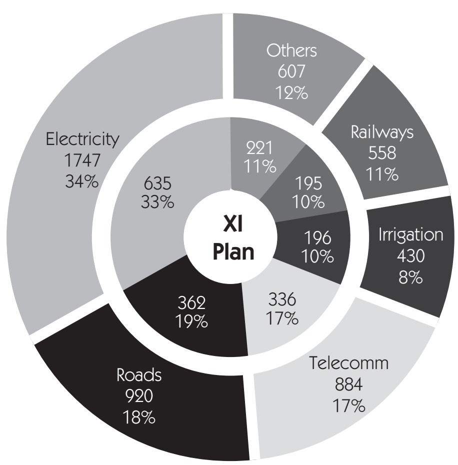
MANAGEMENT DISCUSSION AND ANALYSIS

POWER SECTOR - fostering growth

Power Sector is a key enabler for India's economic growth. The sector consists of generation, transmission and distribution utilities and is a crucial component of India's infrastructure. Power Sector leads the investment in infrastructure for XII plan:



(Electricity includes Non Conventional Energy; Railways include Mass Rapid Transport System)
(Figures in '000 ₹ crore; XI plan @ FY 2006-07 prices & XII plan @ FY 2011-12 prices)
(Source: Interim Report of the High Level Committee on financing infrastructure)

Investment in electricity is projected to be 1/3rd of the total projected investment in infrastructure sector, thus sustaining the XI plan investment.

POWER SECTOR - current landscape

Key Parameters	FY 2012-13 (A)	FY 2011-12 (B)	Change (A-B)	(%) Change
Capacity (GW) as on 31st March*	223.34	199.88	23.46	11.74%
Generation in Billion Units (BU)#	912.06	876.89	35.17	4.01%
All India PLF (Coal & Lignite) (%)	69.93	73.47	-3.54	
Energy deficit (%)	8.7	8.5	0.2	
Peak Deficit (%)	9.0	10.6	- 1.6	
Transmission lines installed (ckt kms)	17107	20434	-3327	-16.28%
Sub-stations (MVA)	63665	54287	9378	17.27%

* including Renewable Energy Sources (RES)
# including Bhutan import of 4.79BU
(Source: Central Electricity Authority (CEA))

Review of installed capacity & capacity addition during the financial year 2012-13

The total installed capacity in the country as on March 31, 2013 was 223343.60 MW with State Sector having a share of 39.91%, followed by Private Sector with 30.83% share and balance 29.26% contributed by Central Sector entities.

Sector	Total Capacity (MW)	% share
State	89124.62	39.91
Private	68859.04	30.83
Central	65359.94	29.26
Total*	**223343.60**	**100.00**

(Source: CEA) *including RES

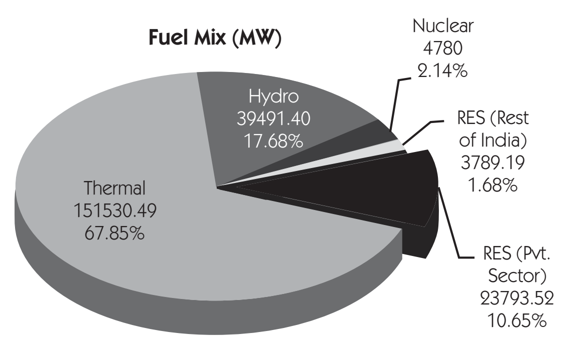
Capacity addition of 20622.80 MW during the financial year 2012-13 exceeded the target of 17956.30 MW. With maximum contribution of 54.59% by Private Sector, followed by Central Sector of 26.17%.

Sector	Capacity Addition (MW)	% share
State	3968.00	19.24
Private	11257.50	54.59
Central	5397.30	26.17
Total*	20622.80	100.00

(Source: CEA) * Excluding RES which includes Small Hydro Project, Biomass Power, Urban & Industrial Waste Power, Wind Energy and Solar Power

The total thermal capacity, including gas and diesel stations accounts for about 67.85% of installed capacity of the country followed by hydro capacity at 17.68%. Nuclear stations account for 2.14% and the balance 12.33% is contributed by RES of which share of private sector is 10.65%.

As on 31.03.2013



(Source: CEA)

With 130220.89 MW of the installed capacity based on coal which is 58.31% of Nation's capacity, coal remains the key fuel for power generation.

Capacity Utilization

Capacity utilisation in the Indian power sector is measured by Plant Load Factor (PLF). The PLF has shown a decline during the financial year 2012-13 vis a vis financial year 2011-12.

Sector wise PLF (Thermal) (%)

Sector	FY 2012-13	FY 2011-12	Change
Central	79.18	82.01	-2.83
State	65.54	68.35	-2.81
IPP	62.16	67.27	-5.11
Private	75.69	76.19	-0.5
All India	69.93	73.47	-3.54

(Source: CEA)

PLF of thermal stations declined from 73.47% to 69.93%. The decline in PLF was mainly on account of shortage / poor quality of coal, backing down/ shut down of units on account of low schedule from beneficiary states and delay in stabilization of new units.

GENERATION

Existing Generation

The total power generation in the country during the financial year 2012-13 was 912.06 BU as compared to 876.89 BU during last year, registering a growth of 4.01%.

Sector wise and fuel wise break-up of generation in BU for the financial year 2012-13 and financial year 2011-12 is detailed as under:

Sector	FY 2012-13	FY 2011-12	Fuel	FY 2012-13	FY 2011-12
Central	375.97	364.00	Thermal	760.68	708.81
State	347.15	367.96	Hydro	113.72	130.51
Private	184.15	139.65	Nuclear	32.87	32.29
Others*	4.79	5.28	Others*	4.79	5.28
Total	**912.06**	**876.89**	**Total**	**912.06**	**876.89**

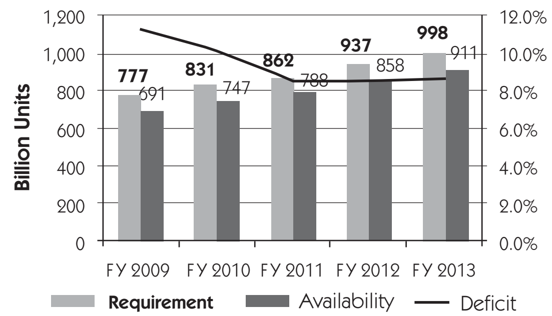
* Import from Bhutan

(Source: CEA)

Of the total national generation during the financial year 2012-13, the State Sector contributed 38.06%, Central Sector utilities contributed 41.22% where as Private Sector has contributed 20.19%. The overall generation during the year was ~ 2 % less than the program/target.

Demand and Supply Position

The energy deficit increased marginally on a year-on-year basis in financial year 2012-13 to 8.7% from 8.5% in financial year 2011-12. However, the Peak deficit, decreased to 9.0% in financial year 2012-13 from 10.6% in the previous year.Overall, the sector is characterized by acute shortages of power. The demand and supply position during the last five year in the country is indicated as under:



(Source: CEA- power supply position)

Consumption

In terms of per capita power consumption, India ranks among the lowest in the world. The per capita consumption of power in India has increased from 631.40 units in financial year 2005-06 to 879.22 units in financial year 2011-12 (provisional). *(Source: CEA)*

Major end users of power can be broadly classified into industrial, agricultural, domestic and commercial consumers. These consumers represented approximately 45%, 17%, 22% and 9%, respectively, of power consumption measured by units of electricity consumed in financial year 2011-12. Traction & Railways and others represented about 7% of power consumption. *(Source: Ministry of Statistics and Programme Implementation-Energy Statistics 2013).*

XII PLAN - a look ahead

An important gain in the XI plan was the ramping up of the pace of addition to generation capacity though it was lower than the planned capacity addition. The main physical milestones achieved during XI plan are summarised as under:

Achievements in Power Sector during the XI Plan

- Capacity addition during the XI Plan period has been at 54964 MW which is 69.8% of the original target and 88.1% of the Mid-term Appraisal target of 62374 MW.
- Total installed capacity as on 31st March 2012, including RES of the country was 199877 MW. The share of renewable energy capacity is about 12 %.
- Approximately 69926 circuit km (ckm) of transmission lines were added. 150362 MVA capacity of alternating current (AC) substations and 1750 MW capacity of High-Voltage Direct Current (HVDC) substations were added to the existing transmission systems. *(Source: Draft 12th plan)*

To keep up the pace of achievements in XI plan, government has also set ambitious targets for XII plan.

Capacity and Generation Targets for XII plan

The Working Group on power has estimated a capacity addition requirement of 75785 MW corresponding to 9 % GDP growth during the XII plan period. However, in order to reduce the deficits, and provide for faster retirement of the old energy-inefficient plants, the target for the XII plan has been fixed at 88537 MW (excluding RES). Since the growth rate of GDP for the XII plan is likely to be 8.2 % and not 9 %, the target for capacity addition contains an element of slack of about 10 %. *(Source: Draft 12th plan)*

As shown in table below, the share of the private sector in the additional capacity will be 53%, followed by central sector with 30% & state sector with 17%.

Sector	Hydro	Thermal	Nuclear	Total
Central	6004	14878	5300	26182
State	1608	13922	0	15530
Private	3285	43540	0	46825
Total (excl.RES)	**10897**	**72340**	**5300**	**88537**
RES				30000
Total (Incl.RES)	**10897**	**72340**	**5300**	**118537**

(Source: Draft 12th plan)

The share of new capacity addition during XII plan based on fossil fuel remains high at ~82% (excluding RES).

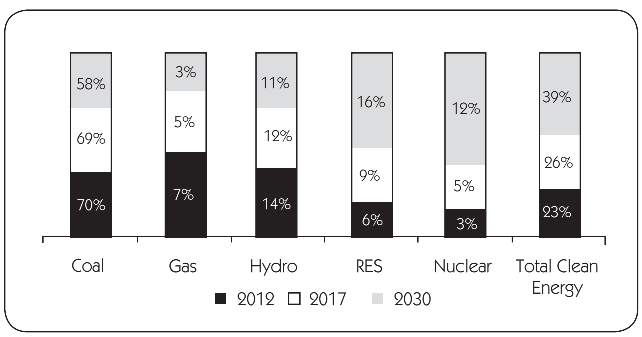
The initiatives taken by Government of India for rapid growth of power sector including setting-up of Ultra Mega Power Projects and development of power projects on tariff based bidding, allocation of captive coal blocks, bulk tendering of super-critical units etc. are expected to yield benefits during XII plan. Already more than 20 GW (excluding RES) of capacity has been added during the financial year 2012-13 i.e. the first year of XII plan, as compared to 9 GW (approx.) added during the first year of XI plan. Thus, first year of the XII plan has ended on a positive note.

The XII plan target seems realisable subject to availability of fuel, land acquisition, environment clearances, availability of water, transmission capacity and Power Purchase Agreements (PPAs).

The Working Group for the XII plan has estimated a requirement of 1403 BU by financial year 2016–17, after taking into account energy conservation measures and demand–supply management.

FUEL MIX - directed towards clean energy

India has come to terms with the fact that renewable energy may be the new order in the age of energy security. The projected change in the mix of generation by fuel by end of 2030 depicted below shows the huge emphasis of Government on Clean Energy:



(Source: Draft 12th plan)

The reliance on fossil based fuel is expected to reduce from current 77% to 61% by the year 2030. For realizing sustainable development an amalgam of fuels for power generation is envisaged by Government. *(Source: draft 12th plan)*

TRANSMISSION AND DISTRIBUTION

Transmission

The large expansion in generation and consumption of electricity has to be supported by a significant expansion and strengthening of the transmission network. The transmission systems that are in place in the country consist of Inter-State Transmission System (ISTS) and Intra-State Transmission System (Intra-STS). ISTS is mainly owned and operated by Power Grid Corporation of India Limited which is also Central Transmission Utility.

The power system in the country is demarcated into five regions. Four regional grids have been operating in synchronous mode as a single system for the past few years. Only the southern grid is yet to be connected to the rest of the system. The high voltage Raichur–Sholapur 765 KV line to connect southern grid is under construction and expected to be commissioned during the financial year 2013-14.

Transmission lines in the country upto March 2013 are 274588 ckm and Sub Stations are 473216 MVA. A total of about 107440 ckm of transmission lines; 270000 MVA of AC transformer capacity and 12750 MW of HVDC systems are expected to be added during the XII plan.

The total capacity to transfer power across regions at the end of the XI plan was about 27750 MW and this is expected to increase by 136 % to 65550 MW by the end of XII plan. *(Source: CEA & Draft 12th plan)*

The proposed rapid expansion of the capacity to transmission capacity can be met if some serious challenges, viz. right of way, flexibility in line loading and regulation of power and improvement of operational efficiency are adequately dealt with.

Distribution

The financial viability of the distribution system is under severe strain.

Losses of Utilities selling directly to consumers

The aggregate losses of utilities selling directly to consumers on subsidy received basis increased from ₹ 34,728 crore in the financial year 2008-09 to ₹43,433 crore in financial year 2009-10. In the financial year 2010-11 these losses stood at ₹38,821 crore a reduction of ₹4,612 crore (10.62%) over financial year 2009-10.

The aggregate losses without considering subsidy of these utilities increased from ₹50,441 crore in the financial year 2008-09 to ₹62,508 crore in the financial year 2009-10. The losses decreased to ₹59,200 crore in the financial year 2010-11 a reduction of ₹3,308 crore (5.29%) over financial year 2009-10. *(Source: PFC report on State Power Utilities)*

Many States have now started to increase tariffs in the last couple of years to bridge the revenue gap. The Cabinet has also approved a Financial Restructuring Plan (FRP) for Distribution Companies (Discoms).

Under FRP, Cabinet has approved a debt restructuring plan for all State Discoms having accumulated losses and facing difficulties in financing operational losses. The highlights are as follows:

- 50 % of the outstanding short term liabilities (STL) as of 31st March 2012 to be taken over by State Governments. This shall be first converted into bonds to be issued by Discoms to participating lenders duly backed by the State Government guarantee.

- The State Government will take over the liability during the next two to five years by issuance of special securities in favour of participating lenders in a phased manner.
- Balance 50 % of the STL will be rescheduled by lenders and serviced by the Discoms with a moratorium of three years on principal and would be backed by a State Government guarantee.
- The restructuring/re-schedulement of loan is to be accompanied by concrete and measurable action by the Discoms/States to improve the operational performance of the distribution utilities *(Source: Draft 12th Plan)*

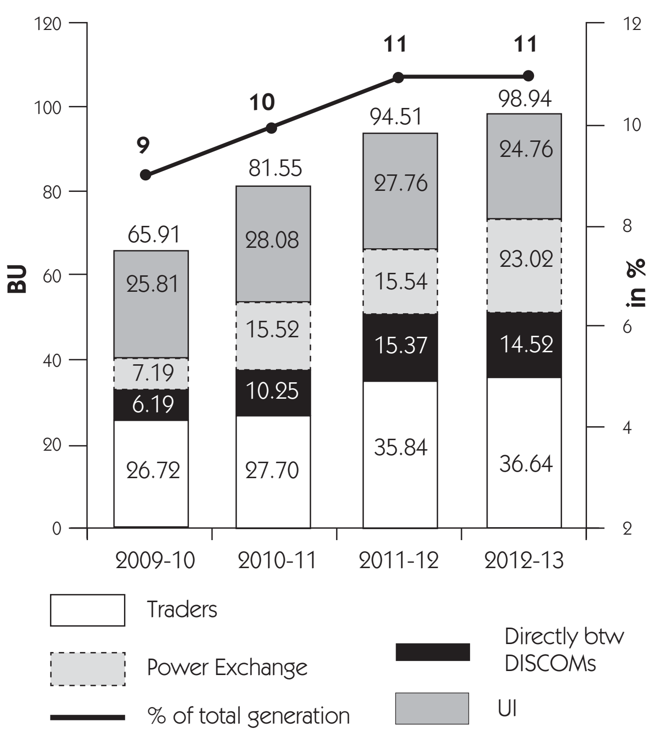
Effective implementation of the restructuring package during the XII plan would send a powerful signal that the power sector is on the path of financial viability.

It is important to note that Aggregate Technical and Commercial (AT&C) losses remained high at 26.15% in financial year 2010-11 and needs to be brought down. *(Source: CEA)*

SHORT TERM POWER MARKET

A short-term power market can help electricity providers procure unplanned and fluctuating power requirements, and on the sellers' side, enable power producers as well as procurers to sell their surplus power. Trading of electricity in India has picked up considerably after the advent of Electricity Act, 2003 (EA 2003) which recognizes trading as a distinct licensed activity. In future, the quantum of electricity traded in the short term market is likely to grow considerably as the new generating capacity of many IPPs plants is not tied up in long term PPAs.

