81	67.81
Programme & Infrastructure improvement of CEA		0.00	0.00	0.00	0.00	0.00	78.65	78.65
Consultancy charges for APDRP Projects		0.00	0.00	0.00	0.00	0.00	217.50	217.50
Scheme for Equity Gap Funding		0.00	0.00	0.00	0.00	0.00	289.49	289.49
Bureau of Energy Efficiency		0.00	0.00	0.00	0.00	0.00	69.40	69.40
Other MOP Schemes		0.00	0.00	0.00	0.00	0.00	31.55	31.55
Total -B		0.00	0.00	0.00	0.00	0.00	4765.53	4765.53
GRAND TOTAL		8813.89	11311.61	4140.70	3404.06	27670.26	5483.00	33153.26

A comparative picture of the outlay in different years of the 10th Plan period and in the first year of the 11th Plan i.e. 2007-08 is as under: -

(Rs. in crores)

	2002-03	2003-04	2004-05	2005-06	2006-07 (RE)	2007-08 (BE)
IEBR	6818.76	8894.34	10659.79	14157.05	20625.77	27670.26
GBS	1830.46	1846.96	2287.78	2690.49	4700.00	5483.00
Total	8649.22	10741.30	12947.57	16847.54	25325.77	33153.26

The annual increase in outlay is shown as below:-



Actual implementation of programmes in monetary terms with reference to what was originally budgeted and assessed at the time of revised estimates are given hereunder.

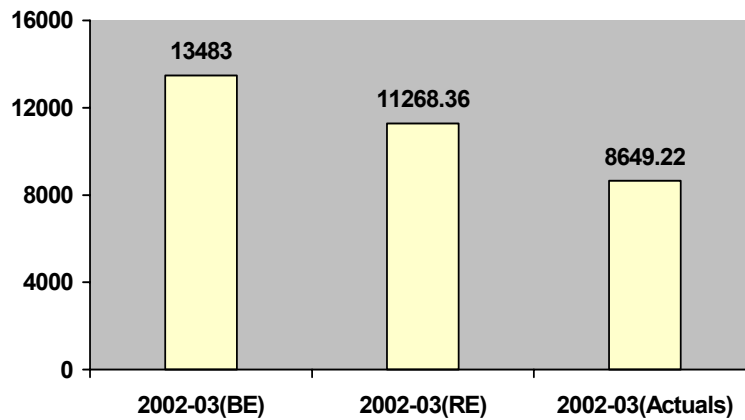
						(Rs. in Crores)		
S No	Schemes/Organisation		2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
A	Investment in PSUs							
1	NTPC	BE	3506.00	4501.00	4755.00	8550.00	11325.00	12792.00
		RE	2712.00	4515.00	4772.00	8553.00	9444.00	
		ACTUALS	2945.26	4549.85	5297.05	7187.92		
2	NHPC	BE	2925.89	3269.72	2849.86	3791.96	3183.64	2501.95
		RE	2600.93	2505.00	2653.28	2523.81	2482.68	
		ACTUALS	1830.74	2087.11	2424.34	2040.54		
3	POWERGRID	BE	3312.00	2670.00	3738.00	4787.63	4849.00	6500.00
		RE	2577.00	2265.00	3413.79	4010.74	5547.00	
		ACTUALS	2561.20	2301.08	3216.18	4110.93		
4	DVC	BE	840.66	1450.00	999.70	2373.51	2302.69	4271.38
		RE	973.55	599.26	1087.71	1013.07	2587.93	
		ACTUALS	146.02	316.51	626.46	9976.93		
5	THDC	BE	1139.80	924.29	1248.76	656.29	788.17	420.90
		RE	1018.17	978.38	709.05	1281.21	780.27	
		ACTUALS	339.68	560.05	436.22	823.18		
6	SJVN	BE	653.00	758.05	592.00	407.70	290.51	642.80
		RE	448.89	636.00	459.76	-27.51	516.62	
		ACTUALS	10.06	504.00	84.65	45.72		
7	NEEPCO	BE	375.76	414.49	482.00	996.79	1181.13	1258.70
		RE	178.92	173.19	240.00	323.49	327.15	
		ACTUALS	71.77	61.17	166.53	206.00		
	Total-A	BE	12753.11	13987.55	14665.32	21563.88	23920.14	28387.73
		RE	10509.46	11671.83	13335.59	17677.81	21685.65	
		ACTUALS	7904.73	10379.77	12251.43	24391.22		

