

## DIRECTORS' REPORT

Dear Members,

Your Directors are pleased to present the 37<sup>th</sup> Annual Report and the audited financial statements for the year ended March 31, 2013.

Financial Year 2012-13 has been a year of achievements for your Company as it performed exceedingly well in various areas of its activities. Major highlights for the year are:

- Addition of 4,170 MW capacity (including 1000 MW through JV Companies), by far the highest ever in any single year and declared 4,830 MW (including 1000 MW through JV Companies) on commercial generation, also the highest ever in a year. Awarded contracts for work of 8,521 MW.
- Average PLF of 83.08% as against all India PLF of 69.95% with six stations recording more than 90% PLF.
- Capital expenditure (CAPEX) of ₹ 19,925.53 crore which was 24.58% higher than the previous year's ₹ 15,994 crore.
- 100% realization of current bills from customers.
- Highest ever net profit after tax of ₹ 12,619.39 crore, making an increase by 36.81% over the previous year's PAT of ₹ 9,223.73 crore and recorded total income of ₹ 68,775.51 crore, an increase of 6.07% as compared to ₹ 64,841.88 crore in the FY 2011-12.
- Highest-ever dividend of ₹ 5.75 per share (total ₹ 4,741.16 crore) which comprises interim dividend of ₹ 3.75 per equity share paid in March 2013 and recommendation of special dividend of ₹ 1.25 per equity share and final dividend of ₹ 0.75 per equity share for the year 2012-13, subject to approval of the shareholders.
- Approval of the Ministry of Power for implementation of North Karanpura Super Thermal Power Project (3X660 MW) at existing site in the State of Jharkhand by NTPC.
- Withdrawal of de-allocation of Chatti-Bariatu, Chatti-Bariatu (South) and Kerandari Coal Blocks by Ministry of Coal which were de-allocated by Ministry of Coal in June 2011.
- Disinvestment of 9.50% holding by Government of India in the equity of your Company, thus reducing its holding from 84.50% to 75.00%.
- Commissioned first two solar power plants of 5 MW each at Dadri and Andaman & Nicobar Islands.

You will appreciate the fact that your Company is imparting a major thrust to the growth of the power sector and recording consistently excellent performance despite the challenge before the sector.

### 1. FINANCIAL RESULTS

Revenue	2012-13		2011-12	
	₹ Crore	US \$ Mn*	₹ Crore	US \$ Mn*
Net Revenue from Operations (including Energy Sales, Consultancy, Energy consumed internally)	65,673.93	11,960.29	62,052.23	11,300.72
Other Income	3,101.58	564.85	2,789.65	508.04
<b>Total Revenue</b>	<b>68,775.51</b>	<b>12,525.14</b>	<b>64,841.88</b>	<b>11,808.76</b>
Expenses				
Fuel	41,018.25	7,470.09	41,635.46	7,582.49
Employee Benefits Expense	3,360.12	611.93	3,101.71	564.87
Finance Costs	1,924.36	350.46	1,711.64	311.72
Depreciation and amortization expense	3,396.76	618.60	2,791.70	508.41
Generation, administration & other expenses	4,211.92	766.93	3,588.79	653.58
Prior period items (net)	(29.72)	(5.41)	(313.58)	(57.11)
<b>Total Expenses</b>	<b>53,880.99</b>	<b>9,812.60</b>	<b>52,515.72</b>	<b>9,563.96</b>
<b>Profit before Tax and exceptional items</b>	<b>14,894.52</b>	<b>2,712.54</b>	<b>12,326.16</b>	<b>2,244.80</b>
Exceptional items	1,684.11	306.70	-	-
Profit before tax	<b>16,578.63</b>	<b>3,019.24</b>	<b>12,326.16</b>	<b>2,244.80</b>
Tax Expense	3,959.24	721.04	3,102.43	565.00
Profit for the year	<b>12,619.39</b>	<b>2,298.20</b>	<b>9,223.73</b>	<b>1,679.80</b>

Appropriations:	2012-13		2011-12	
	₹ Crore	US \$ Mn*	₹ Crore	US \$ Mn*
Transfer to bond redemption reserve	492.79	89.75	482.38	87.85
Transfer to general reserve	6,500.00	1,183.76	5,200.00	947.00

Transfer to capital reserve	0.97	0.18	0.44	0.08
Interim dividend	3,092.07	563.12	2,885.92	525.57
Proposed dividend	1,649.09	300.33	412.27	75.08
Tax on dividend	781.87	142.39	527.92	96.14

\*1US \$= ₹ 54.91 as on March 31, 2013

## 2. DISINVESTMENT

One of the major highlights of the year that passed was that the Government of India divested 78,32,62,880 number of equity shares (9.50%) of NTPC on 7<sup>th</sup> February 2013 using the 'Offer for Sale through Stock Exchange Mechanism'. With this, the GOI's holding in NTPC has reduced from 84.50% to 75.00%. The Offer was over-subscribed by 1.7 times and garnered ₹ 11,469.39 crore at weighted average price of ₹ 146.43. An important feature was that 45% of the subscription came from FII.

## 3. DIVIDEND

### 3.1 Interim, Special and Final Dividend:

In addition to interim dividend of ₹ 3.75 per equity share paid in March 2013, your Directors have recommended a special dividend of ₹ 1.25 per equity share and final dividend of ₹ 0.75 per equity share for the year 2012-13. With this the total dividend for the year is ₹ 5.75 (including special dividend of ₹ 1.25) per equity share of ₹ 10/- each against ₹ 4.00 per share paid during last year.

The total dividend payout is 37.57% and the total dividend payout including dividend tax is 43.77% of profit after tax. The special and final dividend shall be paid after your approval at the Annual General Meeting.

The dividend has been recommended in accordance with your Company's policy of balancing dividend pay-out with the requirement of deployment of internal accruals for its growth plans.

Your Directors believe that growth of the Company through capacity addition, backward and forward integration and strategic diversification of its operations would lead to increase in shareholders' value.

## 4. OPERATIONAL PERFORMANCE

### 4.1 Generation:

During the year, the power stations of your Company generated 232.028 BUs (247 BUs including JVs) of electricity which was 25.57% (27.22% including JVs) of the total power generated in India (without Bhutan import).

The total power generated by the Company has registered an increase of 4.49% over the previous years' generation of 222.068 BUs. The total generation contributed by coal stations is 212.329 BUs during the year against generation of 199.054 BUs last year registering a growth of 6.67%.

Generation from coal based units could have been still higher but due to less grid demand there was generation loss of 7.48 BUs. The coal based stations of your Company operated at average Plant Load Factor (PLF) of 83.08% (All India PLF 69.95%) and average Availability Factor of 90.20% on bus bar during the year. During the year, 6 coal based stations out of 16 achieved more than 90% PLF.

The gas stations having a capacity of 3,955 MW achieved annual generation of 19.699 BUs at a PLF of 55.98% as against 23.014 BUs last year mainly due to less grid demand which accounted for a generation loss of 12.954 BUs. The average declared capacity of gas based stations of the year was 93.14% as compared to 93.81% during previous year.

### Management Discussion and Analysis Report

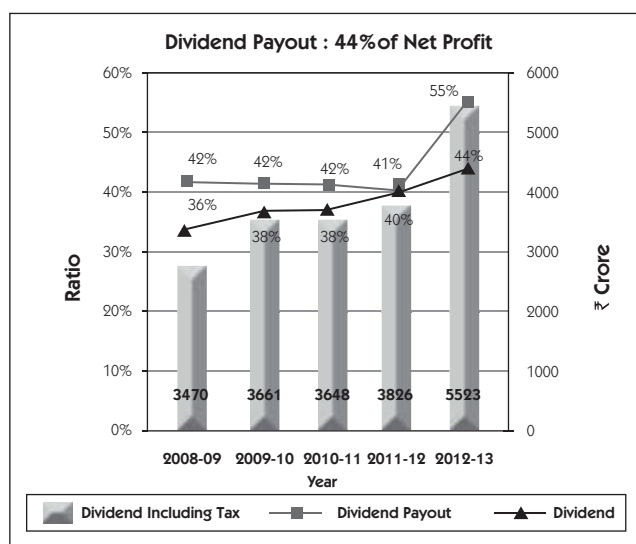
Management Discussion and Analysis Report for the year under review, as stipulated under Clause 49 of the Listing Agreement with the Stock Exchanges in India and as per Guidelines on Corporate Governance for CPSEs issued by Department of Public Enterprises, GOI, is presented in Annex-I to this Report.

## 5. COMMERCIAL PERFORMANCE

Your Company has realized 100% payment of current bills raised for sale of power, thus achieving this feat for the tenth consecutive year.

### 5.1 Rebate Scheme/ One Time Settlement Scheme for realization of dues:

In order to achieve early realization of dues, your Company gives rebate to its beneficiaries who make payments within time, through its Rebate Schemes.



In the Rebate Scheme for 2012-13 rebate was given to those customers also who were making payment after 30 days and upto 55<sup>th</sup> day.

Rebate Scheme for 2013-14 contains an additional provision of additional rebate of 0.1% for opening of monthly Letter of Credit (LC) by beneficiaries over and above the Rebate Scheme for 2012-13.

Most of the customers were making their payments within 30 days of billing, barring state utilities from UP, Haryana, Punjab, Himachal Pradesh, Andhra Pradesh, Tamil Nadu, Rajasthan, Meghalaya who were making their payments within allowable 60 days period.

All the beneficiaries have established LC and are maintaining it. As on 31.03.2013, your Company has monthly LCs of ₹ 5,915.60 crore.

The issue of DESU period dues payable by Government of NCT of Delhi has been settled and Government of India had approved settlement of ₹ 2,520.08 Crore (₹ 835.97 crore as principal and ₹ 1,684.11 crore as interest and surcharge) towards DESU dues. The receipt of amount is being pursued with the Govt.