The following chart shows the classification of short term transactions of electricity and percentage of such transactions of total generation:



(Source: CERC, Report on Short Term Power Market 2011-12 & Market Monitoring Reports 2012-13)

Major players in power trading business include PTC India Ltd., NTPC Vidyut Vyapar Nigam Ltd., Tata Power Trading Co. (P) Ltd., JSW Power Trading Company Ltd., Adani Enterprise Ltd. and Reliance Energy Trading (P) Ltd. Around 80% share of electricity was transacted by these licensees in financial year 2012-13. *(Source: CERC)*

Open Access

The Electricity Act, 2003, mandates that non-discriminatory open access for inter-state as well as intra-state transmission and distribution networks be provided by the utilities.

During the financial year 2011-12, 24111 inter-state short term open access transactions (including bilateral and collective) were approved for sale of 66987 MU. During the financial year 2012-13 (up to November, 2012) sale of 48008 MU has been approved through 21185 interstate bilateral and collective short-term open access transaction. *(Source: Economic Survey 2012-13)*

EXPANDING ACCESS TO POWER

Rural Electrification

The Central Government launched a scheme 'Rajiv Gandhi Grameen Vidyutikaran Yojana' (RGGVY) in April 2005 with the goal of electrifying all un-electrified villages and hamlets and providing access to electricity to all households. Under RGGVY, over 1 lakh villages have been electrified and over 2 crore connections have been provided to Below Poverty Line (BPL) households up to 15.06.2013. Rural electrification contributes in a long way to the Government's objective of inclusive growth. *(Source: RGGVY website)*

R-APDRP

Restructured Accelerated Power Development and Reforms Programme (R-APDRP) was approved as a Central sector scheme on 31.07.2008 with total outlay of ₹ 51,577 crore. The focus of R-APDRP is on actual, demonstrable performance in terms of reduction in Aggregate Technical and Commercial (AT&C) losses through application of information technology for energy auditing and accounting and through technological up-gradation and strengthening of distribution infrastructure. Projects under R-APDRP are presently taken up in two parts. *(Source: Draft 12th Plan)*

Part A focused on establishing reliable and automated system for sustained collection of accurate baseline data, and the adoption of IT in the areas of energy accounting and auditing and consumer-based services. Part B includes projects to strengthen the distribution system.

Most of Part A projects have been awarded. These are under implementation and at a stage of advanced progress in several States.

APDRP and R-APDRP have been successful in bringing down the AT&C losses from 38.86% in 2001-02 to 26.15% in 2010-11. However, losses are still at a higher level and far behind the targeted reduction of AT&C losses to 15%. *(Source: CEA)*

POLICY FRAMEWORK

The Indian power sector is governed by the Electricity Act, 2003 which provides the overall legislative framework.

Electricity Act, 2003 has promoted a liberal, transparent and enabling legal framework for power development for creation of a competitive environment and reforming distribution segment of power industry. It allows open access in transmission and distribution. It provides for regulatory oversight for fixation of tariff.

Central Government has also framed following policies for overall development of the sector:

- National Electricity Policy, 2005
- Tariff Policy, 2006
- Rural Electrification Policy, 2006
- Hydro Power Policy, 2008
- Revised Mega Power Project Policy, 2009

VARIOUS INITIATIVES OF THE GOVERNMENT

Major policy/ plans/regulatory initiatives:

a) Development of power projects on tariff based bidding
b) Development of Ultra Mega Power Projects
c) Allocation of captive coal blocks
d) Hydro power policy, 2008
e) Private sector participation in transmission Sector
f) Jawaharlal Nehru National Solar Mission -towards building solar India
g) R-APDRP
h) Inter-State Trading Margin Regulations, 2010
i) New Indian Electricity Grid Code (IEGC), 2010
j) CERC (Open Access in Inter-State Transmission) Regulations, 2008
k) Regulations on "Terms and Conditions for Tariff determination from Renewable Energy Sources", 2009.
l) Financial Restructuring Plan for Discoms
m) Demand Side Management Initiatives e.g.
    i. National Mission for Enhanced Energy Efficiency (NMEEE)
    ii. Perform Achieve and Trade Scheme
    iii. Energy Conservation Building Code (ECBC)

REGULATORY DEVELOPMENTS IN FINANCIAL YEAR 2012-13

The important regulatory developments of financial year 2012-13 are as follows:

1. Third amendment to Central Electricity Regulatory Commission (CERC) Tariff Regulations 2009-14:

CERC has issued the Third Amendment to 2009-14 Tariff Regulations on 31.12.2012. The salient points of this amendment are as follows:

- Expenditure incurred or projected to be incurred on account of creation of infrastructure for supply of reliable power to rural household within a radius of 5 km of the power station, if the generating company does not intend to meet such expenses as part of its CSR has been allowed as part of capital cost after cut-off date. *(However, scheme for providing electricity within 5 km radius of Central Power Plants has been withdrawn by Ministry of Power on 25.03.2013).*
- Generating company shall provide to the beneficiaries details of parameters of GCV and price of all kinds of fuel, details of blending ratio of imported coal, proportion of e-auction coal and weighted average GCV as received.
- Return on Equity (ROE) for pumped storage hydro generating stations and run of the river stations with pondage has been increased from 15.5% to 16.5%.
- Fees and charges of Regional Load Dispatch Centres (RLDCs) paid by generating companies and inter-state transmission licensees shall be a pass through in tariff.

2. CERC order on Benchmarking of Capital Cost

CERC has issued an order on the benchmarking of capital cost of coal based thermal power projects on 04.06.2012. The salient points of this order are as follows:

- CERC has developed benchmark norms (at December 2011 prices) for capital cost of thermal power units of 500/600/660/800 MW based on a broad based dynamic financial/pricing model.
- The financing cost, IDC, taxes and duties, right of way charges, cost of R&R are not factored in benchmark cost.
- CERC will use the benchmark cost for prudence check of the overall cost and not package wise cost.
- Mandatory packages have been factored in the model whereas optional packages like MGR, Railway siding, locomotive etc. will be accounted separately based on facts of case and deviation caused.
- Indices are used on various components of the package like material, labour etc. to arrive at the cost at any particular date. Deviation on account of indices used or any other specific issues like cost of civil works depending upon site specific details would be dealt on case to case basis.
- Benchmark cost may be reviewed and updated on 6 monthly basis or at such interval as may be decided by the CERC.

3. Third Amendment to grant of connectivity, long-term access and medium term open access Regulations

Through this amendment CERC allowed connectivity for any renewable energy generating station of 5 MW capacity and above but less than 50 MW capacity being developed by a generating company in its existing generating station and seeking connectivity to the existing connection point with inter-state transmission system through the electrical system of the generating station.

POWER SECTOR OPPORTUNITIES AND THREATS

OPPORTUNITIES

With population and economy growing at a rapid pace and a wide gap between demand and supply, the Indian power sector offers strong opportunity to industry participants.

Huge Investments envisaged for Power Sector

Total investments for the Indian power sector, as projected by the Interim Report of High Level Committee on financing infrastructure, August 2012 for the XII plan, stand at ₹17,47,323 crore (including non conventional energy). This provides enough opportunities to various entities in the power sector in core activities of generation, transmission and distribution as well as infrastructure finance institutions.

Demand for Electricity

The demand for power has outstripped the supply. The energy deficit & peak deficit, high transmission and distribution (T&D) and AT&C losses and the electricity demand by end of XII plan entails large capacity expansion by Central, State and Private sector/players together.

Transmission

Strengthening of transmission network with emphasis on reduction in AT&C losses is important along with expansion of generation capabilities. The technological innovations for transmission lines of 765 KV and 1,000–1,200 KV are of great relevance to reduce land requirement and transmission losses. Greater reliance will have to be placed on gas insulated substations which need about 20 % of the space required for conventional stations. This is an area where public investment can be supplemented by private investment and a start has been made in the XI plan.

Renewable Energy Sources (RES)

All over the world, investment in renewable energy sources has been increasing. India has been a late entrant into the field of renewable energy, but it is beginning to make rapid strides in this sector.

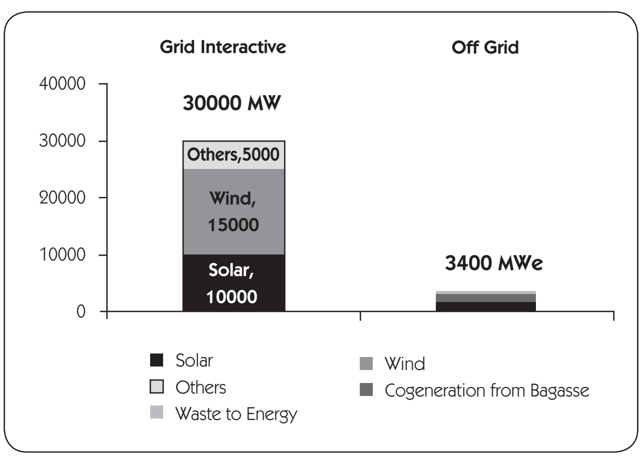
Some of the key issues facing renewable power generation are:

1. Regional concentration of renewable energy potential
2. Insufficiency and high cost of evacuation infrastructure
3. Renewable power, especially solar, is significantly costlier than conventional power

Out of a target of 4 GW RES capacity addition under Grid Interactive Power, 3 GW has been actually deployed during the financial year 2012-13. Cumulative achievement of RES upto 31.03.2013 is approximately 28 GW. *(Source: MNRE Website)*

Draft 12th plan, in line with projections of Ministry of New and Renewable Energy, plans ~30 GW for capacity addition of grid-interactive renewable power during the XII plan.

XII plan RES Capacity Addition Projection



An important initiative by Government to boost RES is introduction of Renewable Energy Certificate Scheme (REC). REC enables distribution companies, captive plants and open access consumers to fulfil their Renewable Purchase Obligations. While renewable generators can receive additional revenue, buyers are able to meet obligations without investing into generating capacities. The REC trading in India is picking up gradually. Several other initiatives by government include establishment of National Institute of Solar Energy, National Bio-Energy Corporation of India, Renewable Energy Development Fund etc.

Hydro Potential – large untapped potential

The identified hydroelectric potential of the country is above 145320 MW (excluding small hydro projects of less than 25 MW). However, installed capacity of hydro electric projects, as on 31.03.2013, is only 39491.40 MW. The main reasons for slow development of hydroelectric power are inaccessible potential sites, difficulties in land acquisition, geological surprises, evacuation of power etc.

Nuclear Potential

India's long-term nuclear power programme is based on utilising the vast indigenous thorium resources for electricity generation. India's uranium resources can support a first-stage programme of about 10000 MW based on Pressurised Heavy Water Reactors using natural uranium as fuel and heavy water as moderator and coolant. Energy potential of natural uranium can be increased in the second stage through Fast Breeder Reactors which utilize plutonium obtained from the recycled spent fuel of the first stage along with thorium as blanket, to produce U-233. With the deployment of thorium at third stage using U-233 as fuel, the energy potential for electricity generation will be large and substantial, thus, providing the industry tremendous opportunity in manufacturing equipments, components and handling of mega package contracts for these reactors *(Source: NPCIL)*.

As on 31.03.2013, Nuclear Power installed capacity was 4780 MW comprising 2.14% of the total installed capacity of the country.

The Indian nuclear power industry is expected to undergo a significant expansion in the coming years due to U.S.-India Civil Nuclear Agreement. This agreement will allow India to significantly enhance its power generation capacity.

Research and Development (R&D) in Power Sector

Thermal, hydro, renewable energy sources are the key areas in the generation sector. R&D initiatives are particularly required to improve equipment performance, automation, mechanism for bulk utilisation of fly ash, control of CO_2, SOx, NOx and mercury in coal-based thermal power plants. Affordable renewable energy etc. need to be focussed on. Major Public Sector Units & Private players involved should be encouraged to do the necessary R&D.

THREATS

Inadequate Fuel Supply

Although the pace of creation of generation capacity has picked up considerably, the fuel supply capability has not kept pace and serious fuel supply problems have arisen in the last year of the XI plan. Since approximately 80% of the additional generating capacity will be coal-based, resolution of coal supply to the power plants coming on stream will be crucial. The requirement of coal, lignite & gas for power sector at the end of XII plan period i.e. financial year 2016-17 is as under:

Fuel	Requirement	Availability
Coal	730 MT	550 MT
Lignite	46 MT	46 MT
Gas/LNG	207 MMSCMD	102 MMSCMD

(Source: Draft 12th plan)

The widening gap between demand and supply has to be met by imports.

Recently, Cabinet Committee on Economic Affairs has approved a new mechanism to ensure coal availability to 78 GW of power projects likely to be commissioned by March 2015.

In addition to tapping fuel source or organizing its availability, it is also necessary to create the requisite infrastructure to facilitate fuel to reach the intended destination. The gestation period in the development of mines and even transport facilities is in some cases longer than the gestation period for setting up of thermal power stations which further compounds the problem of availability of fuel.

However, Government is taking initiatives for availability of inputs for the development of the power sector. Due to unfavorable demand-supply balance of hydrocarbons in India, Government is encouraging national oil companies to pursue equity oil and gas opportunities overseas. Director General of Hydrocarbons has also initiated steps to identify prospective areas for shale gas exploration as India has several shale formations which seem to hold gas.

Inspite of various measures taken by Government, non- availability of coal and gas in desired quantity would have an adverse impact on the overall performance of the power sector.

Financial health of state distribution utilities

The distribution segment plays a crucial role in the overall functioning of the power sector as it is the part of the system which generates the revenues needed to pay generation and transmission utilities. The viability of the power sector as a whole is therefore critically dependent on the health of the distribution sector. Poor financial health of utilities has resulted in underinvestment in the distribution network causing poor upkeep and maintenance. Consequently, the quality of supply is hampered, leading to customer dissatisfaction and poor recovery. This, in turn, leads to further deterioration of financial health of utilities. This vicious cycle needs to be broken.

Effective implementation of the financial restructuring plan during the XII plan would be a positive step towards the path of financial viability.

Other Key Concerns:

(a) Difficulty in obtaining environmental approvals and land clearances.

(b) The enhanced compensation for land acquisition in the new Land Acquisition Bill will make the setting up of projects costly.

(c) Availability of water for power plants and use of new technologies to reduce the requirement of water.

LONG TERM OUTLOOK

The long term outlook of the sector can be gauged from the following statistics relating to electricity as projected by the 18th Electric Power Survey (18th EPS):

Parameters	FY 2021-22	FY 2026-27	FY 2031-32
Electrical Energy Requirement (BU)	1904.86	2710.06	3710.08
Peak Electric Load (GW)	283.47	400.71	541.82
T&D Losses (%)	15.39	15.34	15.29
Load Factor	76.93	76.43	75.93

As reflected above, the demand is set to double from financial year 2021-22 to financial year 2031-32, indicating huge growth potential of the sector.

COMPANY OVERVIEW

NTPC LEADERSHIP POSITION IN INDIAN POWER SECTOR

Your company is the undisputed leader in Indian power sector, with approximately 18.44% of total installed capacity of the country as on 31.03.2013, your Company contributes to around 27.37% of the country's generation during the financial year 2012-13.

	All India	NTPC	% share
Capacity (MW)	223344	35820	16.04
Generation (BU)	912.06*	232.03	25.44
Capacity incl. JVs (MW)	223344	41184	18.44
Generation incl. JVs (BU)	912.06*	249.59**	27.37

* include imports from Bhutan, **include 2.60 BU captive

(Source: All India Data - CEA)

Your Company is ranked 1st in Asia among global electric utilities as per Forbes Global 2000 ranking published in the year 2013. It is also ranked as 384th largest company in the world in the Forbes Global, 2013 rankings. Your Company is also ranked no.1 Independent Power Producer and Energy Trader globally in the Platts Top 250 Global energy company rankings -2012.

Your Company aspires to be the world's largest and best power producer, with a mission to develop and provide reliable power, related products and services at competitive prices, integrating multiple energy sources with innovative and eco-friendly technologies and contribute to society.

STRENGTHS

Operational Performance

The operating performance of the Company has been considerably above the national average. During the financial year 2012-13, your Company has generated ~27% of the country's total power generation with an installed capacity of ~18% of the total installed capacity. Over the years, your Company has consistently operated at much higher operating efficiency as compared to all India operating performance.