B	MOP Schemes							
1	AG &SP	BE	300.00	300.00	300.00	300.00	598.00	0.00
		RE	300.00	200.00	250.00	300.00	498.00	
		ACTUALS	259.69	191.91	250.00	300.00		
2	Rural Electrification schemes	BE	263.87	200.00	500.00	1100.00	3000.00	3983.00
		RE	218.87	120.00	400.00	1100.00	3000.00	
		ACTUALS	257.87	100.00	400.00	1100.00		
3	N.P.T.I. (Training & HR)	BE	13.28	24.60	10.00	9.68	11.00	28.13
		RE	13.28	5.00	10.00	3.70	8.56	
		ACTUALS	9.22	5.09	9.37	3.70		
4	C.P.R.I. (Research & Testing)	BE	18.00	25.00	10.00	12.13	33.02	67.81
		RE	18.00	5.00	10.00	12.13	33.02	
		ACTUALS	17.91	1.48	8.94	12.13		
5	Programme & Infrastr-cture improvement of CEA	BE	40.24	29.46	108.99	5.00	18.13	78.65
		RE	21.63	10.51	26.61	11.24	15.24	
		ACTUALS	14.65	11.25	19.55	10.08		
6	Other MOP Schemes	BE	93.50	101.00	37.01	23.21	43.41	607.94
		RE	187.12	25.43	8.86	35.23	85.30	
		ACTUALS	185.15	51.30	8.28	30.41		
	Total-B	BE	728.89	680.06	966.00	1450.02	3703.56	4765.53
		RE	758.90	365.94	705.47	1462.30	3640.12	
		ACTUALS	744.49	361.03	696.14	1456.32		

Bar Charts given below are showing the comparative financial performance in the different years of the 10th plan period and BE 2007-08.

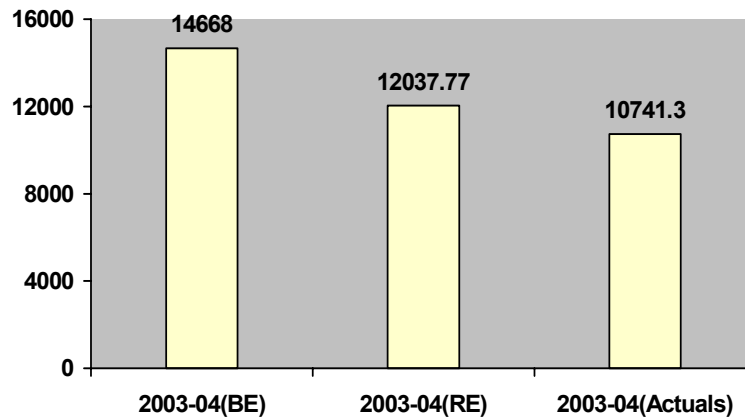
Outlay Status of Financial Year 02-03

(Rs. in crores)



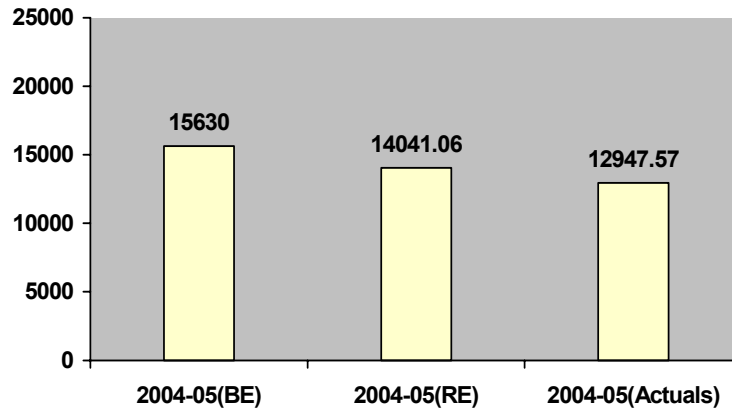
Outlay Status of Financial Year 03-04

(Rs. in crores)



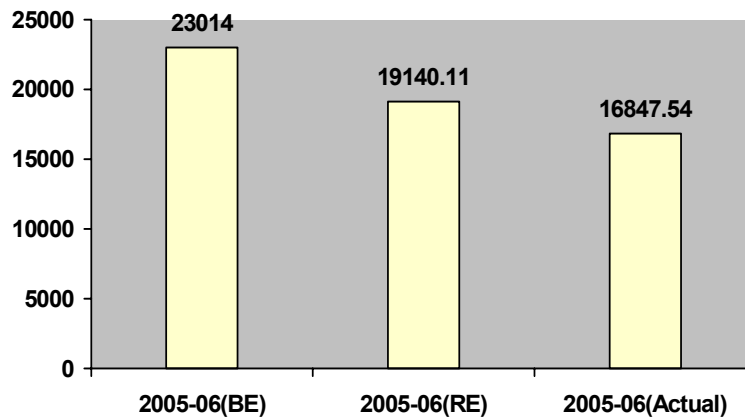
Position of Financial Year 04-05

(Rs. in crores)