## 5.2 Commercial Capacity:

The following units were declared commercial during the year 2012-13, adding 4,830 MW to commercial capacity of your Company, the highest ever in a year:

Project/ Unit	Capacity (MW)	COD*
<b>NTPC Units- Coal Based (I)</b>		
Farakka-III, Unit#6	500	04.04.2012
Sipat-I, Unit#2	660	25.05.2012
Sipat-I, Unit#3	660	01.08.2012
Simhadri-II, Unit#4	500	30.09.2012
Rihand-III, Unit#5	500	19.11.2012
Vindhyachal-IV, Unit#11	500	01.03.2013
Mouda-I, Unit#1	500	13.03.2013
<b>Total (I)</b>	<b>3,820</b>	
<b>NTPC Units -Renewable Energy Units (II)</b>		
Dadri Solar	5	30.03.2013
Andaman & Nicobar Islands Solar	5	31.03.2013
<b>Total (II)</b>	<b>10</b>	
<b>NTPC's JV Units- Coal Based (III)</b>		
Jhajjar, Unit#2 (JV with IPGCL and HPGCL)	500	21.04.2012
Vallur, Unit#1 (JV with TANGEDCO)	500	29.11.2012
<b>Total (III)</b>	<b>1,000</b>	
<b>Total Capacity declared commercial during 2012-13 (incl. JVs) (I)+(II)+(III)</b>	<b>4,830</b>	

\* COD- Commercial Operation Date

Further, after the financial year 2012-13, Unit#3 of 500 MW of Jhajjar (owned by JV, Aravali Power Company Private Limited) has been declared commercial on 26.04.2013.

## 5.3 Determination of Tariff:

Your Company had filed tariff petitions for the five-year period starting 1.4.2009 before Central Electricity Regulatory Commission (CERC) for all the stations in accordance with the CERC (Terms and Conditions of Tariff) Regulations, 2009.

Tariff orders have been received for 26 stations till 31.03.2013 out of 35 stations.

True-up petitions for revision of tariff were filed for 20 stations.

CERC had allowed additional reimbursement of ₹ 764.97 crore for 2004-09 period related to pay revision for NTPC employees, CISF and Kendriya Vidyalaya staff.

## 5.4 Other Activities:

Long term access for evacuation of power has been granted for five projects i.e. Vindhyachal-V, Dadri Solar, Tanda, Lara and Darlipalli.

CERC issued an amendment in the grant of connectivity regulation to allow connectivity to renewable projects having capacity above 5 MW but less than 50 MW being developed in the existing generating stations through the existing electrical system of the stations. This provision would enable your Company to set up renewable capacity within the premises of the existing generating stations.

## 5.5 Strengthening Customer Relationship:

Customer Relationship Management (CRM) initiative has been taken by your Company towards strengthening relationship with the customers. This is also reflected in the Core Values of your Company which emphasize 'Customer Focus'.

Under CRM, apart from Regional Customer Meets, Business Partner Meets, training programs for officials of customers at PMI, regular structured interaction with customers takes place on an ongoing basis for sharing of feedbacks, experiences and expectations. Based on the feedback received from the customers, the Company provides various support services to them, identifies potential areas of cooperation and shares best practices with the customer utilities. During 2012-13, 58 such services were provided to the customers on the basis of the requirement expressed by various customers. Further, 138 participants from various customer utilities attended training in 60 programs conducted by PMI.

Starting from 2008-09, NTPC has rolled out a Customer Satisfaction Index (CSI) Survey for gathering customers' feedback and responding to their requirements. This initiative serves as a useful tool for further strengthening Customer Relationship and better appreciation of our

business. The CSI Survey was conducted in 2012-13 and detailed action plan has been made based on the response to the survey.

## 6. INSTALLED CAPACITY

During the year 2012-13, your Company added 4,170 MW as per details given below:

Project/ Unit installed during FY 2012-13	Capacity (MW)
<b>NTPC owned</b>	
<b>Coal Based Power Projects</b>	
Sipat-I, Unit # 3	660
Vindhyachal- IV, Unit # 11 & 12	1000
Mouda –I, Unit 1 & 2	1000
Rihand, Unit # 5	500
<b>Renewable Energy Projects</b>	
Solar PV Project at Andaman & Nicobar Islands	5
Solar PV Project at Dadri	5
<b>Under JVs (Coal Based Power Projects)</b>	
Jhajjar (JV with HPGCL & IPGCL), Unit # 3	500
Vallur (JV with TANGEDCO), Unit # 2	500
<b>Addition during FY 2012-13</b>	<b>4,170</b>

### 6.1 Installed Capacity of NTPC Group:

The total installed capacity of the NTPC Group has increased from 37,014 MW as on 31.03.2012 to 41,184 MW as on 31.03.2013 as tabulated below:

Owned by NTPC	MW
Coal based projects	31,855
Gas based projects	3,955
Renewable Energy Projects	10
<b>Sub-total</b>	<b>35,820</b>
<b>Joint Ventures &amp; Subsidiaries</b>	
Coal based projects	3,424
Gas based projects	1,940
<b>Sub-total</b>	<b>5,364</b>
<b>Total</b>	<b>41,184</b>

## 7. CAPACITY ADDITION PROGRAM

Your Company has adopted a multi-pronged growth strategy which includes capacity addition through green field projects, brown field expansions, joint ventures and acquisitions towards its journey to become the world's largest power producer.

In addition to furthering capacity addition through Coal and Gas based power projects, your Company has been pursuing enhancement of its power generation portfolio through Hydro, Renewable Energy and Nuclear energy projects.

### 7.1 Projects under Implementation

Your Company's various projects having aggregate capacity of 20,009 MW including 5,190 MW, being undertaken by Joint Venture companies were under construction as on 31.03.2013:

<b>Ongoing Projects as on 31.03.2013</b>	
	Capacity (MW)
<b>I. Projects under NTPC Ltd</b>	
<b>A. Coal Based Projects</b>	
1. Bongaigaon-I	750
2. Barh-I	1,980
3. Barh-II	1,320
4. Lara-I	1,600
5. Kudgi-I	2,400
6. Vindhyachal-V	500
7. Gadawara*	1,600
8. Solapur	1,320
9. Mouda-II	1,320
10. Rihand-III	500
<b>Sub Total (A)</b>	<b>13,290</b>
<b>B. Hydro Electric Power Projects (HEPP)</b>	
11. Koldam	800
12. Tapovan Vishnugad	520
13. Lata Tapovan	171
<b>Sub Total (B)</b>	<b>1,491</b>
<b>C. Renewable Energy Projects</b>	
14. Singrauli CW Discharge (Hydro)	8
15. Ramagundam Phase-I (Solar PV)	10
16. Talcher Kaniha (Solar PV)	10
17. Unchahar (Solar PV)	10
<b>Sub Total (C)</b>	<b>38</b>
<b>Total I (A)+(B)+(C)</b>	<b>14,819</b>
<b>II Projects under JVs</b>	
<b>Coal Based Projects</b>	
18. Nabinagar- JV with Railways	1,000
19. Muzaffarpur Expansion (MTPS)– JV with BSPGCL (erstwhile BSEB)	390
20. Nabinagar, JV with BSPGCL (erstwhile BSEB)	1,980

Ongoing Projects as on 31.03.2013	
Projects under JVs	Capacity (MW)
<b>Coal Based Projects</b>	
21. Vallur, Phase-II JV with TANGEDCO	500
22. Meja, JV with UPRVUNL	1,320
<b>Total II</b>	<b>5,190</b>
<b>III Total On-Going Projects as on 31.03.2013 (I)+(II)</b>	<b>20,009</b>

\*Gadarwara Project in Madhya Pradesh (2X800 MW) is being implemented in place of Gajmara project in Odisha as the land for the same was not available.

Further, after the financial year 2012-13, awards have been placed and work has begun for 5 MW Solar Power Plant at Faridabad and 50 MW Solar Power Plant at Rajgarh (Madhya Pradesh). Thus, 20,064 MW projects are under construction by your Company.

## 7.2 New Projects

Currently, your Company has projects for 3,555 MW capacity under bidding. Feasibility Reports of 20,715 MW capacity (including 2100 MW through Joint Venture) have already been approved by your Board.

## 7.3 New Technology

To meet the future challenges of meeting India's electricity needs at affordable cost with minimum environmental impact, your Company has drawn a long term Technology Roadmap up to 2032. The technology roadmap envisages development, adoption and promotion of safe, efficient and clean technologies for entire value chain of power generation business.

For most of the new projects, your Company will be setting up super critical and Ultra Super Critical units of 660/ 800 MW which have higher efficiency and are also environmental friendly. Your Company has awarded bulk tendering projects with super critical technology for Kudgi-I (3X800 MW), Lara-I (2X800 MW), Solapur (2X660 MW), Mouda –II (2X660 MW) and Gadarwara (2X800 MW).

Your Company has adopted several new technologies, system and practices including combined cycle gas-fired power stations, Distributed Digital Control & Management Information System, High Voltage Direct Current transmission, Sliding Pressure Operation of SG, Dry Ash Extraction and Disposal, 765 KV Switchyard, Ash Water Recirculation System, Liquid Waste Management System, Performance Analysis and Diagnostic Optimization, Tunnel Boring Machines and Super Critical Technologies. Three (03) numbers Super critical units of 660 MW is already under operation at Sipat-I where steam parameters are 247 kg/cm<sup>2</sup>/537° C/565° C. Further, your Company has adopted higher steam parameters for all 660 & 800 MW units from Barh-II onward resulting in 5% gain in efficiency

over the efficiency of conventional sub-critical 500 MW unit using similar coal. For all the new sub-critical 500 MW units also, reheat temperature has been increased to 565 ° C resulting in about 0.7% gain in efficiency.

Your Company has taken initiatives for indigenous development of advance ultra super critical technology for which it has entered into MOU with BHEL and IGCAR. It has potential to enhance thermal efficiency of the power plant to around 46% and result in about 15-20% less CO<sub>2</sub> emission as compared to conventional 500 MW sub-critical thermal power plants. It envisages installing a technology demonstration plant having 800 MW unit with steam parameters of 310 kg/sq cm/710 ° C/720 ° C.

Your Company is preparing Detailed Project Report for hybrid solar thermal plant of about 3.6 MW by integration of solar heat with 210 MW coal based unit at Dadri. Solar heat is proposed to be integrated along with feed heaters in the turbine cycle for conversion of solar heat to electrical power with the help of existing steam cycle of 210 MW. Once integrated, this will reduce coal consumption thereby reducing CO<sub>2</sub> emissions.

## 7.4 Project Management

Your Company has an established state-of-the-art IT enabled Project Monitoring Centre (PMC) for facilitating fast track project implementation. PMC has advanced features like Web-based Milestone Monitoring System (Webmiles), Project Review and Internal Monitoring System (PRIMS), Enterprise-wide Issues Tracking System, etc. PMC facilitates monitoring of key project milestones and also acts as decision support system for the management.

PMC is extensively utilized for tracking and resolving project issues and helps in providing effective coordination between the agencies including management intervention and has provided enhanced and efficient monitoring of projects leading to better, faster and integrated implementation.