In order to sustain the impressive operational efficiency levels, the company's strategy includes:

✓ With the aim of improving system wide reliability, reducing maintenance costs and outages, SACS (Special Analytics & Computational Services) Centre has been established at its Engineering Office in Noida. It provides early warning of slowly evolving equipment problems to the remotely located plant personnel using state of the art technologies.

- ✓ Use of tools like IDAAS (Integrated Data Acquisition and Analysis System) for on-site efficiency evaluation and math-modeling tools like PEPSE (Performance Evaluation of Power System Efficiencies) for verifying equipment and system efficiencies and gap identification; Steam path audit for estimation of solid particle erosion (SPE) and efficiency of steam turbine components etc.
- ✓ Introduction and roll out of RCM (Reliability Centered Maintenance), including REAP (Risk Evaluation and Prioritization).
- ✓ Enhancing quality of Plant Overhauls to target zero forced outage by design.
- ✓ Implementation of Overhauling Performance Index (OPI) for systematic and advanced planning of overhauls.
- ✓ Setting up a Central Repair Facility at Rihand to undertake in-house repair of large equipment including turbines and HT motors, in order to improve availability and reliability as well as to reduce downtime of the units.
- ✓ Creation of peer group knowledge teams for each equipment to harmonize the best practices at enterprise level.
- ✓ Use of a comprehensive Performance Evaluation Matrix (PEM) for relative evaluation of the performance of various power plants over a set of comprehensive performance indicators to create an environment of in-house challenge and competition.
- ✓ Use of PI System & PI System based applications for real time efficiency & loss calculations for ensuring early actions to minimize station losses.

Project Management

Your Company has adopted an integrated system for the planning, scheduling, monitoring and control of approved projects under implementation. To co-ordinate and synchronise all the support functions of project management it relies on a three-tiered project management system known as the Integrated Project Management and Control System (IPMCS) which integrates its engineering management, contract management and construction management control centers. The IPMCS addresses all stages of project implementation from concept to commissioning.

Needless to say, that the identification of critical issues and their timely resolution is crucial for faster project implementation. To achieve this, your Company has established a state-of-the-art IT enabled Project Monitoring Centre (PMC) for facilitating fast track project implementation. PMC facilitates monitoring of key project milestones and also acts as decision support system for the management. PMC is integrated enterprise-wide as a web based collaborative system to facilitate consolidation of project related issues and its resolution. Features like SMS based information delivery, real time video capture, storage & retrieval facility and video conference facility are extensively utilized for project tracking, issues resolution and management interventions on a regular basis.

Your Company has realized that there is a need to have an ERP platform which shall integrate all functions responsible directly or indirectly with project implementation and shall act as a tool to identify critical issues and continuously address them during project implementation phase itself. Your Company is establishing an integrated ERP platform for monitoring and controlling of critical project activities spread across various functions – engineering, contracts, finance and execution. This will help in decision support through timely identification of critical inputs and provide a holistic approach towards project implementation. The benefit expected to be accrued through the interface is focused monitoring of various inputs including drawings, materials and execution w.r.t major project milestones.

Your Company has successfully effected standardization and bulk ordering of 660 MW and 800 MW to reduce engineering time and thereby reduce project execution time. Towards this endeavour, your Company has so far awarded nine 660 MW units at Solapur & Mouda in Maharashtra, Meja in Uttar Pradesh (JV with UPRVNL) and Nabinagar (JV with BSPGCL) in Bihar; seven 800 MW units at Kudgi in Karnataka, Lara in Chhattisgarh and Gadarwara in Madhya Pradesh.

Robust financials and systems

Your Company has strong financial systems in place. It believes in prudent management of its financial resources and strives to reduce the cost of capital. It has robust financials leading to strong cash flows which are being progressively deployed in generating assets. Your Company has a strong balance sheet coupled with low gearing and healthy coverage ratios. As a result, your Company has been able to raise resources for its capital expansion projects at very competitive interest rates. Your Company has been accorded AAA (Triple A) rating for domestic loans & bonds from CRISIL, ICRA and CARE. Your Company has also got 'NIL Comments' from Comptroller and Auditor General (CAG) for 4 consecutive years.

Sound Corporate Governance

NTPC's Corporate Governance philosophy is based on conscience, openness, fairness, professionalism and accountability. These qualities are ingrained in its value system and are reflected in its policies, procedures and systems. Your Company not only believes in adopting best corporate governance systems but also in proactive inclusion of public interest in its corporate priorities and has developed extensive social outreach. In recognition of NTPC's excellence in Corporate Governance, various national and international accolades have been conferred in recent years.

Human Resources

Your Company has a highly talented team of committed professionals and has been able to induct, develop and retain the best talent. The commitment of the employees is also reflected in terms of financial parameters such as sales per employee, PAT per employee, value added per employee etc. We have a pool of ~ 25,000 employees creating value for the Company. Over the years, NTPC has been consistently ranked among the best employers in prestigious surveys. NTPC has a very low executive attrition rate.

Long term power purchase agreements with our customers & Payment Security Mechanism

Each of our stations has PPAs with its customers. Almost the entire output of NTPC's power stations has been contracted for under long-term PPAs. Due to existence of secured payment mechanism, NTPC has been able to realize its 100% dues for last ten consecutive years.

Beyond 2016, the sales are secured through supplementary agreements with the customers under which the customers have agreed to create a first charge on their own receivables in our favour and in the event of a payment default assign such receivables into an escrow account.

Low Cost Producer

Most of the NTPC's coal based stations are pit head stations which provides cost advantage to your Company as compared to its peers. The average cost of tariff for the financial year 2012-13 was ₹2.96/kWh. Low average tariff of your Company ensures least risk of power off-take.

RISKS & CONCERNS

To retain the status of sector leader, your Company has drawn a long term corporate plan to become a 128 GW company by 2032 which means tripling the capacity from the existing levels. Ambitious capacity addition program brings number of challenges for the company. We recognize that risks are not only inherent to any business but are also dynamic in nature. We are also susceptible to certain risks arising out of various activities undertaken in the normal course of our business. We have adequate measures in place to overcome/manage these risks. These risks also provide the challenges and opportunities to view the business with a different perspective. NTPC has adopted multi-pronged strategy which includes adoption of new technology such as super-critical units of 660 MW and above, enhanced delegation of power for quick decision making, state of the art project monitoring centre to have on-line monitoring of progress of projects.

In addition, diversifications into new areas like coal mining, hydro electric, nuclear power bring challenges which are new to company. With its proven execution and operational experience and highly skilled and motivated man power, the Company is geared to take such challenges in its stride.

Sectoral challenges such as fuel risk and poor financial health of discoms are key concerns which may impact the sustainable development of the sector. As far as, fuel risk is concerned, your Company has taken several steps which include development of coal mines in India.

Your Company has also commissioned two 5 MW solar power projects and has a target of 1000 MW RES capacity by financial year 2016-17, thus, reflecting its resolve to diversify the fuel risk.

COMPETITION

Due to the gap between demand and supply in the Indian power sector, there has generally been a stable market for power generation companies in India. As already brought above, your Company is the largest power utility in India followed by the Maharashtra State Power Generation Company Ltd. with an installed capacity of 10237 MW *(Source –website of Mahagenco)* and a market share of about ~4.5% as on 31.03.2013.

Government of India has taken several policy measures which have provided an enabling environment for private investors to participate in power sector. With the entry of private players in power sector, the competition is expected to intensify. However, your Company is geared to face any competition. With proven in house engineering capabilities built in the past and wide ranging experience of project execution and with long term PPAs of over 100000 MW in place, we are confident that we shall be able to retain our leadership position in the industry. Further, our high operational efficiency enables us to sell power at competitive prices and achieve savings. We believe that our monitoring and maintenance techniques offer us a competitive advantage in an industry where reliability and maintenance costs are a significant determinant of profitability.

The share of private sector capacity has increased to ~69 GW which is ~31% of the total installed capacity of the country as on March 31, 2013. However, private sector has contributed ~20% of total electricity generation in the financial year 2012-13.

RISK MANAGEMENT

Your Company has an elaborate Enterprise Risk Management (ERM) framework in place. As part of implementation of the ERM framework, an Enterprise Risk Management Committee (ERMC) comprising Executive Directors representing geographically dispersed regions and core functions of the Company is in place. ERMC has been entrusted with the responsibility to identify and review the risks and formulate action plans and strategies for risk mitigation on short-term as well as long-term basis. For the financial year 2012-13, ERMC has identified following as the High/ Medium risks for the Company:

High Risks:

- Risks relating to coal mining
- Difficulties in acquisition of land
- Compliance of emission, ash utilization and regulatory norms
- Sustaining efficient plant operations
- Threat to safety & security of people and property

Medium Risks:

- Delay in execution of projects
- Inadequate fuel supply
- Risk of not getting schedule
- Challenges in attracting and retaining skilled and experienced employees

These areas are being regularly monitored through reporting of key performance indicators of identified risks and exceptions with respect to risk assessment criteria are being reported to the top management. The ERMC meets every quarter to deliberate on strategies to mitigate the risks to ensure least impact on operational efficiency/profitability of your Company.

INTERNAL CONTROL

Your Company has robust internal systems and processes in place for smooth and efficient conduct of business and complies with relevant laws and regulations. A comprehensive delegation of power exists for smooth decision making which is being further reviewed to align it with changing business environment and speedier decision making. Elaborate guidelines for preparation of accounts are followed consistently for uniform compliance. In order to ensure that all checks and balances are in place and all internal control systems are in order, regular and exhaustive internal audits are conducted by experienced firms of Chartered Accountants in close co-ordination with the Company's own Internal Audit Department. Besides, the Company has two committees of the Board viz. Audit Committee and Committee on Management Controls to keep a close watch on compliance with Internal Control Systems.

A well defined internal control framework has been developed identifying key controls and supervision of operational efficiency of designed key controls by Internal Audit. The framework provides elaborate system of checks and balances based on self assessment as well as audit of controls conducted by Internal Audit at process level. Gap Tracking report for operating efficiency of controls is reviewed by management regularly and action is taken to further strengthen the Internal Control System by further standardizing systems and procedures and implement process changes, wherever required, keeping in view the dynamic environment in which your Company is operating. The Internal Control Framework system presents a written assessment of effectiveness of Company's internal control over financial reporting by the process owners; project/office heads to facilitate certification by CEO and CFO and enhances reliability of assertions.

FINANCIAL DISCUSSION AND ANALYSIS

A detailed financial discussion and analysis on Financial Statements is furnished below. Figures of previous year have been regrouped/ rearranged wherever necessary. Reference to Note(s) in the following paragraphs refers to the Notes to the Financial Statements for the year 2012-13 placed elsewhere in this report.

A Results from Operations

1 Total Revenue (Note 22 & 23)

		FY 2012-13	FY 2011-12	Change
	Units of electricity sold (MUs)	**215,922**	**206,682**	**4%**
	Revenue	Amount in ₹ Crore		
1	Energy Sales (Including electricity duty)	64,715.88	61,430.85	**5%**
2	Consultancy & other services	126.81	142.69	**-11%**
3	Energy internally consumed	76.73	80.75	**-5%**
4	Interest from customers	432.60	510.57	**-15%**
5	Revenue recognized from deferred foreign currency fluctuation liability	3.52	0.16	2100%
6	Provisions written back	844.70	315.86	**167%**
	Revenue from operations (gross)	**66,200.24**	**62,480.88**	**6%**
7	Less:- Electricity duty	526.31	428.65	**23%**
	Revenue from operations (net)	**65,673.93**	**62,052.23**	**6%**
8	Other income	3,101.58	2,789.65	**11%**
9	**Total revenue**	**68,775.51**	**64,841.88**	**6%**

The revenue of the Company comprises income from sale of electricity (net of electricity duty), consultancy and other services, interest earned on investments such as term deposits, bonds (issued under One Time Settlement Scheme) and dividend income from subsidiary and joint venture companies and mutual funds. The total revenue for financial year 2012-13 is ₹ 68,775.51 crore as against ₹ 64,841.88 crore in the previous year registering an increase of 6%.

The major revenue comes from energy sales. The tariff for computing energy sales is determined in terms of Central Electricity Regulatory Commission Regulations as notified from time to time which are briefly discussed below:

Tariffs for computation of Sale of Energy

The Central Electricity Regulatory Commission (CERC) has issued Tariff Regulations for the period 2009-14 - Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2009, which is a balanced regulation for both consumers and investors. As per the Regulations, 2009, the tariff for supply of electricity comprises two parts i.e. Capacity Charges for recovery of Annual Fixed Cost based on plant availability and Energy Charges for recovery of fuel cost. In addition, Regulations also provide for the recovery of certain miscellaneous charges. The CERC sets tariff for each stage of a station in accordance with the notified tariff regulations/norms.

Capacity Charge

The capacity charge is allowed to be recovered in full if plant availability is at least 85%. If the availability of the plant is lower than 85%, the capacity charges are recovered on a pro-rata basis based on normative parameters as specified in the said regulations.

Energy Charge

Energy charges for the electricity sold are determined on the basis of landed cost of fuel applied on the quantity of fuel consumption derived on the basis of norms for heat rate, auxiliary power consumption, specific oil consumption etc.

Other Charges

Besides the capacity and energy charges, the other elements of tariff are:

- Cost of hedging in respect of interest and repayment of foreign currency loans and exchange rate fluctuations for the un-hedged portion of interest and repayment of foreign currency loans on a normative basis.
- The unscheduled interchange charge for the deviation in generation with respect to schedule, payable (or receivable) at rates linked to frequency prescribed in the regulation to bring grid discipline. The unscheduled interchange charge is payable (or receivable) at rates notified by the CERC from time to time.
- Deferred tax liability for the period upto 31.03.2009 on generation income is allowed to be recovered from the customers on materialization.

Each element of total revenue is discussed below:

Energy sales (including electricity duty)

Your Company sells electricity to bulk customers comprising, mainly, electricity utilities owned by State Governments. Sale of electricity is made pursuant to long-term Power Purchase Agreements (PPAs) entered into for 25 years in case of most of our coal-fired plants and for 15 years in case of most of gas-fired plants in line with the estimated average life of the plants. The actual lives of the stations are often longer and unless customer ceases to draw power contracts continue to be in force until they are formally extended, renewed or replaced. With the issuance of CERC Tariff Regulation 2009, the average life of the gas stations is also estimated as 25 years. Hence, the long-term power purchase agreements for new gas stations hence forth, will also be for the same period.

During the year, there is an increase in the commercial capacity by 3830 MW as detailed under:-

Unit	Capacity (MW)	Commercial Operation Date
Farakka-III Unit #1	500	04.04.2012
Sipat-I Unit #2	660	25.05.2012
Sipat-I Unit #3	660	01.08.2012
Simhadri-II Unit #2	500	30.09.2012
Rihand-III Unit #1	500	19.11.2012
Vindhyachal-IV Unit #1	500	01.03.2013
Mouda-I Unit #1	500	13.03.2013
Dadri Solar	5	30.03.2013
A&N Solar	5	31.03.2013
Total	**3830**	

The commercial capacity of 1160 MW comprising unit #1 of 500 MW of Simhadri Stage-II and unit #1 of 660 MW of Sipat Stage-I, which were declared under commercial operation during the financial year 2011-12, were available for the entire financial year 2012-13 as compared to part of financial year 2011-12.

In line with the Regulations, 2009, the CERC has issued provisional/ final tariff orders w.e.f. 01.04.2009 for all the stations except for Talcher Thermal Power Station. Beneficiaries are billed in accordance with the said provisional/final tariff orders except for three stations where it is done on provisional basis (Note 22 (a)). The amount billed for the year ended March 31, 2013 on this basis is ₹ 61,794.68 crore.

Income from energy sales (including electricity duty) for the financial year 2012-13 was ₹ 64,715.88 crore which constituted 94% of the total revenue. The income from energy sales (including electricity duty) has increased by 5% over the previous year's income of ₹ 61,430.85 crore.

In respect of stations for which the CERC has issued final tariff orders under the Regulations, 2009 and Renewable Energy Regulations, 2009, sales have been recognised at ₹ 54,588.81 crore after truing up capital expenditure to arrive at the capacity charges. For other stations, pending determination of station-wise final tariff by the CERC, sales have been provisionally recognized at ₹ 8,059.66 crore on the basis of principles enunciated in the Regulations, 2009 after truing up capital expenditure to arrive at the capacity charges (Note 22(b)).