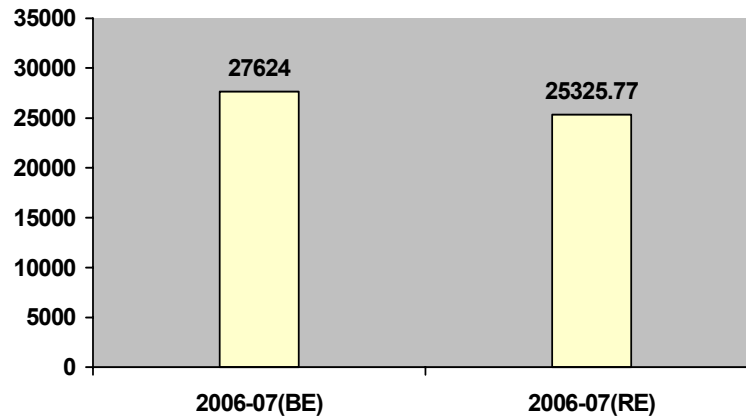


Outlay status of Financial Year 05-06

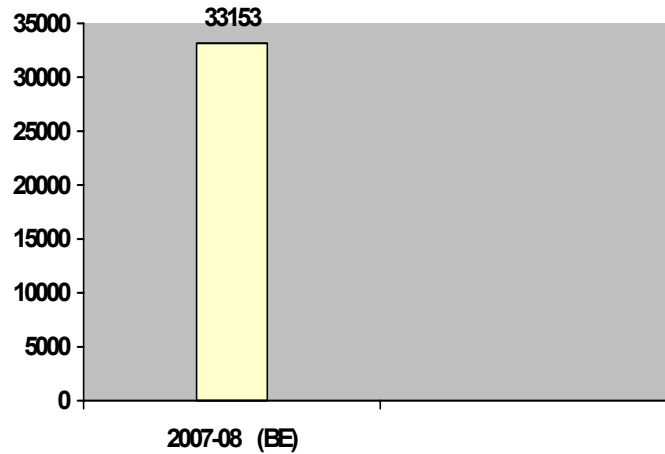
(Rs. in crores)



Outlay Position for Financial Year 06-07
(Rs. in crores)



Outlay Position for Financial Year 07-08
(Rs. in crores)



Utilization Certificate

As on 31.03.2006, no utilization certificate is pending.

Chapter-VI

Review of performance of Statutory and Autonomous bodies Under the administrative control of the Ministry of Power

Ministry of Power has the following two autonomous bodies and four statutory bodies:

Autonomous Bodies:

- a) Central Power Research Institute (CPRI)
- b) National Power Training Institute (NPTI)

Statutory Bodies:

Non-Commercial

- a) Administrative Tribunal for Electricity (ATE)
- 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)

DVC being Central Sector power-generating organizations has already been covered under previous Chapters.

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

1 Central Power Research Institute

CPRI was one of the first major electrical laboratories to achieve the distinction of accreditation as per IEC/ISO 17025 more than a decade back. All the laboratories of CPRI at Bangalore, Bhopal, and Hyderabad are accredited as per this quality standard. ISO 9001 obtained in 2006-07 for Research & Consultancy services is aimed to improve CPRI's work performance. CPRI in 2006-07 became the second laboratory in Asia to become a full member of the Short Circuit Liaison.

1.1 New Test facilities

- An X-ray Diffraction facility, model 'X Pert Pro' has been installed at the Materials Technology Division of CPRI. This sophisticated facility is useful for structural phase analysis of materials (both qualitative and quantitative). The nature of materials, which can be evaluated, could be Ceramics, Insulators, Refractories, Composites, thin films and coatings, in addition to materials and minerals. This facility compliments the SEMEDX facility available in the Division.
- Testing facility to test up to 1 MVA capacitor as per IEC 143 & IEC 60871 was created at Bangalore Unit.

Chapter – VI: Review of Statutory And Autonomous Bodies

1.2 Special tests

- 800kV Circuit Breaker of Areva T&D India Ltd., Chennai was tested for the first time in India for combined Power Frequency and Impulse Test at UHV Laboratory of CPRI at Hyderabad.
- Carried out Endurance test on full size capacitor of rating 500 KVAR for the first time in India as per IEC 60871, Part-II-199 for M/s. ABB Ltd.
- 220 kV Multi-circuit tower was tested for PGCIL successfully.
- UHV Research Laboratory, Hyderabad successfully completed tests on 800 kV string insulators.
- Environmental tests on power supply outdoor module and battery cabinet of M/s. ZTE Telecom Pvt. Ltd., Mumbai for the first time in Diagnostic Cables & Capacitors Division of the Institute.
- Ageing tests on Power Capacitors of rating 500 KVAR, 8.4kV for 1000 hours was conducted for the first time in the Institute, for M/s. ABB, Bangalore.
- Environmental conditioning tests were conducted on tail rotor blade, fluid stick damper, snubber bearing of all indigenously developed Advanced Light Helicopter (ALH) in the new Capacitor Research Laboratory. This cyclic and temperature humidity cycles were conducted for the first time in the Institute for HAL, Bangalore.