Your Company is establishing an integrated ERP Platform for monitoring and controlling of critical project activities spread across various functions like engineering, contracts and finance. This interface will help in getting timely inputs for decision making.

## 7.5 Capacity addition through Subsidiaries and Joint Ventures (JVs)

Besides adding capacities on its own, your Company develops power projects through its subsidiaries and joint ventures, both in India and abroad. Details of Joint Ventures abroad are covered under the heading 'Globalisation Initiatives'.

The information of Indian Subsidiaries and JV Companies along with details of partners of joint ventures for capacity addition is given below:

Name of Company	JV Partner(s)	Details
<b>NSPCL</b> (NTPC-SAIL Power Co. Pvt. Ltd.)	Steel Authority of India Ltd. (SAIL)	A 50:50 JVC formed to own and operate captive power plants for Steel Authority of India at Durgapur (120 MW), Rourkela (120 MW) and Bhilai Steel Plant (74 MW). 2X250 MW units have been implemented at Bhilai.
<b>NTECL</b> (NTPC Tamil Nadu Energy Co. Ltd.)	Tamilnadu Generation and Distribution Corporation Limited (TANGEDCO) (erstwhile TNEB)	A 50:50 JVC is implementing 3x500 MW coal based power project at Vallur, Tamilnadu. Unit#1 of the Project was declared commercial on 29.11.2012. Unit #2 was synchronized on 26.02.2013 and achieved full load on 28.03.2013. Construction of Unit#3 is in progress.
<b>APCPL</b> (Aravali Power Company Pvt. Ltd.)	Indraprastha Power Generation Co Ltd. (IPGCL) and Haryana Power Generation Co Ltd. (HPGCL).	This JVC is implementing the coal based Indira Gandhi Super Thermal Power Project consisting of 3 units of 500 MW each. NTPC, IPGCL and HPGCL have contributed equity in the ratio of 50:25:25. All the three units of the project have been synchronized and declared commercial. The third unit was declared commercial on 26.04.2013.
<b>BRBCL</b> (Bhartiya Rail Bijlee Company Ltd.)*	Ministry of Railways	A subsidiary of NTPC in joint venture with Ministry of Railways with equity contribution in the ratio of 74:26 respectively for setting up power project of 1000 MW (4X250 MW) capacity at Nabinagar in Bihar. Construction work is under progress.
<b>MUNPL</b> (Meja Urja Nigam Pvt. Ltd.)	Uttar Pradesh Rajya Vidut Utpadan Nigam Ltd. (UPRVUNL)	A 50:50 JVC formed for setting up 1,320 MW (2X660 MW) coal based power project in the state of Uttar Pradesh. Main plant award (SG and TG Package) has been placed and construction activities are in progress.
<b>KBUNL</b> (Kanti Bijlee Utpadan Nigam Ltd.)	Bihar State Power Generation Company Limited (erstwhile (BSEB))	A subsidiary of NTPC in joint venture with BSPGCL (erstwhile BSEB), took over MTPS having 2 units of 110 MW each from BSEB. The equity of NTPC in this subsidiary is 65%. Both the units of Stage-I are under Renovation and Modernisation. The Company has also taken up expansion of the project by 2X195 MW units for which construction work is in progress.
<b>NPGCL</b> (Nabinagar Power Generating Company Pvt. Ltd.)	Bihar State Power Generation Company Limited (erstwhile (BSEB))	A 50:50 JVC for setting up and operation of a 3x660 MW Coal based plant at Nabinagar. Investment approval has been accorded by NTPC in January 2013 and main plant TG & SG packages have been awarded. Land acquisition activities are in progress.
<b>RGPPPL</b> (Ratnagiri Gas and Power Pvt. Ltd.)	GAIL, ICICI, SBI, IDBI, Canara Bank and MSEB Holding Co.	NTPC is having a stake of 32.86% (as on 30.06.2013). All the three Power Blocks with a combined capacity of 1,940 MW are under commercial operation since May 2009. Power Block generated 5,127 MUs of energy during the FY 2012-13. The LNG terminal commissioning cargo was received at the Terminal on 28.12.2012 and the re-gasified LNG was injected for the first time on 10.01.2013. In addition to the commissioning cargo, the Company received and unloaded five LNG cargos and re-gasified and supplied 396712200 MMSCM of RLNG in its pipeline.
<b>ASHVINI</b> (Anushakti Vidhyut Nigam Ltd.)	Nuclear Power Corporation of India Ltd. (NPCIL)	ASHVINI was incorporated on 27.01.2011 as a JVC with NPCIL having 51% equity and NTPC having 49% equity. The company has been formed for setting up nuclear power project (s) and also to explore possibilities of entering in areas of front end fuel cycle like uranium mining etc.

\*In addition, NTPC Limited has signed Memorandum of Understanding with Ministry of Railways to set up 1,320 MW power project at Adra, West Bengal through Bhartiya Rail Bijlee Company Limited. Water allocation has been sanctioned from Damodar-Barakar River System and NOC from Airport Authority of India has been obtained. BRBCL has initiated proposal to carry out the remaining site specific studies.

## 7.6 Hydro Power

7.6.1 Your Company is setting up the following hydro projects for increasing its footprints in renewable energy development:

Project	Location	Capacity
Koldam HEPP	Himachal Pradesh	800 MW
Tapovan-Vishungad HEPP	Uttarakhand	520 MW

Construction work is in progress in Koldam HEPP and Tapovan – Vishnugad HEPP.

In addition, Lata Tapovan HEPP (171 MW) (under construction) and Rammam-III HEPP (120 MW) (under bidding) were being implemented by NTPC Hydro Limited, a wholly-owned subsidiary of NTPC.

NTPC Hydro Limited is now being merged with NTPC Limited, for which the Shareholders' Meeting of NTPC and Shareholders' Meeting of NHL was held on 24.05.2013, as per the Order of the Ministry of Corporate Affairs. The legal process of amalgamation is in progress.

Loharinag Pala HEPP had been discontinued on the advice of Ministry of Power. The Empowered Committee constituted by GOI for the purpose of settling the claims had approved reimbursement of ₹ 536.30 crore in first Phase to NTPC. Your Company is pursuing for release of funds.

The flash flood during June 2013 in the river Dhauliganga have caused damage to barrage and roads approaching to power houses at Lata Tapovan HEPP and Tapovan-Vishnugad HEPP. At Tapovan-Vishnugad HEPP, damages have also been caused to upstream and downstream diversion dyke, roads, besides water logging and silt accumulation in power house cavern & Tail Race Tunnel (TRT). While the exact impact shall be known after receding of flood, however, these factors may influence project commissioning schedule.

### 7.6.2 Hydro Engineering

In pursuance of Memorandum of Agreement signed with Govt. of Mizoram, Detailed Project Report of Kolodyne-II HEPP (4X115MW) prepared by Central Water Commission for Govt. of Mizoram and updated by NTPC was submitted to CEA for according Techno-Economic Clearance (TEC). CEA has considered the proposal and accorded Techno-Economic Clearance. As the land required for the project involves Forest Land, the proposal for approval of diversion of Forest Land was submitted to the Government of Mizoram. Government of Mizoram is yet to submit the proposal to Ministry of Environment and Forests.

## 7.7 Capacity Addition through other Renewable Energy Sources

Your Company is planning to add capacity through renewable sources of energy. It offers environmentally clean power.

Your Company plans to broad-base its generation mix to ensure long term competitiveness, mitigate fuel risks and promote sustainable power development.

In pursuit of these objectives, 10 MW Solar power capacity has already been commissioned. 93 MW capacity comprising 85 MW of Solar Power projects and 8 MW of Small Hydro Power Project is under execution, details of which are given under the heading project implementation. 95 MW comprising 15 MW Solar Power Project at Singrauli and Wind Energy Projects of 40 MW each at Karnataka and Maharashtra are under tendering. Detailed Project Report is under finalization for 3 MW Small Hydro Project at Rihand.

A Joint Venture Company has been incorporated amongst NTPC Limited, Asian Development Bank and Kyuden International Cooperation, Japan under the name **PAN-ASIAN Renewables Private Limited** to develop projects for portfolio of about 500 MW of renewable power generation resources in India. The Company is preparing its initial business plan.

Your Company has signed an MOU with CREDA for exploring the potential of Tatapani Geothermal field and subsequently implementing geothermal based power project at Tatapani in Chattisgarh on Build, Own and Operate Basis.

An MOU has been signed with Government of Kerala (GoK) with the objective to plan and develop around 200 MW wind energy based power projects in Kerala in association with GOK on Build, Own and Operate Basis using state-of-the-art technology subject to establishment of techno-commercial viability.

## 8. STRATEGIC DIVERSIFICATION- INCREASING SELF-RELIANCE

8.1 In order to strengthen its competitive advantage in power generation business, your Company has diversified its portfolio to emerge as an integrated power major, with presence across entire power value chain through backward and forward integration into areas such as coal mining, power equipment manufacturing, power trading, and distribution.

Our Company continuously explores business opportunities through market scanning and adopts new business plans accordingly.

8.1.1 The details of joint venture companies taking up activities in other businesses are given below:

Name of Company	JV Partner	Activities undertaken
UPL (Utility Powertech Ltd.)	Reliance Infrastructure Limited	Takes up assignments of construction, erection and supervision of business in power sector and other sectors like O&M services etc.

Name of Company	JV Partner	Activities undertaken
NASL (NTPC ALSTOM Power Services Pvt. Ltd.)	ALSTOM Power Generation, AG	Takes up renovation and modernization assignments of power plants both in India and in other SAARC countries.
EESL (Energy Efficiency Services Ltd.)	PFC, PGCIL and REC	The Company was formed on December 10, 2009 for implementation of Energy Efficiency projects and to promote energy conservation and climate change. The Company is providing consultancy on Energy Audit of Buildings and Agricultural Pump replacement under Perform Achieve Trade Scheme and implementing Bachat Lamp Yojna for various State Govts.
NHPTL (National High Power Test Laboratory Pvt. Ltd.)	NHPC, PGCIL, DVC and CPRI	The Company was incorporated on 22.05.2009 for setting up facility for short circuit testing of transformers and other electrical equipment. The site for setting up the laboratory is located at Bina, MP. Construction activities and award activities are in progress.
NPEX (National Power Exchange Ltd.)	NHPC, PFC TCS, NHPC, BSE, IFCI, Meenakshi, DPSC	The Company was formed to facilitate, promote, assist, regulate and manage nation wide trading of all forms of electrical energies and also to settle trades in a transparent fair and open manner. In view of the change in market scenario and the fact that NTPC's objective of joining NPEX has not been met till date, your Company has decided to exit from NPEX.