Sales include ₹ 1,241.90 crore pertaining to previous years recognized based on the orders issued by the CERC/Appellate Tribunal for Electricity (Note 22 (c)).

Sales also include ₹ 246.04 crore on account of income-tax recoverable from the beneficiaries as per Regulations, 2004 (Note 22 (e)).

As per Tariff Regulations 2009, the deferred tax liability for the period up to March 31, 2009 whenever it materializes shall be recoverable directly from the beneficiaries. Accordingly, sales also include ₹ 53.16 crore on account of deferred tax materialized which is recoverable from beneficiaries (Note 22 (e)).

Sales also include electricity duty on energy sales amounting to ₹ 526.31 crore. The same has been reduced from sales in the statement of profit and loss.

The average tariff for the financial year 2012-13 is ₹ 2.96/KWh. This average tariff is at the same level as it was for the previous year. The average tariff includes adjustments pertaining to previous years. If the impact of such adjustments were to be excluded, the average tariff would be ₹ 2.90/KWh in financial year 2012-13 as against ₹ 2.94/KWh in the previous year.

There has been 100% realization of the dues within the stipulated time frame for the tenth year in succession. All the beneficiaries have opened and are maintaining Letter of Credit equal to or more than 105% of average monthly billing as per One-Time Settlement Scheme (OTSS). In order to ensure prompt and early payment of bills for supply of energy to beneficiaries, your Company has formulated a rebate scheme by way of providing graded incentive for early payment based on the bill(s) raised on state utilities who are the members of NTPC's rebate scheme.

Under OTSS, tri-partite agreements are valid up to October 31, 2016. For the period beyond October 2016, the supplies to state utilities shall be covered by an escrow arrangement. The supplementary agreements signed with all state utilities have a provision of keeping a first charge on their revenue streams for supplies made by your Company. Under the supplementary agreement, the state utilities have agreed to provide payment security through execution of the hypothecation agreement and the default escrow agreement. Further, this will be over and above the LC requirement of 105% of average monthly billing. Moreover, NTPC can resort to regulation/diversion of power supply to third party at the risk and cost of defaulting utilities in case of non-payment of dues.

Consultancy and other services

Accredited with an ISO 9001:2000 certification, the Consultancy Division of your Company undertakes consultancy and turnkey project contracts for domestic and international clients in the different phases of power plants viz. engineering, project management, construction management, operation and maintenance of power plants.

During the year, Consultancy Division posted an income of ₹ 121.51 crore as against ₹ 141.82 crore achieved in the last financial year. In the financial year 2012-13, it has recorded a profit of ₹ 24.52 crore as against ₹ 30.73 crore in the last financial year. A total of 49 orders valued at ₹ 60.74 crore were secured by the division during the year.

Energy Internally Consumed

Energy internally consumed relates to own consumption of power for construction works at station(s), township power consumption, etc. It is valued at variable cost of generation and is shown in 'Revenue from Operations' with a debit to respective expense head under power charges. There is a decrease of 5% in the value of energy internally consumed during the year over the previous year due to decrease in fuel cost.

Interest from Customers

CERC Regulations provides that where after the truing-up, the tariff recovered is less than the tariff approved by the Commission, the Company shall recover from the beneficiaries the under recovered amount along-with simple interest. Accordingly, the interest recoverable from the beneficiaries amounting to ₹ 432.60 crore has been recognised as Interest from customers.

Provisions written back

During the financial year 2012-13, the Company had written back provisions made in earlier years amounting to ₹ 844.70 crore in comparison to ₹ 315.86 crore in the financial year 2011-12. Provision written back includes a write back of ₹ 835.97 crore on account of settlement of dues of erstwhile Delhi Electric Supply Undertaking (Note 32).

Other Income (Note 23)

'Other income' mainly comprises interest income from bonds issued under One Time Settlement Scheme (OTSS), income from term deposits with banks, mutual funds, dividend on equity investment in subsidiary & joint venture companies and miscellaneous income.

'Other income' in financial year 2012-13 was ₹ 3,101.58 crore as compared to ₹ 2,789.65 crore in the financial year 2011-12. Broadly, the break-up of other income is as under:

₹ Crore

	FY 2012-13	FY 2011-12
Interest on OTSS bonds /Loan to State Govt.	555.44	702.10
Income from investment in bank term deposits, mutual funds	1,951.96	1,692.66
Dividend from JVs and Subsidiaries/Interest from subsidiaries	131.03	82.19
Income earned on other heads such as hire charges, profit on disposal of assets, etc.	538.19	417.06
Total	**3,176.62**	**2,894.01**
Less: Transfer to EDC/ development of coal mines	47.14	43.11
Less: Transfer to Deferred Foreign Currency Fluctuation Liability	27.90	61.25
Net other income	**3,101.58**	**2,789.65**

Interest income from OTSS bonds (including loan to State Government) for financial year 2012-13 is ₹ 555.44 crore as compared to ₹ 702.10 crore in financial year 2011-12. The reduction in interest income to the extent of ₹ 146.66 crore is due to redemption of OTSS bonds amounting to ₹ 1,622.46 crore and repayment of loan in lieu of settlement of dues to State Government amounting to ₹ 95.73 crore. The Company has earned income of ₹ 1,951.96 crore during the financial year 2012-13 on account of term deposits made in bank and investments in mutual funds as against ₹ 1,692.66 crore earned last year. The income from investment in bank term deposits and mutual funds has registered a 15% increase over last financial year due to increase in interest earnings on account of higher interest rates / dividends during the current year as compared to the previous year. The interest and dividend income has also increased due to increase in average annual investment from ₹ 18,400 crore in financial year 2011-12 to ₹ 20,649 crore in financial year 2012-13.

We have earned ₹ 128.66 crore as dividend from our investments in joint venture and subsidiary companies. Further, ₹ 2.37 crore has been earned as interest from loan of ₹ 12.58 crore (as at March 31, 2013) extended to Kanti Bijlee Utpadan Nigam Limited, one of our subsidiary companies. Also, an amount of ₹ 538.19 crore has been earned from various other sources mainly consisting of miscellaneous income of ₹ 200.06 crore, sale of scrap ₹ 89.06 crore, surcharge received from customers ₹ 87.75 crore, Interest on income tax refunds ₹ 39.39 crore, interest from contractors ₹ 36.25 crore and interest on loans to employees ₹ 28.84 crore etc.

2 Expenses (Note 24, 25 & 26)

2.1 Expenses related to operations

	FY 2012-13		FY 2011-12	
Commercial generation (MUs)	**230,993**		**220,696**	
Expenses	₹ Crore	₹ per kWh	₹ Crore	₹ per kWh
Fuel	41,018.25	1.78	41,635.46	1.89
Employee benefits expense	3,360.12	0.14	3,101.71	0.14
Generation, administration and other expense	4,211.22	0.18	3,588.79	0.16
Total	**48,589.59**	**2.10**	**48,325.96**	**2.19**

The expenditure incurred on fuel, employee benefits expense and generation, administration and other expenses for the financial year 2012-13 was ₹ 48,589.59 crore as against the expenditure of ₹ 48,325.96 crore incurred during the previous year. In terms of expenses per unit of power produced, it was ₹ 2.10 per unit in financial year 2012-13 as against ₹ 2.19 per unit in financial year 2011-12. Component-wise, there has been a decrease in the fuel cost, however the employee benefits expense and generation, administration and other expenses have increased marginally. The increase in commercial generation due to commercial operation of new units has resulted in an additional operational expenditure of ₹ 3,034.17 crore.

A discussion on each of these components is given below:

Fuel

Expenditure on fuel constituted 84% of the total expenditure relating to operations. Expenditure on fuel was ₹ 41,018.25 crore in financial year 2012-13 in comparison to ₹ 41,635.46 crore in financial year 2011-12 representing a decrease of about 1%. From the current year fuel expenditure, an amount of ₹ 2,526.29 crore is attributable to commercial capacity added during the year. The break-up of fuel cost in percentage terms is as under:

	FY 2012-13	FY 2011-12
Fuel cost (₹ Crore)	**41,018.25**	**41,635.46**
	% break-up	
Coal	80%	82%
Gas	15%	15%
Oil	1%	1%
Naphtha	4%	2%

The major part of the fuel cost is on coal. During the financial year 2012-13, the average price of coal was lower as compared to the average price in previous financial year, mainly on account of better domestic coal supply and lesser reliance on costlier imported coal. Thus, inspite of higher generation by coal based stations during the financial year 2012-13, the total coal cost was lower than previous financial year. However, the gains on coal cost were offset by higher average price of gas and naphtha during the financial year 2012-13 as compared to the average price in previous year.

Further, an amount of ₹ 2,531.10 crore is recognized as Contingent liability on account of difference between the amount billed by the coal companies and the payment released by NTPC pending resolution of the issues with coal companies (refer Notes 33 and 50(a)(iii)). The Company expects possible reimbursement of ₹ 2,531.10 crore against the Contingent liability in terms of CERC Regulations, 2009.

The prices of other component of fuel cost i.e. gas, oil and naphtha have shown an increase during the financial year 2012-13 as compared to the prices of previous year. Over all, fuel cost per unit generated decreased to ₹ 1.78 in financial year 2012-13 from ₹ 1.89 in financial year 2011-12.

The power plants of the Company use coal and natural gas as the primary fuels. Oil is used as a secondary fuel for coal-fired plants and naphtha as an alternate fuel in gas-fired plants. Under the tariff norms set by the CERC, your Company is allowed to pass on fuel charges through the tariff, provided the Company meets certain operating parameters. The Company purchases coal under the long term coal supply agreements with subsidiaries of Coal India Limited (CIL) and with Singareni Collieries Company Limited (SCCL). Based on the revised model Coal Supply Agreement (CSA) signed with CIL on May 29, 2009, we have CSAs in place for all our units commissioned before 31.03.2009. The CSAs are valid for 20 years and has a provision for review after every 5 years. The annual quantity contracted under these CSAs signed with the subsidiary coal companies of CIL and with SCCL is 124.90 Million Metric Tonnes (MMT).

In respect of units commissioned after March 2009, till 17th July 2013, CSAs have been signed with CIL subsidiaries for 4760 MW capacity. Further, in-principle agreement has been reached with CIL for signing of CSAs for balance capacity of 4860 MW. Detailed CSAs will be signed shortly.

In order to ensure uninterrupted supply of coal to its power stations, your Company during the financial year 2012-13 continued to source coal through bilateral arrangements as well as e-auction. A bilateral agreement has been reached with SCCL for supply of 4.0 MMT of coal. These supplies are at a premium of ₹ 1,034/MMT over SCCL's revised notified price. Further, a bilateral agreement has been reached with North Eastern Coalfields Limited for supply of 0.300 MMT of 'A' grade coal, beyond the annual linkage quantity, to Farakka at notified prices. Your Company participated in 16 e-auctions announced by various coal subsidiaries of CIL. Against these e-auctions 0.514 MMT of coal was allotted to the Company.

In addition to these arrangements of procuring domestic coal, your Company is also having arrangements for procuring imported coal, to meet the shortfall in coal supply from domestic sources. Your Company has adopted multiple packaging concept for awarding imported coal contract based on geographical location of power stations by inviting bids under International Competitive Bidding basis. During the financial year 2012-13, award has been made for 12 MMT of imported coal.

During the financial year 2012-13, coal based stations consumed 155.07 MMT of coal as against 141.13 MMT consumed in the financial year 2011-12. This includes 9.23 MMT of imported coal as compared to 11.89 MMT imported in financial year 2011-12.

The Company sources gas domestically under an administered price mechanism regime. The main gas supplier is GAIL. Gas prices are fixed by the Ministry of Petroleum and Natural Gas (MoP&NG).

The Company has Gas Sales and Transmission Contracts with GAIL for supply of Administered Price Mechanism (APM) gas and Panna Mukta Tapti (PMT) gas to Anta, Auraiya, Dadri, Faridabad, Kawas & Gandhar for a combined quantity of 14.48 Million Metric Standard Cubic Meters per Day (MMSCMD). The validity of the APM gas agreements is upto July 6, 2021 while the PMT gas agreements are valid upto December 21, 2019. As per the terms of these agreements, the gas price is regulated in terms of the Government pricing orders issued from time to time. The present applicable price of APM/PMT gas (at APM price) inclusive of royalty is US$ 4.2/ MMBtu as per GoI order dated 31.05.2010. The total quantity of APM & PMT gas supplied during 2012-13 was around 2840 MMSCM.

A long term agreement has been signed by your Company with GAIL for supply of 2.0 MMSCMD RLNG on firm basis and 0.5 MMSCMD on fallback basis for the NCR stations viz. Anta, Auraiya, Dadri & Faridabad valid upto 2019. The price is as declared on a monthly basis by Petronet LNG Ltd. as per the directives of GoI on "Pooled Price" basis. Around 485 MMSCM of RLNG was supplied by GAIL during the year 2012-13 under this agreement.

Your Company has tied up GoI allocated 0.82 MMSCMD non-APM gas of ONGC (through GAIL) for WR stations (Kawas & Gandhar). The contract is valid till 17.11.2016. Around 124 MMSCM of non-APM gas was supplied by GAIL during the year 2012-13.

Government of India has allocated 4.46 MMSCMD of KG D6 gas for NTPC's NCR stations viz. Anta, Auraiya, Dadri & Faridabad. Gas Supply & Purchase Agreements (GSPAs) have been signed with Reliance Industries Ltd. (RIL) and its JV partner Niko and BPEAL for the supply of 2.30 MMSCMD of this gas which is valid till March 2014. MoP&NG has directed RIL and its JV partners for signing the GSPA for balance quantity of 2.16 MMSCMD. RIL furnished a draft agreement which is in total variance from the earlier GSPA. Pending resolution of some of the terms & conditions, the GSPA for balance quantity of 2.16 MMSCMD has not yet been signed. The pricing of this gas is as decided by the Empowered Group of

Ministers, which at present is US$ 4.20 /MMBTU. As against the annual contracted quantity of 839.50 MMSCM (considering DCQ of 2.30 MMSCM for 365 days) the total quantity of KG D6 gas supplied during the year 2012-13 was 237 MMSCM.

To meet the shortfall in supply of gas, NTPC procures Spot RLNG on limited tender basis from domestic suppliers and on 'Single Offer' basis from public sector gas marketing companies. During the year 2012-13, twelve rounds of tendering on "Spot basis" and six rounds of tendering on "Single Offer basis" have been conducted. The approximate delivered price for these supplies ranged between US$ 12.71/MMBtu to US$ 25.70 /MMBtu which has been off-taken strictly in the ascending order of prices. These RLNG supplies are being contracted on reasonable endeavour basis with no penalty on either party for short supply / short off take.

Your Company tied up approximately 1,712.4 MMSCM of Spot RLNG during the year 2012-13 against which approximately 208 MMSCM was off-taken.

During the financial year 2012-13, 10.67 MMSCMD of gas was received, which includes 8.12 MMSCMD of APM/PMT/Non APM gas, 1.33 MMSCMD of Long Term RLNG, 0.65 MMSCMD of KG D6 gas and 0.57 MMSCMD of spot gas and fall back gas. Gas received during 2011-12 was 13.09 MMSCMD.

Rajiv Gandhi Combined Cycle Power Project (RGCCPP), Kerala generates power on naphtha as no gas supply is available. Besides RGCCPP, other gas based stations also used naphtha depending upon the demand from customers and schedule from load dispatch centres. During the financial year 2012-13, 0.267 million MTs of naphtha was consumed as against 0.123 million MTs in the previous year.

Employees benefits expense (Note 24)

Employees benefits expense have increased by 8% from ₹ 3,101.71 crore in financial year 2011-12 to ₹ 3,360.12 crore in financial year 2012-13 of which ₹ 162.41 crore is attributable to commercial capacity added during the year. Employees' remuneration and benefits expenses include salaries and wages, bonuses, allowances, benefits, contribution to provident and other funds and welfare expenses. These expenses account for approximately 7% of operational expenditure in financial year 2012-13.