1.3 Design & investigation:

- Design checking of 220/110kV M/C, Type'MB/MC' tower for M/s. Reliance Energy, Mumbai.
- Investigation of Tamper device & Effect of Tamper device on Electronic Energy Meters for M/s. Bihar State Electricity Board, Patna.
- Design checking/analysis of 100m ground mounted microwave tower to M/s. IMI Softwares, Hyderabad.
- Design checking/analysis of 220V D/C, DA, DC, DD, DDS, DD (New), DC (New) type towers (6 towers) for M/s. Reliance Energy, Mumbai.

1.4 Special Consultancy rendered:

- A team of engineers from CPRI conducted Training Programmes for Quality Inspectors of M/s. Tenaga National Berhad ® (TNBR), Kuala Lumpur, Malaysia on “QA Process Procedures & Methods” & to distribution engineers on “Metering equipments”
- Thirty six Quality Assurance Inspectors of M/s. Tenaga National Berhad, Kuala-Lumpur, Malaysia were trained on Power Distribution Transformers, Circuit Breakers and switches (air insulated), Power Cable and accessories, Gas insulated switchgear (GIS), Surge arrestor and insulators and High Voltage and High Power laboratories.
- The institute has bagged a **prestigious Consultancy Contract for “Upgradation of power system network at Rourkela Steel Plant”** from Rourkela Steel Plant, Rourkela for an amount of Rs. 70 lakhs. Work on the project is in progress.

Chapter – VI: Review of Statutory And Autonomous Bodies

- Testing of MCB's, DB's and CT's for Middle East Electric Meter Factory, Saudi Arabia and Testing of DB's and panels for Farah Trading Co, Jordan were taken up for certification, under ASTA Certification Scheme.
- CPRI executed the prestigious overseas order from M/s. Sharq Sohar Steel Rolling Mills LLC of Sultanate of Oman to carry out studies for sizing of Static VAR Compensator (SVC) and Filter design for their proposed Electric Arc Furnace (EAF) installation.
- CPRI investigated the problem of islanding scheme and Relay Coordination for Neelachal Ispat Nigam Ltd.(NINL). NINL is an integrated steel plant along with a 38 MW combine cycle cogeneration captive power plant (present generation of 2 x 19.2MW).

1.5 Research Activities

- The Institute continued its strides in the area of research: Five research projects amounting to Rs. 174 lakhs were commenced during 2006-07 along with 23 ongoing projects commenced during previous years.

1.6 Dissemination of Information

- The Institute has organised sixteen Seminars/ Conferences/Workshops till date in 2006-07 (Upto 31st December 2006). Eleven training programs have been conducted to distribution engineers of the power sector under MoP-USAID sponsored DRUM programme.

On the basis of performance in the first three quarter of financial year 2006-07, a fact sheet showing achievements against each item of Outcome Budget 2006-07 for CPRI has also been prepared.

2.0 National Power Training Institute

2.1 Training out put

Up to March 2006, 1,11,640 personnel of various levels from different organizations were imparted training by the training institutes of NPTI since their inception.

The annual targets for the year 2006-2007 in terms of number of trainees trained and trainee weeks were decided as 12,800 and 79,000 respectively.

The Training activities/achievements during the year 2006-07 up to Dec., 2006 are as under: -

Sl No.	Courses	No. of Trainees Trained	Trainee Weeks
1.	Long Term Courses for Engineers (including PGDC & MBA)	786	23757
2.	Short Term Courses for Engineers	681	911

Chapter – VI: Review of Statutory And Autonomous Bodies

3.	Long Term Courses for Operators/Technicians (Incl. B. Tech.)	983	29858
4	Short Term Courses for Supervisors/Technicians	1905	1451
5	Simulator Course	421	734
6	On-Job/On Site/Seminars/Workshops	1959	433
7	Short-term training programs at PSTI	715	2338
8	Long term courses at HLTC	188	1276
	Total	7638	60758

On the basis of performance in the first three quarter of financial year 2006-07, a fact sheet showing achievements against each item of Outcome Budget 2006-07 for NPTI has also been prepared.

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. The Tribunal has started hearing appeals against orders of the Regulatory Commissions / Adjudicating Officers. A total of 485 appeals, petitions, etc. have been registered, of which 55 and 237 appeals have been disposed off by the Tribunal during the year 2005-06 and 2006-07 (till 31.12.2006) respectively.

On the basis of performance in the first three quarter of financial year 2006-07, a fact sheet showing achievements against each item of Outcome Budget 2006-07 for ATE has also been prepared.

4. Central Electricity Regulatory Commission (CERC)

4.1 Physical performance/Review of Performance of CERC

The Central Commission, in discharge of its statutory responsibility under the Electricity Act, 2003 has been taking actions towards achievement of the objectives. A brief account of the important achievements during the year 2006-07 is given below:-

- In July 2006, CERC has released its **Staff Paper on developing a common trading platform (Power Exchange)** for electricity trading in the country. Power Exchange (PX) is a mechanism for institutionalized, transparent and efficient trading. The Paper has structured the development of a day-ahead Power Exchange based on firm hourly contracts with simultaneous clearance of transmission path by the System Operator.
- The Commission has published draft regulations on procedure, terms and conditions, for grant of licence for inter-state transmission in electricity in October 2006. The regulations are at advance stage of finalization.