**8.2** The details of other subsidiary companies are as under:

**8.2.1 NTPC Electric Supply Company Limited**, a wholly owned subsidiary of NTPC was incorporated to foray into the business of distribution and supply of electrical energy as a sequel to reforms initiated in the power sector. The Company is implementing Rajiv Gandhi

Gramin Vidyutikaran Yojna projects on turnkey basis and undertakes turnkey execution of sub-stations for utilities and also takes up project management consultancy.

This subsidiary is carrying business of retail distribution of power in various industrial parks developed by Kerala Industrial Infrastructure Development Corporation (KINFRA), through its Joint Venture Company namely **KINESCO Power and Utilities Private Limited**, formed with KINFRA.

The Company is making continuous efforts to take up the new business activities in different areas including retail distribution of electricity to bulk industrial consumers in up-coming mega industrial areas/ SEZs.

**8.2.2 NTPC Vidyut Vyapar Nigam Limited**, a wholly owned subsidiary of NTPC was incorporated to undertake sale and purchase of electric power and to effectively utilize installed capacity and thus enable reduction in the cost of power.

The Company is involved in power trading, sale of fly ash and cenosphere.

It has been appointed as the nodal agency for cross border trading of electricity with Bhutan and Bangladesh. It has signed a Power Purchase Agreement with Bangladesh Power Development Board for supply of 250MW power for 25 years from various Central Generating Stations of NTPC. The power is likely to commence from the end of July 2013.

The Company has also been designated as the Nodal Agency for purchase of grid connected solar power upto 1000 MW as a part of Phase-I of Jawahar Lal Nehru National Solar Mission.

**8.3** In order to strengthen its competitive advantage in power generation business, the Company has diversified into the area of manufacturing through the following joint ventures:

**8.3.1 NTPC-BHEL Power Projects Pvt. Limited (NBPPL)**, a joint venture of your Company with BHEL was incorporated on April 28, 2008 for taking up activities of engineering, procurement and construction of power plants and manufacturing of equipments. The manufacturing plant of NBPPL is being set up at Mannavaram, Tirupati in Andhra Pradesh for CHP and AHP.

The Company is executing EPC contracts for balance of plants packages of Palatana Combined Cycle Power plant in Tripura and Namrup Combined Cycle Power Plant in Assam for BHEL. It is also executing BOP including Erection & Commissioning works of the entire plant at Monarchak, Tripura for NEEPCO.

**8.3.2 BF-NTPC Energy Systems Limited** was incorporated with Bharat Forge Limited on June 19, 2008 to manufacture castings, forgings, fittings and high pressure piping required for power projects and other industries.

The Company is setting up plant at Solapur for which technical specifications for administrative buildings has been submitted by the consultant.



**8.3.3** Your Company has acquired 44.6% stake in **Transformers and Electricals Kerala Limited** from Government of Kerala on June 19, 2009. The Company deals in manufacturing and repair of Power Transformers. Expansion of plant facilities was completed in January 2013.

Please refer to "Management Discussion and Analysis", Annexure-I included as a separate section to this report for further details of subsidiary and joint venture companies of NTPC.

## 9. GLOBALISATION INITIATIVES

**9.1 Trincomalee Power Company Limited**, a 50:50 joint venture Company between NTPC and Ceylon Electricity Board was incorporated on 26.09.2011 to undertake the development, construction, establishment, operation and maintenance of a coal based electricity generating station of 2X250 MW capacity at Trincomalee at Srilanka. Finalisation of various agreements between JV Company and CEB is in progress.

**9.2 Bangladesh - India Friendship Power Company Private Limited**, a 50:50 joint venture company between between NTPC and Bangladesh Power Development Board (BPDB) was incorporated on 31.10.2012 for developing a 2X660 MW Coal based power project at **Khulna, Bangladesh**. Feasibility Report of the Khulna project has already been approved by NTPC.

**9.3** Your Company has prepared and submitted the DPR for Amochu Hydro-electric project in Bhutan on consultancy basis. The DPR has been cleared by CEA.

**10. NTPC Consultancy Wing:** As a result of the phenomenal success achieved by your Company in executing its own power projects, many utilities from India and abroad approach NTPC to benefit from the rich experience gained by your Company. With this in view, NTPC formally established a Consultancy Wing in 1989. Since then, this wing has been receiving orders from domestic and international clients. Consultancy Wing is now recognized as Consultant with several leading domestic and international development and financial institutions and clients. It offers services like Engineering Services, Operation & Maintenance Management Services, Project Management Services, Contracts & Procurement Management Services, Quality Management Services, Training & Development Services etc.

Consultancy Wing has provided various services in domestic and international markets in Gulf countries, Bangladesh, Srilanka and Bhutan like preparation of Feasibility Report for Bangladesh Power Development Board, Bangladesh and site selection, site specific studies and preparation of Feasibility Report for the proposed 2X250 MW Trincomalee Coal Power Project at Srilanka. This Wing is also providing O&M Management Services to 2X120 MW Siddhirganj Peaking Power Plant of Electricity Generation Company of Bangladesh under a World Bank funded contract.

On the domestic front too, Consultancy Wing has been effectively sharing its expertise with several power utilities.

## 11. FINANCING OF NEW PROJECTS

The capacity addition programs shall be financed with a debt to equity ratio of 70:30. Your directors believe that internal accruals of the Company would be sufficient to finance the equity component for the new projects. Given its low geared capital structure and strong credit ratings, your Company is well positioned to raise the required borrowings.

Your Company is exploring domestic as well as international borrowing options including overseas development assistance provided by bilateral agencies to mobilize the debt required for the planned capacity expansion program.

During the year 2012-13, term loan agreements of ₹ 6,970 crore were entered into including loan agreement of ₹ 2,000 crore executed with Union Bank of India and loan agreement of ₹ 600 crore executed with J&K Bank Limited. The cumulative amount of domestic loans tied up till March 31, 2013 was ₹ 59,699.35 crore (excluding undrawn loans short-closed as per agreements).

Your Company has also tied-up USD 750 million from international debt markets through foreign currency notes and term loan.

The bond offering of the Company received strong investor response.

## 12. FIXED DEPOSITS

The cumulative deposits received by your Company from 98 depositors as at March 31, 2013 stood at ₹ 0.63 crore. Further, an amount of ₹ 0.16 crore has not been claimed on maturity by 9 depositors as on March 31, 2013.

Your Company has discontinued the acceptance of fresh deposits and renewals of deposits under NTPC's Public Deposit Scheme with effect from 11.05.2013.

## 13. FUEL SECURITY

**13.1** During the year, the supply position of coal and gas is given as under:

### 13.1.1 Coal Supplies

Your Company has Fuel Supply Agreements (FSA) in place for 20 years for 23,895 MW units commissioned till 31.03.2009. Your Company has signed in-principle FSAs for NTPC and its JVs with Coal India Limited for 14,010 MW on 17.07.2013. However, detailed FSAs are signed for 4,760 MW NTPC Stations and 2,250 MW for NTPC JV stations. Further, detailed FSAs will be signed for balance capacity 4,860 for NTPC stations and 2,140 MW for NTPC JV stations shortly.

Your Company has obtained Letter of Assurance from Eastern Coalfields Limited for supply of 0.4 MMT of coal for Bongaigaon (2X250MW).

The Company has also tied up coal supply through bilateral MOU for 0.3 MMT coal for Farakka with NEC and for 4.0 MMT with SCCL for Ramgundam and Simhadri at a mutually negotiated price. The total coal supply through bilateral MOU during 2012-13 was 3.122 MMT.

### 13.1.2 Domestic Coal and Imported Coal

During 2012-13, your Company received 155 MMT of coal as against 141 MMT in 2011-12 marking an increase of 10%.

Total domestic coal supply during 2012-13 was 145.9 MMT as against 129 MMT during 2011-12.

The total coal supply from CIL was 132.6MMT and from SCCL was 13.3 MMT.

During 2012-13, your Company imported 9.1 MMT of coal as against 12 MMT in 2011-12.

### 13.1.3 Sourcing of coal through E-auction

For supplementing the coal supply at a few critical stations i.e. Sipat, Simhadri, Unchahar, Dadri and Mouda, your Company received 2.28 MMT of coal through E-auction.

### 13.2 Gas supplies

During 2012-13, your Company received 10.67 MMSCMD of gas and RLNG as against 13.09 MMSCMD received during 2011-12. The gas off-take in 2012-13 includes 8.77 MMSCMD of gas and 1.90 MMSCMD of RLNG. Gas offtake was less due to less availability of generation schedule from the beneficiary states.

Your Company has APM gas agreements up to the year 2021 and PMT gas agreements up to the year 2019 for its gas stations. The long-term RLNG supply agreement with GAIL is valid till 2019 and the term sheet for non-APM gas with GAIL is valid till 2016. Further, out of 4.46 MMSCMD of KG-D6 gas allocated by Government of India for NCR gas stations, viz. Anta, Auraiya, Dadri and Faridabad, 2.30 MMSCMD has already been tied up. The tie-up of balance 2.16 MMSCMD KG D6 gas is under discussions. However, the gas supplies from KG D6 fields have been continuously decreasing. As per Empowered Group of Minister/ MOP&NG directive to supply KG D6 gas as per sectoral priority basis, the supplies to Power Sector (including NTPC stations) have reduced to Nil from March 2013.

Your Company has been making arrangements for tie-up and supply of spot RLNG or Fallback RLNG from domestic suppliers on 'reasonable endeavour' basis based on requirement and availability from time to time.

### 13.3 Development of Coal Mining projects

Your Company was allocated six coal blocks by the Government of India namely Pakri-Barwadiah, Chhatti-Bariatu, Kerandari, Talaipalli, Dulanga and Chhatti-Bariatu (South) with estimated geological reserves of over 3 billion tonnes and production of about 53 million tonnes per annum (MTPA).

Ministry of Coal, through letter dated 23.01.2013, has withdrawn de-allocation of Chhatti-Bariatu, Kerandari and Chhatti-Bariatu (South), which were de-allocated on 14.06.2011 and these coal blocks have been restored to NTPC.

Development activities are in advanced stage in all coal

blocks except in Chhatti-Bariatu (South), located in dip side of Chhatti-Bariatu, which will be developed at the end of mining of Chhatti-Bariatu. Mining Plans have been approved by Ministry of Coal for all of these coal blocks, except for Chhatti-Bariatu (South). All notifications for mining area land and Socio-Economic Surveys have been completed for all these coal blocks.