Generation, Administration and Other Expenses (Note 26)

Generation, administration and other expenses consist primarily of repair and maintenance of buildings, plant and machinery, power and water charges, security, insurance, training and recruitment expenses and expenses towards travel, communication and provisions. These expenses are approximately 9% of operational expenditure in financial year 2012-13. In absolute terms, these expenses increased to ₹ 4,211.22 crore in financial year 2012-13 from ₹ 3,588.79 crore in financial year 2011-12 registering an increase of 17%. In terms of expenses per unit of generation, it is ₹ 0.18 in financial year 2012-13 as compared to ₹ 0.16 in previous financial year. An increase of ₹ 345.47 crore is attributable to addition of commercial capacity during the financial year 2012-13.

Repair & maintenance expenses constitute 48% of total generation, administration and other expenses and have increased to ₹ 2,028.99 crore from ₹ 1,746.78 crore resulting in an increase of 16%.

During the financial year 2012-13, your Company has made provisions amounting to ₹ 206.25 crore. This includes a provision of ₹ 103.24 crore towards tariff adjustments, ₹ 49.89 crore towards unserviceable capital work-in-progress and ₹ 1.04 crore towards permanent diminution in the value of investment by the Company in one of its joint venture company i.e. National Power Exchange Limited. Further, there are provisions for 'Others' amounting to ₹ 40.51 crore, this mainly includes a provision towards usage of transmission line at a project and expenses towards an arbitration award.

2.2 Finance Costs (Note 25)

The finance costs for the financial year 2012-13 were ₹ 1,924.36 crore in comparison to ₹ 1,711.64 crore in financial year 2011-12. The details of interest and other borrowing costs are tabulated below:

₹ Crore

	FY 2012-13	FY 2011-12
Interest on:		
Borrowings	4,235.28	3,558.47
Others	73.14	60.99
Total interest	**4,308.42**	**3,619.46**
Other borrowing costs	114.57	84.18
Exchange differences regarded as adjustment to interest costs	-350.21	350.21
Total	**4,072.78**	**4,053.85**
Less: Transfers to		
Expenditure during construction period	2,101.90	2,308.47
Development of coal mines	46.52	33.74
Net interest and Other borrowing costs	**1,924.36**	**1,711.64**

Interest on borrowings (including interest during construction) has increased by 19% over last financial year due to increase in long term borrowings (net of repayment) during the year by ₹ 7,262.44 crore. The average cost of borrowing has increased marginally to 7.8008% in financial year 2012-13 from 7.7649% in previous financial year mainly due to the repayment of loans carrying lower rate of interest and raising of new loans at comparatively higher rate of interest.

The 'Other borrowing costs' have increased by 36% from ₹ 84.18 crore in financial year 2011-12 to ₹ 114.57 crore in financial year 2012-13. The increase is mainly due to fees and export credit guarantee premium on new foreign currency borrowings.

During the financial year 2012-13, unfavourable exchange rate variation treated as adjustment to interest cost amounted to ₹ 350.21 crore w.r.t. financial year 2011-12 has been reversed consequent to clarification by Ministry of Corporate Affairs, Government of India vide circular no. 25/2012 dated August 9, 2012 which clarified that para 6 of Accounting Standard (AS) 11 and para 4 (e) of AS 16 shall not apply to a Company which is applying para 46-A of AS 11 (Note 35).

For the financial year 2012-13, an amount of ₹ 2,101.90 crore relating to finance costs of projects under construction was capitalized while the corresponding amount for the previous year was ₹ 2,308.47 crore. Thus, finance costs capitalized registered a decrease of 9%. In addition, ₹ 46.52 crore has been capitalized in respect of development of coal mines as against ₹ 33.74 crore in previous year.

2.3 Depreciation and amortization expense (Note 12)

The depreciation and amortization expense charged to the profit and loss account during the year was ₹ 3,396.76 crore as compared to ₹ 2,791.70 crore in financial year 2011-12, registering an increase of 22%. This is due to increase in the gross block by ₹ 21,417.44 crore i.e. from ₹ 81,828.26 crore in the previous financial year to ₹ 1,03,245.70 crore in the current financial year. The increase in gross block is largely on account of increase in commercial capacity by 3830 MW resulting from additional capitalization on account of commercial declaration of new units as detailed above under 'Energy Sales'. Further, depreciation for unit #1 of 500 MW of Simhadri Stage-II and unit #1 of 660 MW of Sipat Stage-I has been charged for the entire financial year 2012-13 as against a pro-rata charge during the financial year 2011-12. The impact on depreciation from additional capitalization during the financial year 2012-13 is ₹ 621.33 crore.

As per the accounting policy of the Company, depreciation on the assets of the generation of electricity business is charged on straight line method following the rates and methodology notified by the CERC Tariff Regulations, 2009 in accordance with Section 616 (c) of the Companies Act, 1956 and depreciation on the assets of the coal mining, oil & gas exploration and consultancy business, is charged on straight line method following the rates specified in Schedule XIV of the Companies Act, 1956.

In case of certain assets, the Company has continued to charge higher depreciation based on technical assessment of useful life of those assets.

2.4 Prior Period Items (net)

Certain elements of income and expenditure have been charged to the profit and loss account relating to previous years. For the financial year 2012-13 a net amount of ₹ 29.72 crore was booked as prior period income whereas in the financial year 2011-12 a net amount of ₹ 313.58 crore was accounted as prior period income.

3 Profit Before Tax & Exceptional items

The profit of the Company before tax is tabulated below:

₹ Crore

	FY 2012-13	FY 2011-12
Total revenue	68,775.51	64,841.88
Less:		
Expenditure related to operations	48,589.59	48,325.96
Finance cost	1,924.36	1,711.64
Depreciation and amortization expenses	3,396.76	2,791.70
Prior period items (net)	-29.72	-313.58
Profit Before Tax	14,894.52	12,326.16

4 Exceptional Items (Income)

During the financial year 2012-13 an amount of ₹ 1,684.11 crore has been recognized as exceptional item (income) in view of Government of India, Ministry of Power directions to the Government of National Capital Territory of Delhi to release payment towards settlement of dues of erstwhile Delhi Electric Supply Undertaking to the Company along with the interest. (Note 32)

5 Tax Expense

The Company provides for current tax and deferred tax computed in accordance with provisions of Income Tax Act, 1961.

Under Tariff Regulations, 2009, w.e.f. April 01, 2009, income tax is recoverable on normative basis as return on equity following the applicable rate of tax for respective year. The actual income tax liability, if any (more or less than the normative) is to be borne by the Company. Accordingly, provision for current tax has been computed at the applicable rate of 32.445% for the financial year 2012-13.

The deferred tax liability related to the period upto March 31, 2009 is recoverable from customers as and when the same materializes. However, the deferred tax liability/asset for the period after April 01, 2009 is to the account of the Company.

Provision for Current tax

A total provision of ₹ 3,680.84 crore has been made towards current tax for the year as against the provision of ₹ 3,068.48 crore made in financial year 2011-12, an increase of ₹ 612.36 crore. The increase is mainly on account of increase in tax for the current year due to increase in profit.

Provision for Deferred tax

The deferred tax liability arisen during the year on account of timing difference is ₹ 278.40 crore as against the provision of ₹ 33.95 crore made in financial year 2011-12, an increase of ₹ 244.45 crore. The increase is on account of a lesser amount of deferred tax liability in the financial year 2011-12 due to the change in the method of charging depreciation for tax purposes.

	FY 2011-12 (₹ Crore)		
	Current tax	Deferred tax	Total
Provision for FY 2011-12	2,913.64	327.85	3,241.49
Adjust. for earlier years	154.84	(293.90)	(139.06)
Net prov. as per statement of P&L	3,068.48	33.95	3,102.43

	FY 2012-13 (₹ Crore)		
	Current tax	Deferred tax	Total
Provision for FY 2012-13	3,839.69	278.40	4,118.09
Adjust. for earlier years	(158.85)	-	(158.85)
Net prov. as per statement of P&L	3,680.84	278.40	3,959.24

Net provision of tax for the financial year 2012-13 was ₹ 3,959.24 crore in comparison to ₹ 3,102.43 crore in the financial year 2011-12, an increase of ₹ 856.81 crore.

6 Profit After Tax

The profit of the Company after tax is tabulated below:

₹ Crore

	FY 2012-13	FY 2011-12
Profit Before Tax & Exceptional items	**14,894.52**	**12,326.16**
Exceptional Items (Income)	1,684.11	-
Less:- Tax as per statement of P&L	3,959.24	3,102.43
Profit After Tax	12,619.39	9,223.73

The profit after tax has grown by 37%.

7 Segment-wise Performance

For the purpose of compiling segment-wise results, the business of the Company is segregated into 'Generation' and 'Other Business'. The Company's principal business is generation and sale of bulk power. Other business includes providing consultancy, project management and supervision, oil and gas exploration and coal mining.

The profit before tax and interest in the generation business for the financial year 2012-13 was ₹ 16,645.05 crore as against ₹ 12,300.36 crore for financial year 2011-12. The profit before tax and interest from 'Other Business' represented by income from consultancy, coal mining and oil exploration was ₹ 16.14 crore for financial year 2012-13 as against ₹ (-) 19.46 crore for the previous financial year.

B. Financial Position

Assets and liabilities in the Balance Sheet have been classified under head 'Current' and 'Non-Current' categories in line with revised Schedule VI to the Companies Act, 1956.

The items of the Balance Sheet are discussed as under:

1 Net Worth

The net worth of the Company at the end of financial year 2012-13 increased to ₹ 80,387.51 crore from ₹ 73,291.17 crore in the previous year registering an increase of 10% due to retained earnings. Correspondingly, the book value per share also increased from ₹ 88.89 to ₹ 97.49.

2 Deferred Revenue

Deferred revenue (Note 4) consists of two items detailed as under:

₹ Crore

Deferred revenue on account of	As at March 31	
	2013	2012
Advance Against Depreciation (AAD)	708.60	718.47
Income from foreign currency fluctuation	535.45	711.59
Total	**1,244.05**	**1,430.06**

AAD was an element of tariff provided under the Tariff Regulations for 2001-04 and 2004-09 to facilitate debt servicing by the generators since it was considered that depreciation recovered in the tariff considering a useful life of 25 years is not adequate for debt servicing. CERC Tariff Regulations, 2009, has discontinued with the proviso relating to AAD.

Keeping in view the matching principle, and in line with the opinion of the Expert Advisory Committee (EAC) of the Institute of Chartered Accountants of India (ICAI), this was treated as deferred revenue to the extent depreciation chargeable in the accounts is considered to be higher than the depreciation recoverable in tariff in future years. Accordingly, the amount of AAD considered as deferred revenue in earlier years is included in sales, to the extent depreciation recovered in tariff during the year is lower than corresponding depreciation charged in accounts. Thus, an amount of ₹ 9.87 crore has been recognized as sales during the year ended March 31, 2013.

Foreign Exchange Rate Variation (FERV) on foreign currency loans and interest thereon is recoverable from/payable to the customers in line with the Tariff Regulations. Keeping in view the opinion of the EAC of the ICAI, the Company is recognizing deferred foreign currency fluctuation asset by corresponding credit to deferred income from foreign currency fluctuation in respect of the FERV on foreign currency loans or interest thereon adjusted in the cost of fixed assets, which is recoverable from the customers in future years as provided in accounting policy no. L.3 (Note 1). This amount will be recognized as revenue corresponding to the depreciation charge in future years.

3 Non-Current and Current Liabilities

Details of non-current and current liabilities are discussed below:

a. Borrowings:

Total borrowings as at March 31, 2013 were ₹ 58,146.30 crore in comparison to ₹ 50,279.37 crore as at March 31, 2012. Current maturities out of long term borrowings have been shown under current liabilities. Details of the total borrowings are as under:

₹ Crore

	As at March 31	
	2013	2012
Long term borrowings in non-current liabilities (Note 5)	53,253.66	45,908.27
Current maturities of long term borrowings included in other current liabilities (Note 10)	4,892.64	4,371.10
Total borrowings	**58,146.30**	**50,279.37**

A summary of the borrowings outstanding is given below:

₹ Crore

	Non-current liabilities		Other current liabilities		Total borrowings		% Change
	2013	2012	2013	2012	2013	2012	
Secured							
Bonds	9404.00	9057.00	693.00	693.00	10097.00	9750.00	4%
Foreign currency term loans	-	99.09	96.44	186.38	96.44	285.47	-66%
Other	0.05	0.21	0.22	0.43	0.27	0.64	-58%
Sub-total	**9404.05**	**9156.30**	**789.66**	**879.81**	**10193.71**	**10036.11**	**2%**
Unsecured							
Bonds (including application money)	500.00	-	-	-	500.00	-	-

	Non-current liabilities		Other current liabilities		Total borrowings		% Change
	2013	2012	2013	2012	2013	2012	
Fixed deposits	0.52	0.47	0.11	11.79	0.63	12.26	-95%
Foreign currency notes	7138.30	4130.40	-	-	7138.30	4130.40	73%
Foreign currency loans	9235.34	8799.15	981.51	1049.32	10216.85	9848.47	4%
Rupee term loans	26975.45	23821.95	3121.36	2430.18	30096.81	26252.13	15%
Sub-total	**43849.61**	**36751.97**	**4102.98**	**3491.29**	**47952.59**	**40243.26**	**19%**
Total	**53253.66**	**45908.27**	**4892.64**	**4371.10**	**58146.30**	**50279.37**	**16%**

As on 31.03.2013, the foreign currency loan basket comprises of loans denominated in US Dollar, Japanese Yen and Euro which contributed about 79%, 16% and 5% respectively in the total foreign currency loans.

Over the last financial year, total borrowings have increased by 16%. Debt amounting to ₹ 11,696.96 crore was raised during the year 2012-13. The amount raised through term loans, bonds and foreign currency borrowings was used for capital expenditure and refinancing, while amount raised through public deposits have been used for working capital purposes. The domestic debt funds raised during the year included term loans amounting to ₹6,275.00 crore and bonds aggregating to ₹ 1,540.00 crore. Foreign Currency debt raised during 2012-13 was ₹ 3,881.81 crore. Details in respect of proceeds and repayment of borrowings are as under:

₹ Crore

Source	Debt raised & utilised	Repayment	Net
Term loan	6,275.00	2,430.32	3,844.68
Bonds	1,540.00	693.00	847.00
Foreign currency debts	3,881.81	1,299.05	2,582.76
Others (Public deposits/ finance lease)	0.15	12.15	-12.00
Total	**11,696.96**	**4,434.52**	**7,262.44**
FERV on FC borrowings			604.49
Total			**7,866.93**

Banks and domestic financial institutions continued to show interest in extending term loans for financing the on-going capacity expansion plans. During the year, fresh agreements for term loans aggregating ₹6,970.00 crore were entered into including the Loan Agreement(s) of ₹ 2,000.00 crore with Union Bank of India and ₹600.00 crore with J&K Bank Ltd., being the 100th term loan. The cumulative amount of domestic loans tied up till 31st March 2013 is ₹ 59,699.35 crore (excluding undrawn loans short-closed as per the agreements). During 2012-13, an amount of ₹ 6,275.00 crore was drawn from domestic banks and the cumulative drawl up to 31st March 2013 was ₹43,754.35 crore.

During the year 2012-13, the Company issued bonds amounting to ₹ 150.00 crore to Army Group Insurance Fund (AGIF). The aggregate amount of bonds placed with AGIF as at March 31, 2013, was ₹1,005.00 crore. Further, bonds amounting to ₹1,390.00 crore were issued to eligible institutions through bidding route. Bonds issued during the year have a maturity period ranging from 10 to 20 years and weighted average coupon rate of 9.00%.

During the financial year 2012-13, the Company raised USD 750 million through external commercial borrowings. After enhancing its MTN programme to USD two billion, the Company issued in October 2012, USD 500 million (equivalent to ₹ 2,595.50 crore) Senior Unsecured Fixed Rate Notes at a coupon of 4.75% p.a. with bullet repayment after 10 years. The proceeds were utilized during the year. A term loan facility of USD 250 million was tied up in January 2013 with State Bank of India, New York and Mizuho Corporate Bank. This loan bears floating rate of interest linked to LIBOR and has a door to door maturity of 7 years. USD 50 million (₹ 271.15 crore) has been drawn under the loan upto March 31, 2013 and the balance shall be drawn in financial year 2013-14.

During the year Exchange Risk Management Policy (ERMP) for managing exchange rate risk and/or interest rate risk associated with foreign exchange borrowings through various derivative instruments has come into effect. The necessary framework for implementation of the policy is under development.