Chapter – VI: Review of Statutory And Autonomous Bodies

- CERC has Grid discipline in the country, enforcing strict Grid Code and imposing penalty on violators.
- The Ministry of Power, vide its Notification dated, 19.01.2005, issued Guidelines for Determination of Tariff by Bidding Process for Procurement of Power by Distribution Licensees. These guidelines have been amended on 30.3.2006 and 18.8.2006. These guidelines provide that the CERC shall notify and update the Escalation Rate for Coal and Gas, Inflation Rate based on WPI and CPI, Discount Rate and Exchange Variation Rate, for the purpose of bid evaluation as well as for payment.

The clause 5.6(vi) of the guidelines provide for following escalation rates to be notified by CERC every six months separately for the purpose of bid evaluation and payment:

- (i) Escalation rate for domestic coal. (Separately for evaluation and payment)
- (ii) Escalation rate for domestic gas. (Separately for evaluation and payment)
- (iii) Escalation rates for different escalable sub-components of energy charge for plants based on imported coal. (Separately for evaluation and payment)
- (iv) Escalation rate for different escalable sub-components of energy charge for plants based on imported gas. (Separately for evaluation and payment)
- (v) Inflation rate to be applied to indexed capacity charge component.
- (vi) Inflation rate to be applied to indexed energy charge component in cases of captive fuel source.
- (vii) Discount rate to be used for bid evaluation.
- (viii) Dollar-Rupee exchange variation rate. (For the purpose of evaluation)

After taking into consideration the comments of the stakeholders, Commission notified the Escalation Rate on 26.10.2006 for Coal and Gas, Inflation Rate based on WPI and CPI, Discount Rate and Exchange Variation Rate, for the purpose of bid evaluation as well as for payment in respect of the above rates excluding (i), (ii) & (iv). The Commission amended the Notification on 22nd November 2006 after correcting certain inadvertent errors in data considered and methodology adopted for the computations of escalation rates/indices for the purpose of payment.

- The Central Electricity Regulatory Commission (Procedure, Terms and Conditions for grant of Trading Licence and other related matters) (Amendment) Regulation 2006. Some new regulatory measures are as follows: -
 - (a) Provisions to ensure that persons with doubtful antecedents do not acquire licence for inter-State trading in electricity.
 - (b) Provision for publication of detailed information while making an application so that the public response can be more meaningful.
 - (c) Additional provisions to ensure compliance of the terms and conditions of the licence.
 - (d) Prescription of further detailed statutory reports from the licensees to monitor their performance and the impact of their transactions on the sector.

Chapter – VI: Review of Statutory And Autonomous Bodies

- The Commission has been issuing licence for inter-state trading in electricity and so far, has issued licence to 20 applicants.

On the basis of performance in the first three quarter of financial year 2006-07, a fact sheet showing achievements against each item of Outcome Budget 2006-07 for CERC has also been prepared.

5. Bureau of Energy Efficiency

5.1 Bureau of Energy Efficiency (BEE) has been set up to develop policy and strategies with a thrust on self-regulation and market principles, within the overall framework of the Energy Conservation Act (EC Act), 2001 with the primary objective of reducing energy intensity of the Indian economy. This will be achieved with active participation of all stakeholders, resulting in accelerated and sustained adoption of energy efficiency in all sectors.

The major achievements of BEE are highlighted briefly hereunder:

- 64 energy-auditing agencies have been accredited on the basis of their energy auditing capabilities and institutional set up.
- 713 Certified Energy Managers and 2023 Certified Energy Auditors are in place from the 3 examinations
- 4 Guidebooks prepared to assist energy professionals
- 7 Sector specific Task Forces for Aluminium, Cement, Chlor alkali, fertiliser, 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
- Savings of about 1112 MW of electric power, as equivalent avoided capacity, achieved during 1999-2006 through National Energy Conservation Award Scheme.
- Labeling plan for air conditioners, refrigerators, fluorescent tube light, motors have been prepared
- 30 State Governments and Union Territories have notified State Designated Agencies for the purpose of implementing EC Act within the state.
- Draft Energy Conservation Building Codes (ECBC) prepared.
- Energy audit studies completed in 9 Government buildings to set up an example for private buildings to pursue similar efforts. Savings potential between 23 to 46 % identified in the above buildings
- Substantial completion of implementation of energy saving measures in 4 buildings has been made through ESCO route.
- 17 more Government buildings are being taken up in second phase for energy auditing and its implementation through ESCO mode

Bhakra Beas Management Board (BBMB)

During the current year 2006-07, the generation from BBMB Power Houses has been 8948 Million Units up to 31.01.2007 against the target of 9512 Million Units. The shortfall in expected generation with respect to the targets for the current year is primarily attributed to less generation at

Chapter – VI: Review of Statutory And Autonomous Bodies

Dehar Power House due to flooding on 27.8.2006 and consequent generation loss during complete closure of Power House up to 25.9.2006. The Power House wise plant availability of BBMB Power Houses up to 30.11.2006 has been, Bhakra Left Bank-97.41%, Bhakra Right Bank-96.89%, Ganguwal-98.70%, Kotla-85.53%, Dehar-63.74% and Pong-93.90%. The drop in plant availability for Dehar Powerhouse is due to forced outage of various units due to flooding of Powerhouse on 27.8.2006. The availability of BBMB power evacuation system during the year 2006-07 (up to January, 2007) has been 98.11%.