Government of Jharkhand has approved the R&R plan and annuity scheme for Pakri-Barwadiah coal block in February 2013. Rehabilitation Action Plan for Pakri-Barwadiah, Chhatti-Bariatu, Kerandari and Talaipalli coal blocks have been approved by the Board of your Company and payment of land compensation to project affected families is under progress.

Ministry of Environment & Forests, Govt. of India (MOEF) has accorded environment clearance for Pakri-Barwadiah, Chhatti-Bariatu, Kerandari and Talaipalli Coal blocks. In-principle environment clearance has been received from MOEF for Dulanga coal block and final environment clearance will be issued after Stage-I forest clearance.

MOEF had accorded Stage-I & Stage-II forest clearances for Pakri-Barwadiah and Chhatti-Bariatu coal blocks and Stage-I forest clearance for Kerandari and Talaipalli coal blocks.

Forest clearance proposal for Dulanga coal block is under consideration at MOEF. Construction of R&R Colony, CHP, Sub-Station, Railway Siding, etc. have commenced in Pakri-Barwadiah coal block. Mine Developer-cum-Operator (MDO) has been appointed in Pakri-Barwadiah, Chhatti Bariatu and Talaipalli coal blocks.

In addition to the above coal blocks, Ministry of Coal has conveyed in-principle approval for allotment of more coal blocks to NTPC in lieu of coal linkages for the following new projects:

- (i) Kudgi (2,400MW)
- (ii) Gajmara (1,600MW)
- (iii) Barethi (3,960 MW)
- (iv) Unchahar Stage-IV (500 MW)

Ministry of Coal has allotted four coal blocks on 03.07.2013 out of six coal blocks applied for. The estimated geological reserves for these blocks are estimated to be 2 Million tones as listed below:

- (i) Bhalumuda, Chattisgarh (550 MT)
- (ii) Banai, Chattisgarh (629 MT)
- (iii) Chandrabila, Odisha (550 MT)
- (iv) Kudanali- Luburi, Odisha (266 MT)

Formal letter regarding allotment of coal blocks from Ministry of Coal is likely to be received shortly.

### 13.4 Other initiatives for securing coal supply

To leverage the strength of established players in mining and related areas, your Company has formed the following Joint Venture Companies:

Name of Company	JV Partners	Purpose
CIL NTPC Urja Pvt. Ltd.*	Coal India Ltd.	For undertaking the Development, O&M of Brahmini and Chichro Patsimal coal blocks and Integrated Power Project(s).
NTPC SCCL Global Ventures Pvt. Ltd.	Singareni Collieries Company Ltd.	For undertaking development and O&M of coal Blocks in India and abroad. This Company has been appointed as MDO for Talaiipalli Coal Block.
International Coal Ventures Private Limited**	SAIL, CIL, RINL and NMDC	For exploring various opportunities in Australia, Mozambique, Canada, Indonesia and USA for acquisition of stake in coking coal and thermal coal mines

\*In case of Brahmini and Chichro-Patsimal coal blocks, allocated to CIL NTPC Urja Private Limited, Ministry of Coal had de-allocated these blocks for delay in their development though there was no schedule stipulated in the allotment letter. Your Company has taken up the matter with the Ministry of Coal for withdrawal of de-allocation.

\*\*The Board of NTPC has accorded approval to exit from International Coal Ventures Private Limited. Approval of Ministry of Power permitting NTPC to exit from ICVL has been received. ICVL is pursuing with Cabinet for approval of exit of NTPC out of it.

### 13.5 Exploration Activities

In Cambay exploration block allotted under NELP-VIII, held by NTPC as operator with 100% participating interest, 3D Seismic Data Acquisition has been completed and processing and interpretation of data is in progress. Based on the results, exploratory drilling of wells shall be planned.

In the other three blocks, in each of which NTPC has 10% participating interest and ONGC is operator, exploration activities are in progress.

### 14. BUSINESS EXCELLENCE: GLOBAL BENCHMARKING

In pursuit of actualizing our vision and with a view to achieve higher levels of excellence, your Company has developed and adopted its own 'NTPC Business Excellence Model' on the lines of globally reputed Excellence Models such as Malcom Baldrige Model, USA and EFQM Model of Europe.

This model has been deployed at our Business Units (Stations) and we carry out assessment of generating stations using this framework of excellence.

The assessment process is aimed at identifying the areas for enhancing stakeholder engagement, accelerating critical processes and developing leadership potential.

The outcomes of this model are organizational strengths, opportunities for improvement, issues of concern and best practices.

In the financial year 2012-13, the 3<sup>rd</sup> cycle of assessment was completed. The stations ranking high on excellence level like Korba, Talcher-Thermal and Faridabad were awarded by Honourable Union Minister of State (I/c) for Power.

As a next step on the Journey of Excellence, your Company is implementing Business Balanced Scorecard capturing proper matrices to enhance overall strategic focus and speed.

Other TQM initiatives and techniques like Quality Circles, Professional Circles, 5S, integrated management system (IMS) etc have been deployed across the organization for continuous improvement. Our Quality Circle teams of workmen have been consistently representing NTPC at national and international Quality Circle conventions and bringing many laurels. In the year 2012-13, 'Prayas' Quality Circle team from Talcher-Thermal bagged 'Gold' award at the International Quality Control Circles Convention held at Kuala Lumpur, Malaysia.

### 15. RENOVATION & MODERNISATION

#### 15.1 Need for R&M:

In the present scenario of severe resource constraint, Renovation and Modernization (R&M) of power plants is considered to be the best option for bridging the gap between demand and supply of power as R&M schemes are cost effective. It increases the capacity and ensures safe, reliable and economic electricity production by replacement of worn-out, deteriorated or obsolete electrical, mechanical, instrumentation, controls and protection system by state-of-the-art equipment.

To this end, renovations are being carried out for the purpose of life extension of units, performance improvements, capacity enhancement, availability improvement and improved environment compliance. Your Company completed 761 out of 1,109 schemes of R&M, with a cumulative expenditure of ₹ 3,150 crore upto 31<sup>st</sup> March, 2013.

In year 2012-13, investment approvals were accorded for life extension of Stage-I units of Ramagundam and Kobra and thereafter, investment approval for life extension of Singrauli Stage-I has also been accorded.

With a view to comply with increasingly stringent environment norms prescribed by State Pollution Control Boards, tendering is on for Renovation and Retrofitting of Electrostatic Precipitator (ESP) in stations like Singrauli - I & II, Farakka - I, Unchahar - I, Talcher STPS Stage-II etc. With the same objective, implementation of renovatin of ESP is already in progress at Badarpur TPS (2x210 MW).

Awards were placed during the year 2012-13 for Renovation of ESP in Korba - I & II, Rihand - I, Vindhyaal - I & II, Talcher STPS, Badarpur TPS and Talcher TPS-II.

### 16. VIGILANCE

#### 16.1 Vigilance Mechanism:

Your Company ensures transparency, objectivity and quality of decision making in its operations and to monitor the same, the Company has a Vigilance Department headed by Chief Vigilance Officer, a nominee of Central Vigilance Commission. The CVO reports to the Central Vigilance Commission.

The four units of Vigilance Department namely Corporate Vigilance Cell, Departmental Proceeding Cell (DIPC), MIS Cell and Technical Cell (TC) deal with various facets of vigilance mechanism. The Vigilance Department submits its report to the Competent Authority and also to the Board of Directors.

Your Company has made it mandatory for all the projects and stations to award the packages above ₹ 15 lac through e-procurement. As per the directive of DOPT/MOP, the property returns of all the executives have been published on NTPC Website.

### 16.2 Workshops and Vigilance Awareness Week

Preventive Vigilance Workshops are being conducted every year to sensitize employees about DO's and DON'Ts in work areas and their role in preventing corruption. During the Vigilance Awareness Week, a compendium of circulars and a Handbook on Preventive Vigilance and Case Studies were also issued.

### 16.3 Implementation of Integrity Pact

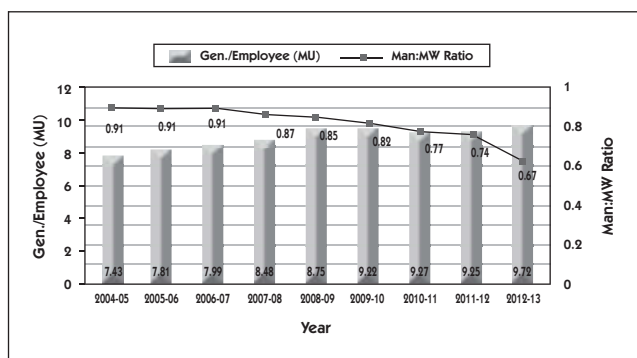
Your Company is committed to have total transparency to its business processes and as a step in this direction; it signed a Memorandum of Understanding with Transparency International India in December, 2008. The Integrity Pact is being implemented for all contracts having value exceeding ₹ 10 crore. Two Independent External Monitors have been nominated by the Central Vigilance Commission for all contracts with value exceeding ₹ 100 crore.

### 16.4 Implementation of Fraud Prevention Policy

The Fraud Prevention Policy has been formulated and implemented in your Company since 2006. The cases referred by the nodal officers are being investigated immediately to avoid fraudulent behaviors as defined in the Fraud Prevention Policy.

## 17. HUMAN RESOURCE MANAGEMENT

**17.1** Your Company takes pride in its highly motivated and competent human resource that has contributed its best to bring the Company to its present heights. The productivity of employees is demonstrated by increase in generation per employee and consistent reduction of Man-MW ratio year after year. The over-all Man-MW ratio for the year 2012-13 excluding JV/subsidiary capacity is 0.67 and 0.62 including capacity of JV/ Subsidiary. Generation per employee was 9.72 MUs during the year based on generation of NTPC stations.



The total employee strength of your Company stood at

25,484 as on 31.3.2013 against 25,511 as on 31.3.2012.

	Fiscal 2013	Fiscal 2012
<b>NTPC</b>		
Number of employees	23,865	24,011
<b>Subsidiaries &amp; Joint Ventures</b>		
Employees of NTPC in Subsidiaries & Joint Ventures	1,619	1,500
<b>Total employees</b>	<b>25,484</b>	<b>25,511</b>

The attrition rate of the NTPC executives (including Executive Trainees and those posted in Subsidiaries and JVs) during the year was 1.46%.

### 17.2 Employee Relations

The Company takes pride in its greatest resource and asset, the employees. The human resource has been the backbone of the Company, in driving operational and financial performance. As a commitment towards the Company's core values, Employees' Participation in Management was effectualized based on mutual respect, trust and a feeling of being a progressive partner in growth and success. Communication meetings with unions and associations, workshop on production and productivity, etc were conducted at projects, regions and corporate level during the year.