Your Company has redeemed bonds amounting to ₹ 693.00 crore during the year. Repayments amounting to ₹ 2,430.32 crore were made under various term loans extended by Indian Banks and Indian Financial Institutions. Repayment of ₹ 1,299.05 crore was made during the year towards foreign currency loans. Public Deposits for ₹ 11.79 crore and finance lease (net) of ₹ 0.36 crore were also discharged during the year.

The Company continues to enjoy highest credit ratings for its bonds programme, borrowings from banks as well as fixed deposits. The rating assigned by CRISIL, ICRA and CARE for rupee bonds program as well as term loans continue to be 'CRISIL AAA', 'ICRA AAA' and 'CARE AAA' respectively. The rating assigned by CRISIL for Company's fixed deposit schemes is 'FAAA'.

The Company's current foreign currency issuer ratings are at par with the sovereign ratings of India. The rating assigned by Fitch is 'BBB- with stable outlook' while S&P has assigned 'BBB- with negative outlook'.

The debt to equity ratio at the end of financial year 2012-13 of the Company increased to 0.72 from 0.69 at the end of the previous financial year. The Debt Service Coverage Ratio (DSCR) and Interest Service Coverage Ratio (ISCR) for financial year 2012-13 are 3.17 and 10.39 respectively.

Formula used for computation of coverage ratios DSCR = Earnings before Interest, Depreciation, Tax and Exceptional items/ (Interest net of transferred to expenditure during construction + Principal repayment) and ISCR = Earnings before Interest, Depreciation, Tax and Exceptional items/ (Interest net of transferred to expenditure during construction).

The maturity profile of the borrowings by the Company is as under:

₹ Crore

	Rupee Loans incl. Bonds & PDS	Foreign Currency Loans	Total
Within 1 year	3,814.69	1,077.95	4,892.64
2 – 3 years	8,264.54	3,154.19	11,418.73
4 – 5 years	8,215.35	3,304.59	11,519.94
6 – 10 years	15,888.92	8,289.38	24,178.30
Beyond 10 years	4,511.21*	1,625.48	6,136.69
Total	**40,694.71**	**17,451.59**	**58,146.30**

*including bond application money of ₹ 200.00 crore

b. Deferred Tax Liabilities (net):

Deferred tax liabilities (net) (Note 6) have increased from ₹ 636.90 crore as at 31.03.2012 to ₹ 915.30 crore as at 31.03.2013. These have increased mainly due to timing difference of depreciation and other expenses in accounts and as per allowability under the Income Tax Act.

c. Other Long Term Liabilities:

Other long term liabilities (Note 7) primarily consist of liabilities for capital expenditure and deferred foreign currency fluctuation liability. Liabilities for capital expenditure has increased from ₹ 1,589.28 crore as at 31.03.2012 to ₹ 1,823.64 crore as at 31.03.2013 mainly due to new projects going under construction. Liabilities for capital expenditure which have become due for payment within 12 months from the reporting date have been classified under Other current liabilities (Note 10).

Further, as per the opinion of the Expert Advisory Committee of the ICAI pronounced in earlier years, exchange differences on account of translation/settlement of foreign currency monetary items which are payable to the beneficiaries in subsequent periods as per CERC tariff regulations are accounted as 'Deferred foreign currency fluctuation liability'. Accordingly, an amount of ₹ 135.60 crore has been accounted towards the same upto March 31, 2013 in line with accounting policy no. L.3. (Note 1)

d. Long Term Provisions:

Long term provisions (Note 8) consist of amounts provided towards employees benefits as per actuarial valuations which are expected to be settled beyond a period of 12 months from the Balance Sheet date. Long term provision as at 31.03.2013 was ₹ 739.92 crore as compared to ₹ 603.70 crore as at 31.03.2012.

e. Current Liabilities:

The current liabilities as at March 31, 2013 were ₹ 22,610.03 crore as against ₹ 17,231.58 crore as at the end of previous year. The break-up of current liabilities is as under:

₹ Crore

	As at March 31		Y-o-Y Change	% Change
	2013	2012		
Trade payables (Note-9)	5,158.77	4,460.65	698.12	16%
Other current liabilities (Note-10)	10,446.72	9,537.24	909.48	10%
Short term provision (Note-11)	7,004.54	3,233.69	3,770.85	117%
Total	**22,610.03**	**17,231.58**	**5,378.45**	**31%**

The trade payables mainly comprise amount payable towards supply of goods & services, deposits & retention money from contractors. Other current liabilities mainly comprise current maturities of long term borrowings, payable towards capital expenditure and other statutory liabilities. The details of other current liabilities are as under:

₹ Crore

	As at March 31	
	2013	2012
Other current liabilities	10,446.72	9,537.24
Less: Current maturities of long term borrowings, Finance lease obligations	4,892.64	4,371.10
Other current liabilities (net)	5,554.08	5,166.14

Other current liabilities (net) include amount payable for capital expenditure, interest accrued but not due on borrowings, advances from customers and others, deposits from contractors, gratuity obligations, payables to employees, unpaid dividends etc.

Short-term provisions mainly consist of provisions for employee benefits, provision for proposed dividend and taxes thereon, provision for obligations incidental to land acquisition and provision for tariff adjustment. As at March 31, 2013, your Company had outstanding short term provisions of ₹ 7,004.54 crore as against ₹ 3,233.69 crore as at March 31, 2012. The increase is due to reasons discussed as under:

Provision for obligations incidental to land acquisition on 31.03.2013 has increased by ₹ 1,713.86 crore over the previous year.

The increase in short-term provisions is also due to higher provisions for proposed final dividend including special dividend and tax on proposed dividend in 2012-13. The provision on above account for the financial year 2012-13 is ₹ 1,929.35 crore as against ₹ 475.10 crore in the previous financial year. The proposed final dividend including special dividend for the financial year 2012-13 is 20% of paid up equity capital as compared to 5% of paid up equity capital in the previous year.

Provision for tariff adjustment was created in the books of accounts as a prudent and conservative policy in the year 2010-11, to the extent of the impact of the issues challenged by CERC in Supreme Court on the APTEL's judgment. The Appeal is still pending for disposal and the CERC tariff orders are subject to the outcome of this appeal.

During the year, a provision for tariff adjustment for ₹ (-) 45.95 crore has been created by corresponding adjustment to sales on account of the impact of challenged issues of the APTEL judgement.

Provision for tariff adjustment also includes interest provision corresponding to the impact of challenged issues. Further, as the tariff for revenue recognition for the tariff period 2009-14 is based on duly trued-up capital expenditure, provision for interest payable on the differential amount considered for revenue recognition and billing has also been made upto 31.03.2013.

Other provisions include ₹ 46.27 crore (previous year ₹ 41.19 crore) towards cost of unfinished minimum work programme demanded by the Ministry of Petroleum and Natural Gas (MoP&NG) in relation to block AA-ONN-2003/2. [Refer Note 45 b) ii)] and ₹ 200.84 crore (previous year ₹18.07 crore) towards provision for litigation cases.

During the year, provision for employee benefits has also increased. In terms of guidelines of Department of Public Enterprises (DPE), and subsequent clarification issued by the DPE, the Company is allowed to contribute upto 30% of employees' salary (basic pay plus DA) towards superannuation benefits including pension w.e.f. 1st January 2007. Consequent upon receipt of approval from the Ministry of Power (MoP), GOI for introduction of a defined contribution pension scheme in the Company w.e.f. 1st January 2007, a separate pension trust has been formed for administration of the pension scheme. The pension scheme is yet to be made operational as clarification on certain issues referred to MoP and DPE are awaited. Pending this, an amount of ₹ 156.90 crore (previous year ₹ 174.55 crore) for the year and ₹ 458.40 crore up to 31st March 2013 (upto the previous year ₹ 301.50 crore) has been provided and included in provision for employee benefits.

4 Fixed Assets

Fixed assets of the Company are detailed as under:

₹ Crore

	As at March 31		% Change
	2013	**2012**	
Tangible assets	102,876.14	81,509.59	26%
Intangible assets	369.56	318.67	16%
Total gross block	103,245.70	81,828.26	26%
Total net block	**62,936.10**	**45,256.36**	**39%**
Capital work- in -progress and Intangible assets under development	37,109.42	41,827.86	-11%

During the year gross block of the Company increased by 26% over the previous year by ₹ 21,417.44 crore. This was mainly on account of declaration of commercial operation of 3830 MW during 2012-13.

Correspondingly, net block has increased by 39%. Due to increase in capitalisation of CWIP, there was a decrease of ₹ 4,718.44 crore in the capital work-in-progress (excluding capital advances which is shown as Long-term loans & advances in Note 15 of Balance Sheet) registering a decrease of 11% over the last year.

5 Investments

Investments have been bifurcated into non-current investments and current investments and discussed accordingly:

₹ Crore

	As at March 31		% Change
	2013	**2012**	
Non-current investments (Note 14)	9,137.64	9,583.92	-5%
Current investments (Note 16)	1,622.46	1,622.46	-
Total	**10,760.10**	**11,206.38**	**-4%**

Investments as at year end mainly consist of bonds issued under One Time Settlement Scheme (OTSS) and equity participation in subsidiary and joint venture companies. Over the year, the investments decreased by about 4% mainly due to redemption of OTSS bonds. The outstanding OTSS bonds reduced by 25% while investment in subsidiary and joint venture companies increased by 31% and 3% respectively. Broadly the break-up of investments is as follows:

₹ Crore

	As at March 31	
	2013	**2012**
Bonds issued under One Time Settlement Scheme (OTSS Bonds)	4,910.88	6,533.34
Investments in Joint Ventures	4,823.46	3,672.93
Investment in Subsidiaries	1,025.76	1,000.11
Total investments	**10,760.10**	**11,206.38**

OTSS Bonds account for 46% of total investments at the end of financial year 2012-13. These bonds carry a 'call option' giving right to SEBs to redeem the bonds before scheduled redemption date. However, no call option was exercised by any SEB during the financial year 2012-13. During the year, OTSS Bonds of ₹ 1,622.46 crore were redeemed as per scheduled redemption.

Your Company invested ₹ 1,150.53 crore in following joint venture companies during the year:

₹ Crore

Name of JV Companies	Amount
NTPC-SAIL Power Company Private Ltd.	15.00
NTPC-Tamil Nadu Energy Company Ltd.	244.61
Ratnagiri Gas & Power Private Ltd.	197.40
Aravali Power Company Private Ltd.	119.00
Meja Urja Nigam Private Limited	300.00
Nabinagar Power Generating Company Private Ltd.	267.12
National High Power Test Laboratory Private Ltd.	8.44
Less: provision for permanent diminution in value of investment in National Power Exchange Ltd.	(1.04)
Total	**1,150.53**

The Company also invested ₹ 25.65 crore in subsidiary- Kanti Bijlee Utpadan Nigam Ltd. during 2012-13.

6 Long Term Loans and Advances

Long term loans and advances (Note 15) include those loans and advances which are expected to be realized after a period of 12 months from Balance Sheet date. Total long term loans and advances as at March 31, 2013 were ₹ 9,633.45 crore as against ₹ 5,394.35 crore as at March 31, 2012. Long term loans and advances consist of advances for capital expenditure and other advances to contractors, security deposits and loans to employees. These also include a loan of ₹ 239.31 crore (previous year ₹ 335.04 crore) to the Govt. of Delhi subsequent to conversion of the dues of Delhi Vidyut Board under the One-Time-Settlement Scheme. The Govt. of Delhi pays 8.5% tax-free interest on this loan. Long-term loans and advances also include advance tax & Tax deducted at source as reduced by provision for current tax.

Long-term loans and advances have increased primarily due to increase in capital advances to contractors on account of construction of new projects.

7 Other Non-Current Assets

As per the opinion of the Expert Advisory Committee of the ICAI (referred at para 3c above), exchange differences on account of translation of foreign currency borrowings which are recoverable from the beneficiaries in subsequent periods as per CERC tariff regulations are accounted as 'deferred foreign currency fluctuation asset'. Accordingly, an amount of ₹ 1,132.77 crore has been accounted under this head upto March 31, 2013 (Previous year ₹ 1,371.88 crore) (Note 15A). Deferred foreign currency fluctuation asset has decreased due to overall appreciation in value of Indian Rupee vis-à-vis other currencies in loan basket with respect to operating stations.

8 Current Assets

The current assets as at March 31, 2013 and March 31, 2012 and the changes therein are as follows:

₹ Crore

Current Assets	As at March 31		Y o Y Change	% Change
	2013	2012		
Current investments (Note 16)	1,622.46	1,622.46	-	-
Inventories (Note 17)	4,057.19	3,702.85	354.34	10%
Trade receivables (Note 18)	5,365.49	5,832.51	-467.02	-8%
Cash & bank balances (Note 19)	16,867.70	16,141.83	725.87	4%
Short term loans & advances (Note 20)	1,745.53	1,543.32	202.21	13%
Other current assets (Note 21)	11,508.71	8,553.40	2,955.31	35%
Total current assets	**41,167.08**	**37,396.37**	**3,770.71**	**10%**

A major portion of current assets comprised cash and bank balances. As at March 31, 2013, cash and bank balances stood at ₹16,867.70 crore being 41% of the total current assets in comparison to ₹ 16,141.83 crore as at March 31, 2012 which was 43% of the total current assets as at that date. Of this, ₹ 16,469.97 crore was held as term deposits with banks as at March 31, 2013 as against ₹ 15,657.98 crore as at March 31, 2012.

Inventories

Inventories as at March 31, 2013 were ₹ 4,057.19 crore (being ~10% of current assets) as against ₹ 3,702.85 crore as at March 31, 2012. Inventories mainly comprise stores and spares and coal which are maintained for operating plants. Stores and spares were ₹ 2,210.19 crore as against ₹ 1,899.57 crore in previous year end. Coal inventory amounted to ₹ 885.62 crore as at 31.03.2013 as against ₹ 1,096.14 crore in previous year.

Trade Receivables

Trade receivables (net) as at 31.03.2013 are ₹ 5,365.49 crore as against ₹ 5,832.51 crore as at 31.03.2012. The trade receivables collection period is 30 days as against 35 days as at 31.03.2012. Trade receivables before provision for bad and doubtful debts stand at ₹ 5,365.52 crore as at 31.03.2013 and ₹ 6,673.21 crore as at 31.03.2012. The trade receivable collection period is 30 days as at 31.03.2013 as against 40 days as at 31.03.2012 before considering the provision for bad and doubtful debts.

Keeping in view the requirements of revised Schedule VI to the Companies Act, 1956, unbilled revenues are shown under 'Other current assets' in Note 21 of balance sheet.

Short term loans and advances

Short term loans and advances as at 31.03.2013 comprise of advances to contractors and suppliers including materials issued on loan, short term advances to employees, security deposits, loans and advances to subsidiary and joint venture companies etc. Short term loans and advances have increased from ₹ 1,543.32 crore in 2011-12 to ₹ 1,745.53 crore in 2012-13 mainly on account of increase in security deposits and loans and advances extended to joint venture companies.

Other Current Assets

Other current assets excluding unbilled revenue are as under:

₹ Crore

	As at March 31	
	2013	2012
Other current assets as per Note 21	11,508.71	8,553.40
Less: Unbilled revenue	5,624.27	5,616.10
Net Other current assets	5,884.44	2,937.30

Other current assets include interest accrued on OTSS Bonds, term deposits with banks, other deposits and claims recoverable. Claims recoverable includes ₹ 2,520.08 crore (previous year ₹ Nil) recoverable from Government of National Capital Territory of Delhi towards settlement of dues of erstwhile Delhi Electric Supply Undertaking (DESU).

Claims recoverable also include ₹ 894.72 crore (previous year ₹ 766.12 crore) recoverable towards the cost incurred upto 31st March 2013 in respect of Loharinag Pala Hydro Power Project which has been discontinued on advice of Ministry of Power, Government of India. The empowered committee in its meeting held in June 2012 approved an interim payment of ₹ 536.30 crore for reimbursement to NTPC against the amount of work done and paid including IDC upto December 2011. This amount is expected to be received during the current financial year 2013-14 and balance amount recoverable is under various stages of review by the empowered committee.

Claims recoverable also include claims against railways ₹1,147.69 crore (previous year ₹ 852.28 crore).

Unbilled revenue of ₹ 5,624.27 crore (previous year ₹ 5,616.10 crore) is net of credits to be passed to beneficiaries at the time of billing and includes ₹ 6,005.41 crore (previous year ₹ 5,411.93 crore) being billed to the beneficiaries after 31st March for energy sales.