CHAPTER VI
OUTCOME BUDGET (Achievement till Dec 2006)
Appellate Tribunal for Electricity

Sl. No.	Name of Scheme/ Programme/ Projects	Sanctioned cost/ Cumulative expenditure from beginning till 31.03.2006	Objective/ Outcome:	Outlay 2006-2007			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Remarks/ Risk Factor	Achievements upto December 31, 2006
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 Rs/lacs)	4(iii) Complementary Extra-Budgetary Resources				
1	Appellate Tribunal for Electricity (ATE)	Sanctioned Cost: Not applicable Expenditure from 1.4.2005 to 31.03.2006 : Rs.261.18 lakhs	To facilitate expeditious resolution of disputes in the power sector at the appellate level	642	-	-	Total appeals filed and pending final disposal as on 3 rd March, 2006 are 221 32 cases have also been transferred by various High Courts. These are likely to be disposed of in due course	Spread throughout the year		237 appeals have been disposed off during the current financial year (upto 31.12.2006)

CHAPTER VI
OUTCOME BUDGET (Achievement till Dec 2006)
Central Electricity Regulatory Commission

Sl. No.	Name of Scheme/ Programme/ Projects	Sanctioned cost/ Cumulative expenditure from beginning till 31.03.2006	Objective/ Outcome:	Outlay 2006-2007			Quantifiable Deliverables/ Physical Outputs	Processes/ Timelines	Remarks/ Risk Factor	Achievements upto December 31, 2006
1.	2.	3.	3.	4.			5.	6.	7.	8.
		3(i)	3 (ii)	4(i) Non-Plan Budget (Amount Rs/lacs)	4(ii) Plan Budget (Amount Rs/lacs)	4(iii) Complementary Extra-Budgetary Resources				
2	Central Electricity Regulatory Commission (CERC)	Sanctioned Cost: Not applicable Expenditure from 1.4.2005 to 31.03.2006: Rs.632.97 Lakhs	Following are the objectives of CERC:- <ul style="list-style-type: none"> To improve the operations and management of the regional transmission systems. To formulate an efficient tariff setting mechanism To facilitate open access in inter-State transmission To 	525		Nil	100 petitions are likely to be disposed during the year 2006-07. The petitions include the tariff petitions for the Tariff Period 2004-09, miscellaneous applications etc. Floating Consultation Paper on setting up Power Exchange Market.	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	Passing of tariff orders will result in firm tariff for the 5 year for which the Terms & conditions of Tariff have been specified by CERC. Power exchange will facilitate the buyers and sellers to have a common platform for purchase and sale of electricity. The power exchange would result in better resources	154 petitions have been disposed off during the current financial year (upto 31.12.2006) Oral hearing on consultation paper on developing of Common Platform for Electricity Trading has been held on 19.12.2006.

			<p>facilitate inter-State trading</p> <ul style="list-style-type: none"> • To promote development of power market • To improve access to information for all stakeholders • To facilitate technological and institutional changes for the development of competitive markets. 				<p>Issue of Regulation on Terms & Conditions for inter-State Transmission Licence.</p>	<p>disposing of the petitions and other issues highlighted in column 5. The targets as indicated in column 5 are expected to be achieved during the year 2006-07.</p>	<p>optimization, generate strong investment signal and make power trading transparent and efficient.</p> <p>Issue of Terms & Conditions of inter-State Transmission Licence will bring in greater certainty and clarity for the prospective transmission licensees</p> <p>This would promote effective utilization of assets across the country and accelerated development of the new transmission capacities.</p>	<p>Draft regulation for inter-State Transmission License has been prepared and comments of stakeholders have been invited.</p>
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Central Power Research Institute
Outcome Budget (achievements till Dec 2006)