Both, employees and management complemented each other's efforts in furthering the interest of the Company as well as its stakeholders, signifying and highlighting over-all harmony and cordial employee relations prevalent in the Company.

### 17.3 Safety and Security

NTPC recognizes and accepts its responsibility for establishing and maintaining a safe working environment for all its employees and associates. Occupational health and safety at workplace is one of the prime concerns of NTPC Management and utmost importance is given to provide safe working environment and inculcate safety awareness among the employees. The Company takes all such steps which are reasonably practicable to ensure best possible conditions of work. NTPC has a 3-tier structure for occupational health and safety management, namely at site at Regional Headquarters and at Corporate Centre.

All our stations are certified with OHSAS-18001/IS-18001. Regular plant inspection and review with Head of Project, internal safety audits by our own safety officers of various sites and external safety audits by reputed organizations are carried out at each site every year. Recommendations of auditors are regularly reviewed and complied with.

Cross Functional Safety task force for O&M and construction projects are functional at all site to monitor unsafe working conditions at site and its rectification.

Height permit and height check list are implemented to ensure safety of workers while working at height. Adequate numbers of qualified safety officers are posted at all units as per statutory rules and provisions to look after safety of people and property.

For strict compliance and enforcement of safety norms and practices, safety clauses are included in General Conditions of Contract.

To mitigate on-site emergencies at all operating stations, effective engineering controls are provided to indicate and handle emergency situation. Detailed emergency plans have been developed and responsibilities are assigned to each concerned to handle emergency situations. Mock drills are conducted regularly to check healthiness of the system.

Through our continuous efforts in safeguarding the employees, accidents have come down as compared to last year. Many of our plants have been awarded with prestigious safety awards by various Institutions and Bodies like Ministry of Labour & Employment, Govt. of India, National Safety Council and Institution of Engineers in recognition of implementing innovative safety procedures and practices.

Concrete steps are being taken for upgrading surveillance systems at all of our projects/ stations by installing state-of-the-art security systems. Security and Coordination Group interact with MHA, IB and CISF as well as the State/ District level authorities to augment the security preparedness in our establishment/ power installations.

#### 17.4 Training and Development

In line with its objective of being a learning organization, your Company has continuously promoted training and development of not only its own employees but also other professionals of the power sector. In this effort, your Company has endeavored to continuously upgrade the training infrastructure of Power Management Institute (PMI) at the corporate level as well as the Employee Development Centers at the sites. The training imparted is in tune with emerging needs in diverse areas like nuclear power, coal-mining, hydro-power, super-critical technology, renewable energy etc. and for this purpose some new programmers are included in the annual calendar every year. Apart from this, the usual programs include topics on management, power station operation & maintenance, project construction, erection and commissioning and information technology.

Under the on-going scheme of strengthening the Industrial Training Institutes (ITIs) across the country, your Company has taken the initiative of adopting ITIs near its power generating stations and a total of 17 ITIs have been adopted under this scheme till 31.03.2012. This activity is being coordinated through PMI which is also facilitating the construction of nine new ITIs where new projects are coming up. Through this initiative, PMI has created 1,533 extra seats by way of starting new trades/ units in these ITIs.

During 2012-13, your Company organized a number of training programmes in power and energy related areas.

PMI conducted 397 training programmes during 2012-13 with a participant base of 8,938. The training mandays clocked were 47,935.

PMI, for the first time, conducted an all-women training programme titled 'Let's Cherish Womanhood' on the issues and challenges of women executives in managing

home and office together.

It also took the initiative of taking training programmes to the doorstep of the site employees.

In collaboration with CC-IT group and CenPEEP department, "Efficiency Overview and Perform Achieve and Trade (PAT) Legislation" programme was launched through Web Conferencing.

In order to promote holistic well-being of employees and their families, Pranik Healing was started through Holistic Wellness Foundation under the aegis of 'Snehal', a Healing and Creativity Centre at PMI.

#### 18. SUSTAINABLE DEVELOPMENT

Sustainability is an opportunity for business to improve its profitability, competitiveness and market share without compromising the ability of future generations to meet their own needs. The sustainability agenda of your Company addresses all aspects related to sustainable development and promote environmental management, social responsibility and economic performance (triple bottom line approach).

Your Company is a member of "TERI – Business Council for Sustainable Development – India (TERI-BCSD)", the Indian partner of the WBCSD (World Business Council for Sustainable Development), Geneva, and also a member of United Nation's Global Compact.

SEBI, through its Circular CIR/CFD/DIL/8/2012 dated August 13, 2012, mandated the top 100 listed entities based on market capitalization at BSE and NSE, to include Business Responsibility Report as a part of the Annual Report describing the initiatives taken by the Company from Environmental, Social and Governance perspective.

**Accordingly, a Business Responsibility Report is attached as Annex-X and forms part of the Annual Report.**

##### Initiatives by the Company

Your Company has developed a Policy on Sustainable Development in accordance with which a sustainable development plan was prepared for the year 2012-13. Major activities carried out under this plan included plantation of more than 2 lac saplings in and around NTPC plants, reduction of particulate matter emissions at two stations through flue gas conditioning, installation of flue gas conditioning system at one more station and installation of bio-methane plants to treat biodegradable waste and generate bio-gas for use in guest house / canteen kitchens. A total expenditure of ₹ 10.18 crore was incurred on these Sustainable Development Projects during the Financial Year 2012-13.

During the year, your Company has published its "Sustainability Report 2011-12" in line with the internationally accepted "Global Reporting Initiative (GRI)" Guidelines and the report has been duly assured by an independent external assurance provider as per international standard.

In its endeavor to achieve the goals of Sustainable Development, your Company is addressing the issues through multi-pronged approach as per the details given below:

## 18.1 Inclusive Growth – Initiatives for Social Growth

### 18.1.1 Corporate Social Responsibility:

Your Company has always discharged its social responsibility as a part of its Corporate Governance philosophy. It follows the global practice of addressing CSR issues in an integrated multi stake-holder approach covering the environmental and social aspects.

With a view to address the domains of socio-economic issues at national level, it has revised its Corporate Social Responsibility – Community Development (CD) Policy in line with the Guidelines issued by Department of Public Enterprises, Govt. of India.

Your Company, being a member of Global Compact Network, India, confirms its involvement in various CSR activities in line with 10 Global Compact principles and shares its experience with the representatives of the world through “Communication on Progress”. It submits its Communication on Progress (COP) to UN Global Compact on regular basis. A report on progress made in this area is enclosed at Annex- VIII to this Report.

#### Expenditure incurred towards CSR Activities:

A total expenditure of ₹ 69.24 crore was incurred towards Corporate Social Responsibility expenses during the Financial Year 2012-13, which was 0.75% (against MOU target of 0.5%) of the net profit after tax of the previous year.

In line with revised guidelines on CSR and Sustainability issued by DPE, your Company has enhanced allocation for CSR and Sustainable Development activities to 1% of net profit after tax of previous year with effect from financial year 2013-14.

#### Awards:

Your Company received FICCI Appreciation Plaque for 2011-12, Golden Peacock Award for CSR, 2012 and Greentech Award for CSR 2012.

### 18.1.2 NTPC Foundation

NTPC Foundation is engaged in serving and empowering the physically challenged and economically weaker sections of the society.

Initiatives undertaken by the Company are covered under Annex-VII to this Report.

### 18.1.3 Distributed Generation Power Projects

Your Company has signed MoU with Swiss Agency for Development and Cooperation for planning and implementing Renewable Energy and Distribution Generation projects. The main focus is on technologies like bio-mass gasification including two stage gasifier, small hydro and solar energy and sustainability of DG projects.

### 18.1.4 Rehabilitation & Resettlement (R&R)

Your Company is committed to help the people affected by its projects and has been making all its efforts to improve the socio-economic status of Project Affected Persons (PAPs). In order to meet its social objectives, your Company is focusing on effective R&R of PAPs and undertaking community development activities in and around the projects.

Land availability for bulk tendered projects for which award was placed during the year was ensured through proactive redressal of R&R issues.

R&R activities were implemented at new Greenfield/ brownfield projects after finalization in consultation and participation of the stakeholders at Kudgi, Lara, Tanda, Gadarwara, Khargone, Barethi, Dadri and Coal Mining projects. At other thermal, hydro and coal mining projects, like Barh, Koldam, Korba, Vindhyachal, Mouda, Solapur, Bongaigaon, Tapovan-Vishnugad, Pakri-Barwadiah, Chhatti-Bariatu, Kerandari and Talipalli projects, R&R activities continued throughout the year.

Socio-economic Survey was completed for Darlipalli, Barethi, Lara, Gadarwara, Khargone, Chhatti-Bariatu (South) and Dhuvaran Projects and is in progress at Bilhaur Projects.

In the area of health, your Company is providing financial assistance for renovation and refurbishment of “Sundargarh District Hospital” in Odisha. Capacity building/ skill upgradation and training activities including those in construction trades were facilitated and commitment for the part contributions towards construction of Engineering Colleges at Raipur and Raigarh, Chattisgarh was made during the year.

## 18.2 Environment Management – Initiatives for preserving Environment

### Vision Statement on Environment Management:

“Going Higher on Generation, lowering GHG intensity”

Your Company is pursuing the objective of environment protection as one of its prime responsibilities and focuses its efforts to mitigate the impact of its operation on surrounding environment. Around 12-15% of the project cost is spent on various environment protection equipments. To meet the environmental challenges of 21<sup>st</sup> century and beyond, the Company has adopted sound environment management practices and advanced environment protection system to minimize impact of power generation on environment.

Your Company has adopted advanced and high efficiency technologies such as super critical boilers for the upcoming green field projects. The Company is also designing its up-coming plants to use beneficiated coal and imported low ash coal. The above measures are aimed not only to achieve reduction in pollution and minimize use of precious natural resources but also to lead to reduction of CO<sub>2</sub> emissions per unit of generation and thereby deal with the global warming.

**18.2.1 Control of Air Emissions:** High efficiency Electro-static Precipitators (ESPs) with efficiency of the order of 99.9% and above, with advanced control systems have been provided in all coal based stations to keep Suspended Particulate Matter (SPM) below permissible limits. All up-coming new plants are being provided with ESPs designed in such a manner that would cater to the anticipated future norms. Performance enhancement of ESPs operating over the years is being carried out by augmentation of ESPs fields, retrofit of advanced ESP controllers and adoption of sound O&M practices. Flue Gas Conditioning system has also been provided at our old units which are helping in reduction of SPM emissions

below statutory limits. Also, massive R&M program is being undertaken to upgrade air pollution equipments to reduce SPM emissions.