9 Cash flows

Cash, cash equivalents and cash flows on various activities is given below:

₹ Crore

	FY 2012-13	FY 2011-12
Opening cash & cash equivalents	16,141.83	16,181.60
Net cash from operating activities	15,495.17	10,709.85
Net cash used in investing activities	-14,016.89	-7,880.54
Net cash flow from financing activities	-752.41	-2,869.08
Change in cash and cash equivalents	725.87	-39.77
Closing cash & cash equivalents	16,867.70	16,141.83

Net cash used in investing activities increased by 78% and was ₹ 14,016.89 crore in financial year 2012-13 as compared to ₹ 7,880.54 crore in the previous year. Cash outflows on investing activities arise from expenditure on setting up power projects, investment of surplus cash in various securities, investments in joint ventures & subsidiaries and tax outflow on income from investing activities. Cash inflows arise from interest from banks and dividend income from joint ventures and subsidiaries and Mutual Funds. Cash invested on purchase of Fixed Assets increased by 51% i.e. from ₹ 10,794.44 crore in financial year 2011-12 to ₹ 16,296.65 crore in financial year 2012-13. During the year, there was purchase and sale of non-trade investments and redemption of OTSS Bonds. Cash flows from sale of investment (net of purchase of investment) was ₹ 1,622.46 crore.

During the year, out of cash generated from operating activities the Company used net ₹ 752.41 crore of cash for servicing financing activities as against ₹ 2,869.08 crore in the previous year. During the financial year 2012-13 the Company had an inflow of ₹ 11,696.96 crore from long term borrowings as against ₹ 8,736.39 crore in the previous year. Cash used for repayment of long term borrowings during the financial year 2012-13 was ₹ 4,434.52 crore as against ₹ 3,522.93 crore repaid in the previous year. Cash used for paying dividend and the tax thereon was ₹ 4,068.78 crore.

BUSINESS AND FINANCIAL REVIEW OF SUBSIDIARY COMPANIES

Your Company has five subsidiary companies as at 31.03.2013 out of which three are wholly owned.

The detailed financial statements of the subsidiaries are included elsewhere in this Annual Report. The performance of the five subsidiaries is briefly discussed here:

(a) NTPC Electric Supply Company Limited (NESCL)

The Company was formed on August 21, 2002 as a wholly owned subsidiary company of NTPC with an objective to make a foray in the business of distribution and supply of electrical energy as a sequel to reforms initiated in the power sector. NESCL is working broadly in the following areas:

- Implementation of turnkey projects under Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY).
- Provision of supply of electricity in 5 Km area around NTPC power stations.
- Turnkey execution of sub-stations for utilities.
- Project management consultancy assignments.
- Retail distribution of power in various industrial parks developed by Kerala Industrial Infrastructure Development Corporation (KINFRA), SEZs and other industrial areas. A Joint Venture company KINESCO power & utilities Pvt. Ltd has been formed.

Under RGGVY, NESCL is carrying out the implementation in 29 districts in 5 states (Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand and West Bengal). During the financial year 2012-13, 1407 Un-electrified/De-electrified (UE/DE) villages have been energized and work of 2,820 partially electrified (PE) villages have been completed. Further, during the year, electricity connections have been provided to 25,204 Below Poverty Line (BPL) rural households. Cumulatively, till 31.03.2013, 14,242 UE/DE villages have been energised, work of 17,679 PE villages completed and connections provided to 26 lakh BPL households. Out of 30 projects, physical work of 15 projects has been completed.

The company is also involved in providing supply of electricity in 5 Km area around NTPC power plants in eight projects which is expected to be completed by second quarter of financial year 2013-14.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	0.08	0.08
Total Revenue	28.92	55.67
Profit /(Loss) After Tax	(24.59)	7.66
Earnings/(Loss) per share (basic) (in ₹)	(3,038.77)	946.59

Joint venture of NESCL

The Company has made a foray into the distribution sector by formation of a JV Company KINESCO Power & Utility Pvt. Ltd. with Kerala Industrial Infrastructure Development Corporation (KINFRA) to take up retail distribution of power in various Industrial Parks developed by KINFRA in Kerala and other SEZs and industrial areas. The new JV Company has taken over the operations from 1st February 2010. Total sale of energy during the financial year 2012-13 is 59.46 MU.

As at 31.03.2013, the paid up share capital of the Company is ₹ 0.10 crore and ₹ 0.26 crore of share application money is pending for allotment. NESCL holds 50% of share capital amounting to ₹ 0.05 crore and entire ₹ 0.26 crore of share application money pending allotment.

(b) NTPC Vidyut Vyapar Nigam Limited (NVVN)

The Company was formed on November 1, 2002 as a wholly owned subsidiary company of NTPC with an objective to undertake business of sale and purchase of electric power. During the year 2012-13, the Company transacted business with various state electricity boards spread all over the country and traded 8,382 MUs of electricity in comparison to 8,529 MUs traded in the previous year resulting in decrease of 2% over the previous year which is mainly due to congestion in the transmission system resulting in considerable curtailment of open access by the Central Transmission Utility (CTU).

NVVN is the designated nodal agency for purchase of grid connected solar power upto 1,000 MW as a part of phase-I (2009-2013) of Jawaharlal Nehru National Solar Mission (JNNSM) and for sale of such power to distribution utilities after bundling with equivalent megawatt of the unallocated power at the disposal of Govt. of India from NTPC's coal power stations. So far, 468 MW of solar PV capacity has been commissioned. Further, around 500 MW solar PV projects are scheduled for commissioning during 2013-14.

During the year 2012-13, the company transacted solar energy with various DISCOMs spread all over the country and traded 1,590 MUs of solar bundled power in comparison to 329 MUs traded in previous year.

NVVN has also been designated as the Nodal Agency for cross border power trading with Bangladesh and Bhutan. NVVN has signed a PPA with Bangladesh Power Development Board on 28th February 2012 for supply of 250 MW power from NTPC stations for 25 years. The power supply is likely to commence from end of July 2013.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	20.00	20.00
Total revenue	3,075.32	2,379.18
Profit /(Loss) After Tax	(34.84)	111.93
Earnings /(Loss) Per Share before exceptional items (Basic) (in ₹)	21.30	20.54
Earnings /(Loss) Per Share after exceptional items (Basic) (in ₹)	(17.42)	55.97

(c) NTPC Hydro Limited (NHL)

NTPC Hydro Ltd. was set up as a wholly owned subsidiary company of NTPC Ltd. on 12th December 2002. Your Board approved a scheme of amalgamation of NHL with NTPC considering the benefits of synergy of operation, reduction in overhead expenditure, enhancement of efficiency & administrative control and to optimize utilization of resources. Ministry of Power, Government of India through Letter No. 5/5/2012-Th.II dated 10.04.2012, has decided to allow for amalgamation of NHL with NTPC subject to approval of competent authority in terms of Section 391-394 of Companies Act, 1956 after following due process. The competent authority i.e. Ministry of Corporate Affairs (MCA) has vide order dated 20.12.2012 directed for convening the meeting of shareholders of both NHL and NTPC. Accordingly, the meeting of shareholder of both these companies was conducted on 24.05.2013 and scheme was approved by requisite majority. Final approval of MCA is awaited.

Presently, the Company is implementing the following projects:

- **Lata Tapovan Hydro Electric Project (171 MW)** is proposed as a run of river hydro project in the state of Uttrakhand. All the statutory clearances have been obtained and entire land required for the project has been physically acquired. The project shall be developed as a regional power station with 12% free power to Govt. of Uttarakhand. The power generated from the project would be provided to the beneficiaries of Northern Region States. The project is scheduled for commissioning during 13th plan period. The project cost has been approved at ₹ 1,527.08 crore on 17.07.2012. Annual generation from the project is estimated as 869 MUs.
- **Rammam-III (120 MW)** in the state of West Bengal. All the statutory clearances have been obtained and majority of land acquisition activities have been completed. Various infrastructure developmental works are under progress. Annual generation from this project is estimated as 476 MUs.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity (incl. share capital deposit) (net of provision for permanent diminution)	113.42	113.42
Profit /(Loss) After Tax*	(0.00)	(0.01)

* Loss of ₹31,348/- and ₹ 64,781/- for the financial year 2012-13 and 2011-12 respectively.

As at 31.3.2013, the paid-up share capital of the Company is ₹ 121.36 crore and ₹ 0.20 crore of share application money is pending for allotment.

(d) Kanti Bijlee Utpadan Nigam Limited (KBUNL)

A Company named 'Vaishali Power Generating Company Ltd.' was incorporated on September 6, 2006 as a subsidiary of NTPC to take over Muzaffarpur Thermal Power Station (2 x 110 MW). The Company was rechristened as 'Kanti Bijlee Utpadan Nigam Limited' on 10.04.2008. The equity contribution in the Company as at 31.03.2013 is 65% by NTPC and 35 % by Bihar State Power Generation Co. Ltd. (BSPGCL).

Unit # 2 of 110 MW of Stage–I was declared commercial in October 2010. Renovation and Modernization (R&M) of existing units 2X110 MW is being carried-out by BHEL.

For Stage II, out of 31 packages, 28 packages have been awarded upto 31.03.2013. Hydro test of one unit of Stage II (unit # 3) has been completed.

Other financial highlights of the Company are given below:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity (incl share capital deposit)	382.80	357.15
Total revenue	9.93	127.76
Profit /(Loss) After Tax	(12.90)	5.35
Earnings/(Loss) Per Share (Basic) (in ₹)	(0.25)	0.15

As at 31.3.2013, the paid up share capital of the Company is ₹ 549.46 crore and ₹ 88.61 crore of share application money is pending for allotment which includes ₹ 357.15 crore and ₹ 25.65 crore respectively as the share of NTPC Ltd.

(e) Bhartiya Rail Bijlee Company Limited (BRBCL)

BRBCL was incorporated as a subsidiary of NTPC on November 22, 2007 having equity participation of 74:26 by NTPC Ltd. and Ministry of Railways, Govt. of India respectively for setting up of 4 units of 250 MW each of coal based power plant at Nabinagar, district Aurangabad, Bihar.

The financial highlights of the Company are given below:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity (incl. share capital deposit)	509.46	509.46
Profit /(Loss) After Tax	(0.16)	(0.01)
Earnings /(Loss) Per Share (Basic) (in ₹)	(0.00)	(0.00)

As at 31.3.2013, the paid up share capital of the Company is ₹ 688.46 crore of which NTPC's share is ₹ 509.46 crore. Share application money pending allotment as on 31.03.2013 is ₹ 83.00 crore of which NTPC's share is ₹ 39,000/-.

BUSINESS AND FINANCIAL REVIEW OF JOINT VENTURE COMPANIES

a) Utility Powertech Limited (UPL)

UPL is a 50:50 joint venture company of NTPC and Reliance Infrastructure Limited formed to take up assignments of construction, erection and supervision in power sector and other sectors in India and abroad as well as to provide man power to power, telecom and other sectors.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	1.00	1.00
Total revenue	438.93	402.35
Profit /(Loss) After Tax	15.94	15.23
Earnings / (Loss) Per Share (Basic) (in ₹)	39.86	38.06

As at 31.03.2013, the paid up share capital of the Company is ₹ 4.00 crore. NTPC has a share of ₹ 2.00 crore in the paid up share capital which includes ₹ 1.00 crore of bonus share allotted in the earlier years.

For the financial year 2012-13, the company has paid interim dividend of ₹ 4.00 crore and also proposed a final dividend of ₹ 6.00 crore. NTPC's share of total dividend is ₹ 5.00 crore.

b) NTPC-SAIL Power Company Pvt. Ltd. (NSPCL)

NSPCL, a 50:50 joint venture company of NTPC and SAIL was incorporated on 08.02.1999 for running the captive power plants of SAIL at Durgapur, Rourkela and Bhilai.

NSPCL owns and operates a capacity of 814 MW mostly as captive power plants for SAIL's steel manufacturing facilities located at Durgapur, Rourkela and Bhilai. Captive power plants (314 MW) of NSPCL recorded generation of 2,602 MUs at 94.59% PLF. Further, Bhilai Expansion (2X250MW) achieved 92% PLF and generated 4,030 MUs.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	490.25	475.25
Total revenue	1,898.00	1,780.06
Profit /(Loss) After Tax	248.06	194.23
Earnings /(Loss) Per Share (Basic) (in ₹)	2.56	2.04

As at 31.03.2013, the paid up share capital of the Company is ₹ 980.50 crore and out of this, 50% has been contributed by NTPC Ltd.

NSPCL has recommended a final dividend of ₹ 132.37 crore of which NTPC's share is ₹ 66.19 crore.

c) NTPC-ALSTOM Power Services Private Limited (NASL)

NASL is a 50:50 joint venture company between NTPC Limited and Alstom Power Systems GmbH, Germany. The Company was formed on 27.09.1999 for taking up Renovation & Modernization assignments of power plants both in India and SAARC countries. Apart from above, the Company has ventured into various studies like Residual Life Assessment (RLA) Studies, Steam Path Audit, etc.

During the year 2012-13, the Company has registered a turnover of ₹ 67.62 crore and is executing orders at NALCO, NTPC Tanda, SAIL Rourkela, Amarkantak sites etc. In addition, the company is exploring new opportunities in the integrated retrofit business, ESP, operation and maintenance and large scale erection work across various power plants in India.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	3.00	3.00
Total revenue	70.06	78.43
Profit /(Loss) After Tax	2.32	2.84
Earnings/(Loss) Per Share (Basic) (in ₹)	3.86	4.73

As at 31.03.2013, the paid up share capital of the Company is ₹ 6.00 crore with 50% being contributed by your Company. The Company declared a dividend of ₹ 0.60 crore during the year 2012-13 of which NTPC's share is ₹ 0.30 crore.

d) NTPC Tamil Nadu Energy Company Limited (NTECL)

NTECL was formed as a 50:50 joint venture between NTPC and Tamilnadu Generation and Distribution Company (TANGEDCO) on May 25, 2003 to develop and operate 1500 MW power project at Vallur. The project is named as Vallur Thermal Power Project and is expected to use Ennore port infrastructure facilities.

Unit-I (500 MW) of the project was commissioned on 28.03.2012 and declared commercial on 29.11.2012. Unit- II was commissioned on 28.02.2013.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity (incl. share capital deposit)	1,143.61	899.00
Total revenue	302.26	-
Profit /(Loss) After Tax	(49.98)	(1.32)
Earnings /(Loss) Per Share (Basic) (in ₹)	(0.27)	(0.01)

The paid up share capital of the Company is ₹ 2,287.21 crore and out of this, 50% had been contributed by NTPC Ltd. Further, as at 31.03.2013, the amount of share capital deposit pending for allotment is ₹ 20.00 crore from TANGEDCO.

e) Ratnagiri Gas and Power Pvt. Limited (RGPPL)

RGPPL was formed in July 2005 as joint venture between NTPC and GAIL as promoters and MSEB Holding Co. Ltd. and Indian Financial Institutions as other equity participants for taking over and operating erstwhile Dabhol Power Project assets consisting of 1940 MW gas based combined cycle power block and 5 MMTPA LNG block. The assets were transferred to RGPPL in October 2005.

The Power Block, spearheaded by NTPC, has been fully revived and under commercial operation since May 19, 2009 supplying 43.5 BUs so far to the Western Grid. State of Maharashtra (95%), UT of Daman & Diu (2%), UT of Dadra and Nagar Haveli (2%) and State of Goa (1%) are the beneficiaries of the power generated from the facility. The power block operated at 31.21% PLF during 2012-13 matching with the dwindling supply of domestic gas from KG D6 basin gas fields of RIL/BPEAL/NIKO (7.6 MMSCMD) and inability of GAIL to supply gas from ONGC's marginal fields (0.9 MMSCMD).

LNG block, spearheaded by GAIL, has been commissioned and gas delivery has started from January 10, 2013. Since, the power generation is envisaged using the domestic gas entirely, the integrated LNG terminal shall be utilized for tolling purposes. RGPPL has already entered into a long term agreement with GAIL for commercial utilization of the terminal and tolling operations have started during this test run.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	974.30	776.90
Total revenue	2,289.51	5,223.83
Profit /(Loss) After Tax	(375.33)	1,089.24
Earnings / (Loss) Per Share (Basic) (in ₹)	(1.43)	4.60

As at 31.03.2013, the paid up share capital of the Company is ₹ 2,916.46 crore and out of this, NTPC's share contribution is ₹ 974.30 crore.

f) Aravali Power Company Private Limited (APCPL)

APCPL (A joint venture company of NTPC Ltd., Indraprastha Power Generating Co. Ltd. [IPGCL] of Delhi Govt. and Haryana Power Generating Co. Ltd. [HPGCL] of Haryana Govt. has set up Indira Gandhi Super Thermal Power Project of 1500 MW (3x500 MW), coal fired power plant, in Jhajjar District of Haryana.