Sl. No.	Name of the Scheme/ Programme	Objective/ Outcome	Outlay 2006-07 (Rs.in lakhs)	Quantifiable Deliverable	Processes/ Timeliness	Remarks/Risk factors	Achievements upto 31 st Dec. 2006
1	2	3	4	5	6	7	8
1.	Plan R&D Activities	Inhouse R&D plan of CPRI aimed at product/ process development, augmentation of test facilities, Improvement of standards etc.	300	<ul style="list-style-type: none"> ➤ Contribution to improvement of standards ➤ Establishment of test facilities ➤ Development of products/ processes useful for power sector ➤ Contribution to understanding of power sector problems 	April 2006– December 2006	Nil	<p>18 projects which have been undertaken during the year 2005-06 is continuing.</p> <p>5 Projects are completed during the period</p> <p>Expenditure: Rs. 333.84 lakhs</p>
2.	RSoP Schemes	Ministry of Power sponsored programme on Research for Indian Power sector.	200	Study of power sector problems by utilities & Industry	April 2006– December 2006	- Nil-	<p>24 schemes which were on-going during the year 2005-06 has been continued.</p> <p>Expenditure : Rs. 94.28 lakhs</p> <p>Margin Money: Rs. 0.00</p>

Sl. No.	Name of the Scheme/ Programme	Objective/ Outcome	Outlay 2006-07 (Rs.in lakhs)	Quantifiable Deliverable	Processes/ Timeliness	Remarks/Risk factors	Achievements upto 31 st Dec. 2006
1	2	3	4	5	6	7	8
3.	Augmentation of Engineering services for plant performance monitoring & improvement (PMI), Renovation & Modernisation (R&M) and Life Extension (LE)	Keeping the various requirements of the Power Generation Sector, it was proposed to strengthen and consolidate the facility and capability for Plant Performance Monitoring & Improvement (PMI), Renovation & Modernisation and Life Extension (RM & LE) and through this CPRI will provide a more focused and meaningful service to the power plants.	90	<ul style="list-style-type: none"> ➤ Augmentation of facilities- ➤ Purchase initiation of equipments ➤ Receipt, installation & commissioning of equipment 	April 2006– December 2006	Project is as per schedule	<p>The following equipment identified in the project have been received and commissioned: Automatic 12kV insulation System, Ultrasonic flowmeter, Computerised wedge tightness tester, Combustion Analyser, Portable Digital precision RTD, Fibroscopic Equipment, Portable Eddy Current testing equipment, Steam Oxide Scale Thickness measurement equpt. Portable Spectrometer, Microprocessor based Insulation tester, Ultrasonic Gas Glow Meter, Combustion Analyser, Portable Digital vane type Anemometer.</p> <p>Expenditure: Rs.65.40 lakhs</p>

Sl. No.	Name of the Scheme/ Programme	Objective/ Outcome	Outlay 2006-07 (Rs.in lakhs)	Quantifiable Deliverable	Processes/ Timeliness	Remarks/Risk factors	Achievements upto 31 st Dec. 2006
1	2	3	4	5	6	7	8
4.	Establishment of 100 MVA on-line short circuit test facilities at CPRI, Bangalore for low voltage switchgear & controlgear	At CPRI, Bangalore a 50 MVA direct Short-circuit test facility is available at present for testing Low Voltage Circuit-breakers / switchgear up to 415V, 50kA. This facility is nearly four decades old which was obtained under UNDP scheme and has served its useful life since long. To evaluate the performance of present day LV switchgear as per IS / IEC Standards and to meet the specified duty requirements of different switching capabilities, a new test facility is required for short-circuit testing at higher current level with On-line power source.	850	<ul style="list-style-type: none"> ➤ Continuation of Civil works ➤ Manufacture of Transformers, Circuit breakers, Isolators, Resistors & Reactor banks, PT's & CT's and other auxiliary equipment 	April 2006– December 2006	Nil	<p>Due to increase in equipment cost by more than 400%, it is decided to drop the project</p> <p>Financial progress (2006-07) Upto Dec. 06</p> <p>Expenditure : Rs.0.75 lakhs Margin Money: 0.00</p>

Sl. No.	Name of the Scheme/ Programme	Objective/ Outcome	Outlay 2006-07 (Rs.in lakhs)	Quantifiable Deliverable	Processes/Timeliness	Remarks/ Risk factors	Achievements upto 31 st Dec. 2006
1	2	3	4	5	6	7	8
5.	Comprehensive energy efficiency testing facilities for refrigerators & airconditioners	The Indian Energy Conservation Act 2001(ECA) has made mandatory display of label on electrical equipment indicating the energy consumption and also developing testing and certification procedures & promote testing facilities. Towards meeting this requirement The BUREAU OF ENERGY EFFICIENCY was formulated by the Govt. of India in 2002 with a mission to institutionalize the energy efficiency services to enable delivery mechanisms in the country to provide leadership to energy efficiency in all energy intensive industry sectors of the country. CPRI being the only third party test house in the government sector to test & certify the electrical equipment was requested to setup the necessary test & certification facilities for Refrigerators & Air conditioners. This proposal envisages to set up these facilities at Bangalore.	235	<ul style="list-style-type: none"> ➤ Receipt of Equipment ➤ Continuation of civil works ➤ Installation & commissioning 	April 2006–December 2006	Project is as per schedule	<p>Refrigerator test facility commissioned. LC opened for supply of AC test facility</p> <p>Civil works of AC test facility is in progress Visit to the Ac test equipment manufacturers for discussions and also to finalise specification for Air Condition test facility finalized and LC opened for supply of the same.</p> <p>Expenditure :Rs. 463.28 lakhs</p>