NOx control in plants is achieved by controlling its production by adopting best combustion practices. Since tall stacks are provided in coal stations, SOx and NOx emitted through stacks is widely dispersed and diluted. In gas based stations, NOx control systems (hybrid burners or wet DeNOx) have been provided for good combustion practices.

Fugitive emission from ash pond is controlled by maintaining water cover, tree plantation on abandoned ash ponds, water spray, earth cover in inactive lagoons. Providing dust suppression and extraction system in CHP area has further added to reduction in fugitive dust in the vicinity of power stations.

**18.2.2 Control of water pollution and promotion of water conservation:** Various water conservation measures have been taken up to reduce water consumption in power generation by using 3Rs (Reduce, Recycle & Reuse) as guiding principle.

Provision of advanced treatment facilities such as Liquid Waste Treatment Plants (LWTP), Recycling Systems for Ash Pond Effluent called Ash Water Recirculation System (AWRS) and closed cycle condenser cooling water systems with higher Cycle of Concentration (COC), rain water harvesting wherever possible and reuse of treated sewage effluent for horticulture purposes are some of the measures implemented in most of the stations.

**18.2.3 Ash Management:** Ash dykes in the stations have been engineered to ensure that all safety and environmental issues are addressed at design stage itself.

Multi-lagoon ash ponds with provision of over-flow lagoons and ash pipe garlanding arrangement for change over of ash slurry feed points have been provided for effective settlement of ash particles.

Water sprinklers have been provided in the ash pond areas for spraying water in dried up portion of lagoons for control of fugitive dust. Efforts are made to maximize utilization of ash through use of Dry Ash Extraction System (DAES).

Unutilized ash is sent to ash pond by making ash slurry. The decanted water in Ash Pond is recycled back with the help of Ash Water Recirculation System (AWRS) for making ash slurry again, leading to reduction in water consumption.

**18.2.4 Automation of environment measurement system:** 67 continuous ambient air quality monitoring stations (AAQMS) have been installed to capture the real time data and access thereof viz., PM 10, PM 2.5, SOx, NOx and access has been provided to Central Pollution Control Board. Additional ozone analyzers for ambient air are also being provided at the stations. Continuous Emission Monitoring Systems (CEMS) to monitor SOx, NOx and CO<sub>2</sub> in all its units on real time basis are also planned for installation in near future

**18.2.5 Environmental Studies:** Your Company has taken a number of studies for better environment protection and to develop strong scientific database.

**18.2.6 Tree Plantation:** Your Company has planted more than 19 million trees till date in and around its projects as a measure of massive afforestation.

The afforestation has not only contributed to the 'aesthetics' but also helped in carbon sequestration by serving as a 'sink' for CO<sub>2</sub> released from the stations and thereby protecting the quality of ecology and environment in and around the projects.

**18.2.7 ISO 14001 & OHSAS 18001 Certification:** NTPC's stations have been certified with ISO 14001 and OHSAS 18001 by reputed National and International certifying agencies as a result of sound systems and practices.

### 18.3 Clean Development Mechanism (CDM)

Your Company is undertaking climate change issues proactively.

The methodology for super critical technology prepared by NTPC viz. "consolidated base line and monitoring methodology for new grid connected fossil fuel fired power plants using less GHG intensive technology" has been approved by "United Nations Frame Work Convention on Climate Change (UNFCCC)" under 'Approved Consolidated Methodology 13 (ACM0013)'.

Two of its solar projects namely 5MW each solar PV project at Dadri and Port Blair, Andaman & Nicobar had already been submitted to UNFCCC for CDM registration. Another two projects namely 5MW solar PV project at Faridabad and 8MW Small Hydro Power Project at Singrauli are in advanced stage of validation for submission to UNFCCC for CDM registration.

Further, Tapovan Vishnughad HEPP (4X130 MW), North Karanpura STPP (3X660 MW), 15 MW Solar (Thermal) project at Anta, energy efficiency measures at Singrauli STPP and energy efficiency measures at Dadri have already obtained Host Country Approval from National CDM Authority.

### 18.4 Ash Utilisation

During the year 2012-13, 56.29 million tonnes of ash was generated and 30.97 million tonnes of ash had been utilized for various productive purposes. This was 55.02% of the total ash generated.

Important areas of ash utilization are – cement & asbestos industry, ready mix concrete plants (RMC), road embankment, mine filling, ash dyke raising & land development. 10.74 million tonnes of ash has been issued to cement, RMC and other industries in the financial year 2012-13.

Pond ash from all stations of NTPC is being issued free of cost to all users. The funds collected from sale of ash is being maintained in a separate account by NTPC Vidyut Vyapar Nigam Limited, a wholly-owned subsidiary company of NTPC and the same is being utilized for development of infrastructure facilities, promotion and facilitation activities to enhance ash utilization.

The quantity of ash produced, ash utilized and percentage of such utilization during 2012-13 from NTPC Stations is at Annex-IX.

## 18.5 CenPEEP – towards enhancing efficiency and protecting Environment

'Center for Power Efficiency and Environmental Protection' (CenPEEP), was set up to take initiatives to address climate change issues. It is a symbol of NTPC's voluntary proactive approach towards Greenhouse Gas (GHG) reduction. The Centre has been entrusted with some of the strategic initiatives such as improvement in efficiency and reliability.

Thrust has been given to efficiency improvement through customized Energy Efficiency Management System (EEMS) and reliability through 'Knowledge Based Maintenance'. The activities include use of advanced analytical tools for efficiency gap analysis, combustion optimization, improvement in performance of condenser, cooling tower, coal mills and air-preheater, maximization of condition based maintenance through systematic 'Predictive Maintenance Program', reliability improvement strategies by failure mode analysis through 'Reliability Centered Maintenance (RCM)' as a program.

Joint project has also been taken up with NETRA for modification of flue gas duct internals based on 'computational fluid dynamic (CFD)' analysis.

'Perform, Achieve & Trade (PAT) Scheme' of Government of India under Prime Minister's National Mission on Enhanced Energy Efficiency (NMEEE) is being implemented in NTPC with CenPEEP as the coordinator. All 22 stations of NTPC are Designated Consumers in this program.

The cooperation with USAID was extended under Indo-US bilateral program 'Partnership to Advance Clean Energy – Deployment (PACE-D)'. Under this program, study on development of best practices manual for super critical units has been taken up with support of US experts. Assistance is also provided to two State utilities from Haryana and Maharashtra for efficiency improvement under this program. The 'Heat Rate Improvement Guidelines for Indian Utilities' which are prepared by CenPEEP, have been helpful in the program.

CenPEEP has estimated cumulative CO<sub>2</sub> emission avoided in NTPC since the year 1996 as 34.8 million tones.

CenPEEP had been conferred with **The Times of India Earth Care Award 2012** in recognition of its efforts and achievements for GHG reduction in utilities, contributing to combat climate changes across the SAARC countries.

### 18.6.1 RURAL ELECTRIFICATION

NTPC, through its wholly owned subsidiary NESCL, is carrying out the implementation of rural electrification work in 5 States namely Madhya Pradesh, Chhattisgarh, Odisha, Jharkhand and West Bengal under Government of India, flagship program, Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY). NESCL has been entrusted with electrification of total 30 projects in 29 districts in above States with a total scope of 14,729 Un-electrified/De-electrified (UE/DE) villages, 20,555 partially electrified (PE) villages and electricity connection to 26.42 lakhs below poverty line (BPL) households.

Physical work of 15 projects has been completed till 31<sup>st</sup> March 2013 and balance projects are expected to be completed in FY 2013-14.

In the FY 2012-13, 22 un-electrified/de-electrified and

2,820 partially electrified villages have been electrified and electricity connections provided to 25,204 BPL households during the FY12-13.

Cumulatively, electrification of 14,719 un-electrified /de-electrified villages and 17,679 partially electrified villages has been completed and electricity connections has been provided to 26.08 lakhs BPL households by Mar'2013.

### 18.6.2 5 KM Scheme around NTPC power plants

MOP, Government of India notified in Apr'2010 a scheme for provision of supply of electricity in 5 Km area around the Central Power Plants. The scheme covers the existing and upcoming Power Plants of CPSUs. Under the scheme, total 29 projects were initially identified for implementation around NTPC power plants. NTPC has awarded eight projects where work is in progress.

Subsequently, MoP has withdrawn the above scheme for future projects in March 2013. The ongoing projects are expected to be completed during the financial year 2013-14.

## 19. IMPLEMENTATION OF OFFICIAL LANGUAGE

Your Company has made vigorous efforts for propagation and effective implementation of the Official Language Policy of the Government of India. Several Hindi workshops, meetings, conferences and competitions were conducted at projects, regional offices and corporate centre during the year, in which renowned Hindi Scholars inspired the participants to use Hindi in day-to-day official works.

The progress and usage of Rajbhasha Hindi was inspected in the stations and proper suggestions for compliance were given to the Heads of the Offices. The Sub-committee of Parliament on Official Language appreciated the efforts for Rajbhasha implementation in our projects. Our half-yearly Hindi Magazine 'Vidyut Swar' also received Rajbhasha Award from Ministry of Home Affairs, Government of India.

All office orders, formats and circulars were issued in Hindi as well. Important advertisements and house journals were released in bilingual form- in Hindi and in English. Your Company's website also has a facility of operating in bilingual form- in Hindi as well as in English.

## 20. NETRA – R&D Mission in Power Sector

NTPC Energy Technology Research Alliance (NETRA), the research & development wing of NTPC focuses on areas of efficiency & availability improvement; cost reduction; renewable and alternative energy source; climate change & environment protection; and providing scientific support to utilities.

Research Advisory Council (RAC) of NETRA comprising of eminent scientists and experts from India and abroad is in place to steer high-end research. Scientific Advisory Council (SAC) with Regional Executive Directors as its members provides directions for improving plant performance & reducing cost of generation. The meetings for both these Advisory Councils were held periodically where members deliberated on various project activities and gave guidelines for implementation of suggestions.

In order to provide maximum possible benefit to the stations, projects like Artificial Intelligence based plant



performance advisory system, expert system for real time monitoring of steam cycle chemistry, computational fluid dynamics (CFD) modeling based plant improvement for increasing efficiency and reducing auxiliary power consumption have been implemented at stations. Many products & processes developed by NETRA have been tested successfully at stations like robotic inspection devices; PDC-RVM based expert system for transformer condition monitoring, CO<sub>2</sub> utilization through mineralization of fly ash etc.