All the three units i.e. Unit-I, Unit-II and Unit-III of the plant are under commercial operation w.e.f. from 05.03.2011, 21.04.2012 and 26.04.2013 respectively.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity (incl. share capital deposit)	1,208.52	1,089.51
Total revenue	2,776.87	1,408.93
Profit /(Loss) After Tax	177.72	34.15
Earnings / (Loss)Per Share (Basic) (in ₹)	0.78	0.18

As on 31.03.2013, the paid up capital of the Company is ₹ 2,319.02 crore with 50% being contributed by NTPC Ltd. Further, as on 31.03.2013, the amount of share capital deposit pending for allotment is ₹ 98.01 crore out of which NTPC's share is ₹ 49.01 crore.

g) NTPC-SCCL Global Venture Pvt. Ltd (NSGVPL)

NTPC Limited along with Singareni Collieries Company Limited formed a 50:50 joint venture company under the name 'NTPC-SCCL Global Ventures Private Limited' on July 31, 2007 to undertake various activities in coal and power sectors including acquisition of coal/lignite mine blocks, development and operation of integrated coal based power plants and providing consultancy services. Both NTPC and SCCL hold 50% equity each.

NTPC has appointed NSGVPL as MDO for Tallaipalli Coal Mining Project on nomination basis.

As at 31.03.2013, the paid up share capital of the Company is ₹ 0.10 crore, out of which 50% has been contributed by your Company.

h) Meja Urja Nigam Private Limited (MUNPL)

This JV Company was formed with Uttar Pradesh Rajya Vidyut Utpadan Nigam Limited (UPRVUNL) on April 2, 2008 for setting up a power plant of 1320 MW (2X660 MW) at Meja Tehsil in Allahabad district in the state of Uttar Pradesh.

The Board of Directors of MUNPL approved an investment of ₹ 10,829.58 crore on 28.04.2012.

SG package has been awarded to BGR Energy on 30.04.2012 and TG package has been awarded to Toshiba Corporation, Japan and Toshiba JSW Turbine & Generator Pvt. Ltd. on 01.05.2012.

Financial closure for the 2X660 MW Meja Thermal Power Project has been achieved and loan agreement for ₹7,574.77 crore has been executed on 06.06.2012, with a consortium of banks and financial institutions led by State Bank of India.

The company has incurred a cumulative capex of ₹ 1082.36 crore upto 31.03.2013 of which ₹ 859.99 crore was incurred in 2012-13.

As at 31.03.2013, the paid up share capital of the Company is ₹ 757.58 crore and out of this, 50% has been contributed by NTPC Ltd. Further, as at 31.03.2013, out of share capital deposit pending for allotment amounting to ₹ 67.28 crore, ₹ 33.64 crore being 50% of the total share capital deposit has been contributed by NTPC Ltd.

i) **NTPC BHEL Power Projects Pvt. Ltd. (NBPPL)**

NBPPL was formed on April 28, 2008 as a JV Company with Bharat Heavy Electrical Ltd (BHEL) for carrying out Engineering Procurement and Construction (EPC) activities in the power sector and to engage in manufacturing and supply of equipment for power plants and other infrastructure projects in India and abroad.

Manufacturing plant of NBPPL is being constructed at Mannavaram, Tirupati Distt., A.P. for CHP and AHP. Currently, NBPPL is executing EPC contracts for balance of plant packages of Palatana Combined Cycle Power Plant in Tripura and Namrup Combined Cycle Power Plant in Assam and BoP including E&C Works of entire plant for Monarchak, Tripura for NEEPCO.

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	25.00	25.00
Total revenue	114.66	146.92
Profit /(Loss) After Tax	5.66	13.06
Earnings /(Loss) Per Share (Basic) (in ₹)	1.13	2.61

As at 31.03.2013, the paid up share capital of the Company is ₹ 50.00 crore, out of this, 50% has been contributed by your Company.

j) **BF-NTPC Energy Systems Limited (BFNESL)**

BF-NTPC Energy Systems Limited was formed on June 19, 2008 with Bharat Forge Limited to establish a facility to take up manufacturing of castings, forgings, fittings and high pressure piping required for power projects and other industries, Balance of Plant (BoP) equipment for the power sector.

As at 31.03.2013, the paid up share capital of the Company is ₹ 12.00 crore with 49% i.e. ₹ 5.88 crore being contributed by NTPC Ltd.

k) **Nabinagar Power Generating Company Private Limited (NPGC)**

'Nabinagar Power Generating Company Private Limited' was incorporated as a JV Company on September 9, 2008 with equal equity contribution from erstwhile Bihar State Electricity Board (now Bihar State Power Generation Co. Ltd.) for setting-up of a coal based power project at New Nabinagar in district Aurangabad of State of Bihar. The project will have a capacity of 1980 MW (3X660 MW). The Company will also undertake operation & maintenance of the project after its commissioning.

NTPC's Board approved the investment of ₹ 15,131.67 crore on 21.01.2013. Financial closure was achieved by signing loans for ₹ 8,575.00 crore. TG & SG packages were awarded on 31.01.2013.

As at 31.03.2013, the paid up share capital of the Company is ₹ 306.00 crore of which NTPC has contributed ₹ 153.00 crore. Further, the amount of share capital deposit pending for allotment is ₹ 634.25 crore out of which NTPC's share is ₹ 317.13 crore.

l) **National Power Exchange Limited (NPEX)**

NPEX was incorporated as a JV Company with NHPC Ltd., Power Finance Corporation Ltd. and Tata Consultancy Services Ltd. on December 11, 2008 to set up and operate a power exchange at national level.

Keeping in view the change in market scenario and the fact that NTPC's objective of joining NPEX has not been achieved so far, Board of Directors of NTPC in its 388th meeting held on 01.11.2012 approved the proposal of NTPC's exit from NPEX. The decision of NTPC to exit from NPEX has been communicated to other promoters of NPEX. In view of above, provision towards permanent diminution, in the value of Company's investment amounting to ₹ 1.04 crore has been made in the books of accounts of NTPC.

As on 31.03.2013, the Company has paid-up share capital of ₹ 13.13 crore of which NTPC has contributed ₹2.19 crore.

m) **International Coal Ventures Private Limited (ICVL)**

A JV Company was incorporated on May 20, 2009 under the name 'International Coal Ventures Private Limited' (ICVL) in association with Steel Authority of India (SAIL), Coal India Limited (CIL), Rashtriya Ispat Nigam Limited (RINL) and NMDC Limited (NMDC). SAIL, CIL, RINL, NMDC and NTPC shall contribute in the equity share capital of the Company in the ratio of 2:2:1:1:1 respectively. The Company has been incorporated for the purpose of carrying on business for overseas acquisition/ operation of coal mines or blocks/ companies for securing coking and thermal coal supplies.

The Board of Directors of NTPC Ltd., in their meeting on 27th January 2012, decided to exit out of ICVL. A letter permitting the same has been received from the Ministry of Power. ICVL is to take up the issue with other partners after obtaining Cabinet approval. ICVL response on this matter and on Cabinet clearance is awaited, subsequent to which, the withdrawal process would commence.

As at 31.03.2013, the paid up share capital of the Company is ₹ 9.80 crore in which NTPC's contribution is ₹ 1.40 crore.

n) **National High Power Test Laboratory Private Limited (NHPTL)**

NTPC has formed a JV Company on May 22, 2009 under the name 'National High Power Test Laboratory Private Limited' in association with NHPC Limited, Power Grid Corporation of India Limited and Damodar Valley Corporation. On 24.02.2012, Central Power Research Institute was formally inducted as fifth equity JV partner. All JV partners will contribute equally to the share capital of the Company. The

Company has been incorporated for setting up an On-line High Power Test Laboratory for short-circuits test facility in the country.

O&M agreement between CPRI and NHPTL signed on 8th Feb, 2013. Various erection & commissioning work is under progress at site.

As at 31.03.2013, the paid up share capital of the Company is ₹ 55.30 crore which includes ₹ 11.06 crore (20%) being NTPC's share.

o) Energy Efficiency Services Limited (EESL)

EESL was formed on December 10, 2009 to carry on and promote the business of energy efficiency and climate change including manufacture and supply of energy efficiency services and products. NTPC, PFC, PGCIL and REC hold shares in the equity share capital of the Company equally. Different energy efficiency improvement related works like replacement of agricultural pumps, report under Perform, Achieve and Trade (PAT) Scheme are being taken up by the Company

The financial highlights of the Company are as under:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity (incl. share capital deposit)	25.00	25.00
Total revenue	14.54	12.68
Profit /(Loss) After Tax	6.34	5.02
Earnings /(Loss) Per Share (Basic) (in ₹)	16.11	20.08

As at 31.03.2013, paid up share capital of the Company is ₹ 90.00 crore of which ₹ 22.50 crore has been contributed by NTPC.

p) Transformers and Electricals Kerala Limited (TELK)

In 2007, NTPC Ltd. joined hands with Government of Kerala for strategic acquisition of 44.60% stake in TELK at a total value of ₹ 31.34 crore.

Subsequent to this acquisition, NTPC brought its system and procedures in the work culture of TELK, carried out financial restructuring and injected a new lease of life in the company. The efforts started showing positive results and today TELK is a zero debt, dividend paying company with a positive net worth of over ₹117.59 crore. TELK has regained its financial health and retained its technical edge for producing best quality transformers in the country and is now looking optimistically at higher technology space in 765kV voltage levels.

Financial year 2012-13 was seen as the most difficult period for transformer industry which registered a negative growth for first time in last ten years. This was primarily due to the stagnation in power sector growth and overall economic growth which slowed to its lowest rate in the decade, estimated by the Government at 5%. Further, the stiff competition offered by Chinese and Korean manufacturers also affected the domestic manufacturers.

Despite these challenges, TELK managed to remain healthy and profitable and finished the year with production of 5178 MVA, thereby registering a plant capacity utilisation factor of 115%.

As at 31.03.2013, the paid up share capital of the Company is ₹ 42.97 crore with NTPC Limited holding 44.60% of the paid-up capital of TELK at an acquisition cost of ₹ 31.34 crore.

The financial highlights of the Company are:

Particulars	FY 2012-13	FY 2011-12
		₹ Crore
NTPC's investment in equity	31.34	31.34
Total revenue	154.46	202.37
Profit /(Loss) After Tax	1.59	13.21
Earnings /(Loss) Per Share (Basic) (in ₹)	0.37	3.07

q) CIL NTPC Urja Private Limited (CNUPL)

CIL NTPC Urja Private Limited was formed as a joint venture Company between NTPC Ltd. and Coal India Limited (CIL) on April 27, 2010.

This Company has been formed with the aim of undertaking the development, operation & maintenance of coal blocks at Brahmini and Chichro Patsimal in Jharkhand and integrated coal based power plants.

MOC vide its communication dated 14.06.2011, de-allocated Brahmini & Chichro-Patsimal coal blocks from the JV Company. MOC vide letter dated 21.06.12 has tentatively assigned these coal blocks to CIL and asked to submit the timeframe in which these blocks will be brought into production. NTPC as well as Ministry of Power are pursuing with MOC for withdrawal of de-allocation of these two coal blocks and restoring it to JV Company.

The authorized capital of the company is ₹ 10.00 crore and as on 31.03.2013, paid up capital is ₹ 0.05 crore of which NTPC shareholding is 50%. NTPC's share capital pending allotment as on 31-03-2013 is ₹ 0.05 crore

r) Anushakti Vidhyut Nigam Limited (ASHVINI)

Ashvini has been incorporated as a Joint Venture Company between NTPC Limited (NTPC) and Nuclear Power Corporation of India Limited (NPCIL) on January 27, 2011. NPCIL and NTPC would hold 51% and 49% of the equity share capital respectively. The Company has been formed for the purpose of development of nuclear power projects in the country within the framework of Atomic Energy Act, 1962.

NTPC proposes to establish 2x700 MW capacity of PHWR based nuclear reactor at Hisar in Haryana subject to amendment in Atomic energy Act, 1962 and subsequent transfer of the project to the proposed JV Company. The amendment bill is being actively pursued by AEC for early introduction in parliament.

As on 31.03.2013, Company has a paid up capital of ₹ 0.10 crore and NTPC has released ₹ 0.05 crore as initial equity contribution.

s) Trincomalee Power Company Limited

A Joint Venture Company between your Company and Ceylon Electricity Board, Sri Lanka (CEB) was incorporated in Sri Lanka on September 26, 2011 under the name 'Trincomalee Power Company Limited'. Both NTPC and CEB hold 50% each of the equity share capital of the Company. The joint venture Company has been formed to set up a 2X250MW coal based power project in Trincomalee region in Sri Lanka.

The authorised share capital and paid-up capital of the Company is Sri Lankan Rupees 300 million, subscribed equally by NTPC Limited and CEB. NTPC's contribution in paid up share capital in INR is ₹ 6.72 crore.

t) Pan-Asian Renewables Private Limited

A joint venture company amongst NTPC Limited, Asian Development Bank (ADB) and Kyuden International Corporation, a wholly owned subsidiary of Kyushu Electric Power Company Inc. (Kyushu) was incorporated on October 14, 2011 under the name 'Pan-Asian Renewables Private Limited'. NTPC, ADB and Kyushu shall contribute in the ratio of 50:25:25 in the equity share capital of the Company. The Company has been incorporated to develop renewable energy projects and shall initially establish over a period of three years a portfolio of about 500 MW of renewable power generation resources in India.

The Company is preparing its initial business plan which also includes identification of initial projects for development.

The authorised share capital of the Company as at 31st March 2013 is ₹ 6.50 crore and paid up share capital is ₹ 1.00 crore. NTPC's contribution in paid-up share capital is ₹ 0.50 crore.

u) Bangladesh-India Friendship Power Company Pvt. Limited (BIFPCL)

A Joint Venture Company between NTPC and Bangladesh Power Development Board, Bangladesh (BPDB) was incorporated in Dhaka on October 31, 2012 under the name 'Bangladesh India Friendship Power Company (Pvt.) Limited'. Both NTPC and BPDB will hold 50% each of the equity share capital of the Company. The Joint Venture Company has been formed to develop and operate coal based power project(s) in Bangladesh.

The authorized share capital of the company is Bangladesh Taka 400 million (equivalent to ₹ 27.5 crore approximately).

Feasibility report has been prepared for a 1,320 MW imported coal based power project in Rampal area of Khulna Region of Bangladesh. Power Purchase Agreement (between BIFPCL and BPDB) and implementation agreement (between BIFPCL and Govt. of Bangladesh) for the Khulna power project have been signed by BIFPCL on April 20, 2013 in Dhaka.

Consolidated financial statements of NTPC Ltd.

The consolidated financial statements have been prepared in accordance with Accounting Standards (AS)-21 - 'Consolidated Financial Statements' and Accounting Standards (AS)-27 -'Financial reporting of Interests in Joint Ventures' and are included in this Annual report.

A brief summary of the results on a consolidated basis is given below:

₹ Crore

	FY 2012-13	FY 2011-12
Total revenue	72,540.79	68,842.48
Profit before Tax	16,610.95	13,137.26
Profit after Tax	12,586.22	9,814.66
Profit after Tax [less Share of Profit/(Loss)- Minority interest]	12,590.78	9,812.79
Net Cash from operating activities	16,507.79	11,396.96

CAUTIONARY STATEMENT

Statements in the Management Discussion and Analysis and in the Directors' Report, describing the Company's objectives, projections and estimates, contain words or phrases such as "will", "aim", "believe", "expect", "intend", "estimate", "plan", "objective", "contemplate", "project" and similar expressions or variations of such expressions, are "forward-looking" and progressive within the meaning of applicable laws and regulations. Actual results may vary materially from those expressed or implied by the forward looking statements due to risks or uncertainties associated therewith depending upon economic conditions, government policies and other incidental factors. Readers are cautioned not to place undue reliance on these forward-looking statements.

For and on behalf of the Board of Directors

Place: New Delhi
Date: 2nd August 2013

(Dr. Arup Roy Choudhury)
Chairman & Managing Director