Sl. No.	Name of the Scheme/ Programme	Objective/ Outcome	Outlay 2006-07 (Rs.in lakhs)	Quantifiable Deliverable	Processes/Timeliness	Remarks/Risk factors	Achievements upto 31 st Dec. 2006
1	2	3	4	5	6	7	8
6.	Capacitor current switching facility at STDS, Bhopal	<p>To meet new requirements of National & International Standards by switchgear and transformer manufacturers call for augmentation and upgradation of existing facility of the following three areas:</p> <ol style="list-style-type: none"> 1. Capacitive current interruption for MV Switchgear, which helps us in study of behaviour of interruptive currents upto 400Amps. 2. Transformer loss and impedance measurement at 50Hz and 3. EMI / EMC test upgradation for Energy meters 	215	<ul style="list-style-type: none"> ➤ Receipt of Equipment ➤ Continuation of civil works ➤ Installation & commissioning 	April 2006–December 2006	Project is as per schedule	<p>All equipment of EMI/EMC test facility upgradation received</p> <p>Delay in civil works</p> <p>Expenditure :Rs.216.41 lakhs</p>

Sl. No.	Name of the Scheme/ Programme	Objective/ Outcome	Outlay 2006-07 (Rs.in lakhs)	Quantifiable Deliberable	Processes/ Timeliness	Remarks/ Risk factors	Achievements upto 31 st Dec. 2006
1	2	3	4	5	6	7	8
7.	National / International accreditation of CPRI laboratories	Accreditation for laboratories of CPRI from National Accreditation Board of laboratories, IECEECB, STL & ASTA. Improvement of client related services	Rs.59.00	<ul style="list-style-type: none"> ➤ Accreditation of Laboratories ➤ Client Services improvement 	April 2006–December 2006	Project is as per schedule	ASTA accreditation obtained IECEECB Scheme certification obtained All civil works to improve client services have been completed. Expenditure: Rs.62.40 lakhs
8.	Establishment of Test facility for Eastern/ North Eastern Region	Under this proposal it is planned to create <ul style="list-style-type: none"> • Dielectric tests facility and • Mobile transformer oil testing facility To start with Diagnostics of Power/Distribution Transformers through oil tests is planned, which will help the power utility to maintain the transformers and also know the health of transformers. Some remedial action depends on the nature of fault also can be carried out. The Mobile laboratory so established would be able to cover vast area in West Bengal, Orissa, Bihar, Assam, Manipur, Meghalaya, Arunachal Pradesh etc. Approximately, 1500 Transformers could be monitored in one year. Later based on the demand and also the requirement of the power utility other facilities would be planned in a phased manner.	Rs.320.00	Procurement of equipments Procurement & fabrication of Mobile Van for establishing laboratories both at Kolkatta & Guwahati	April 2006–December 2006	Project is as per schedule	Two chasis procured and Chasis with all equipment commissioned and the Regional Testing Laboratory at Kolkata established. Fabrication of Mobile van for Guwahati is in final stages of completion. The following equipment have been commissioned: <ol style="list-style-type: none"> BDV Tan Delta Flash point apparatus Moisture Analyser Expenditure :Rs.185.92 lakhs

Sl. No.	Name of the Scheme/ Programme	Objective/ Outcome	Outlay 2006-07 (Rs.in lakhs)	Quantifiable Deliverable	Processes/ Timeliness	Remarks/Risk factors	Achievements upto 31 st Dec. 2006
1	2	3	4	5	6	7	8
9.	Augmentation & Modernisation of CPRI laboratories	<p>Augmentation & Modernisation through facility addition for the laboratories</p> <p>In order to create good work environment in the laboratories, it is proposed to give a face lift to the laboratories for interiors, modernization of electrical works, installation of fire safety devices, providing air conditioning facility.</p> <ol style="list-style-type: none"> 1) Instrumentation Division 2) High Voltage Laboratory 3) Mechanical Engineering Division 4) Short Circuit Laboratory 5) Electrical Appliances & Technology Division 6) Diagnostics Cable & Capacitors Division 7) Dielectric Materials Division 8) Materials Technology Division 9) Library 	1353	<p>Procurement of equipments for the following laboratories of CPRI :</p> <p>High Power Lab High Voltage Lab Short Circuit Lab Diagnostics Lab Mechanical engineering Dielectric matrls Switchgear Testing & Development Station Interior Design of Laboratories</p> <p>Preparation of drawings & estimate for rejuvenation of CPRI Laboratories</p>	April 2006–December 2006	Project is as per schedule	<p>Procurement process initiated to augment and modernize the laboratories identified.</p> <p>Expenditure: Rs.462.20 lakhs</p>
		TOTAL	3302				

Rs-in -Lakhs

[illegible]

	TOTAL		208.00	1100.00						
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