One Patent (01) has been granted to NETRA and another Twenty one (21) patent applications have been filed and these are in advanced stage of processing. NETRA continued to provide scientific support to all NTPC stations as well as many other utilities' stations to improve their performance.

Some state-of-the art facilities for condition monitoring and diagnostic equipments like Scanning Electron Microscope with EDAX, Sixteen Channel Vibration Analyser, Video image scope system with dimensional measurement facility, etc have been inducted.

The Phase-II infrastructure is being created for new laboratories and facilities like pilot plant bay, 150 KWp Solar PV rooftop systems and an auditorium with seating capacity of 400 persons.

NETRA is actively involved in many National activities related to R&D such as developing DPE guidelines on R&D, contribution to Sectoral Innovation Council for Power.

NETRA has also taken research Projects under "National Clean Energy Fund" a) Solar Thermal Hybrid with Fossil Fired Power Plant b) Flue Gas based Aqua Ammonia Power Cycle.

NETRA has also organized Round Table Meeting on carbon capture & storage (CCS) for formulating the Policy under the aegis of MoP.

NETRA has undertaken collaborative projects with different institutes like CPRI, Bangalore in the area of coal combustion characterization, non destructive testing, fly ash utilization and with Jadavpur University for Development of polarisation depolarisation current analysis – Recovery voltage measurement (PDC-RVM) system etc.

NETRA laboratories have been reaccredited as per ISO 17025:2005. NETRA is also certified by Central Boiler Board for RLA agencies.

## 21. RIGHT TO INFORMATION

Your Company has implemented Right to Information Act, 2005 in order to provide information to citizens and to maintain accountability and transparency. The Company has put RTI manual on website for access to all citizens of India and has designated a Central Public Information Officer (CPIO), an Appellate Authority and APIOs at all sites and offices of NTPC.

During 2012-13, 1,181 applications were received under the RTI Act, out of which 1,158 applications were replied to.

Five workshops on RTI Act have been conducted at

Corporate Centre, Regional Headquarters and sites to share and deliberate on latest notifications, amendments and other issues for smooth implementation. This includes an interactive session with the delegates from the Institute of Secretarial Training & Management, DoPT to share experience on implementation of RTI Act in the Company.

## 22. USING INFORMATION AND COMMUNICATION TECHNOLOGY FOR PRODUCTIVITY ENHANCEMENT

NTPC has implemented an Enterprise Resource Planning (ERP) package covering maximum possible processes across the organization including subsidiaries. In addition to the core business processes and Employee Self Service (ESS) functionality, the ERP solution also includes e-procurement, Knowledge Management, Business Intelligence, Document Management, Workflow etc. The ERP system is fully managed through in-house expertise from process groups and technical groups. Parallely, in-house solutions have been developed to take care of the non-ERP areas.

ERP has its main data center at Noida. There is a disaster recovery center at Hyderabad as a full back up for real time changeover in case of any emergency.

Videoconferencing (VC) facility is widely used for deliberations among locations. The facility has also been augmented to hold VC in secured manner, with external agencies also.

In order to improve upon efficiency and bringing transparency in procurement process in NTPC, e-procurement process using SRM module of ERP is widely used.

A third party audit and review of ERP solution implemented at NTPC has been carried out that included review of business process controls, configuration settings, access controls and review of roles and authorization. The critical remediation points suggested by the external auditor agency have been implemented.

Various other applications have been developed to take care of RTI, Parliament Questions Management, legal system, transit camp booking requirement etc.

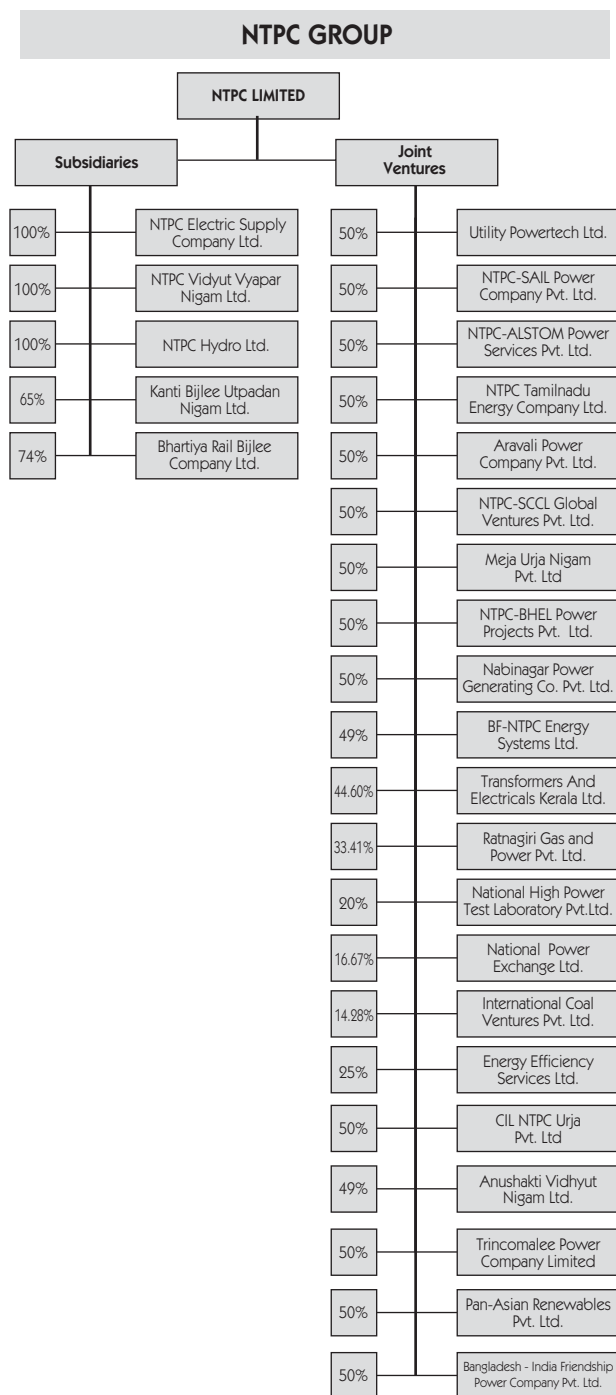
NTPC tender website [www.ntpctender.com](http://www.ntpctender.com) is being regularly used for publishing all open tenders on the Internet. Additional Website [www.ntpcemployees.co.in](http://www.ntpcemployees.co.in) for facilitating superannuated employees has also been hosted.

The Information Technology department at Corporate Center Noida has been awarded certificate in recognition of the organization's Quality Management System which complies with ISO 9001:2008 for "Providing IT Enabled Services".

## 23. NTPC GROUP: SUBSIDIARIES AND JOINT VENTURES

Your Company has currently 5 subsidiary Companies and 21 joint venture Companies for undertaking specific business activities.

The names of Subsidiaries and Joint Venture Companies and the percentage of your Company's shareholding in these Companies as on 31.03.2013 are as follows:



The performance of these Companies as well as the consolidated financial statements are briefly discussed in the Management Discussion & Analysis section. The financial statements of subsidiary companies along with the respective Directors' Report are placed elsewhere in this Annual Report.

**24. INFORMATION AS PER COMPANIES (PARTICULARS OF EMPLOYEES) RULES, 1975**

Ministry of Corporate Affairs, through Notification G.S.R.

289(E) dated 31<sup>st</sup> March 2011 has amended the Companies (Particulars of Employees) Rules, 1975 by providing that the information required under Section 217(2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 1975 shall be required to be provided for those employees whose remuneration is more than ₹ 60 lac per financial year, if employed for whole of the year or more than ₹ 5 lac per month, if employed for part of the year. The said Notification further provides that in case of Government Companies such particulars are not required to be included in the Board's Report.

As your Company is a Government Company, such particulars have not been included as part of the Director's Report. Any member interested in obtaining such particulars may write to the Company Secretary at the Registered Office of the Company or download them from the website at [www.ntpc.co.in](http://www.ntpc.co.in). Such particulars shall also be made available to the shareholders on a specific request made by them during the course of Annual General Meeting to be held on 17.09.2013.

**25. STATUTORY AUDITORS**

The Statutory Auditors of your Company are appointed by the Comptroller & Auditor General of India. M/s O.P. Bagla & Co., K.K. Soni & Co., PKF Sridhar & Santhanam, V. Sankar Aiyar & Co., Ramesh C. Agrawal & Co. and A.R. & Co. were appointed as Joint Statutory Auditors for the financial year 2012-13.

**26. MANAGEMENT COMMENTS ON STATUTORY AUDITORS' REPORT**

The Statutory Auditors of the Company have given an unqualified report on the accounts of the Company for the financial year 2012-13. However, they have drawn attention towards Note-33 to the financial statements in respect of the accounting of fuel on GCV based pricing system.

The issue has been adequately explained in Note 33 referred to by the Auditors.

**27. REVIEW OF ACCOUNTS BY COMPTROLLER & AUDITOR GENERAL OF INDIA**

You would be pleased to know that for the fourth year in a row your organization has received 'NIL' Comments on the Financial Statements for the year from the Comptroller & Auditor General of India (C&AG).

As advised by the Office of the C&AG, the comments of C&AG for the year 2012-13 are being placed with the report of Statutory Auditors of your Company elsewhere in this Annual Report.

**28. COST AUDIT**

As prescribed under the Cost Accounting Records (Electricity Industry) Rules, 2001 applicable for financial years 2011-12 and 2012-13, the Cost Accounting records are being maintained by all stations of the Company. The particulars of Cost Auditors as required under Section 233(B) of the Companies Act, 1956 read with General Circular No. 15/2011 dated 11.04.2011 issued by Ministry of Corporate Affairs are given below:

The firms of Cost Accountants appointed for the financial year 2011-12 are (i) M/s Dhananjay V. Joshi & Associates, Pune, Maharashtra, (ii) M/s Jugal K. Puri & Associates, Gurgaon, Haryana, (iii) M/s Mandal Mukherjee Datta & Associates, Kolkata, West Bengal, (iv) M/s S.C. Mohanty &

Associates, Bhubhaneshwer, Orissa, (v) M/s V.P. Gupta & Co., Noida, Uttar Pradesh and (vi) M/s Chandra Wadhwa & Co., Daryaganj, Delhi.

The firms of Cost Accountants appointed for the financial year 2012-13 are (i) M/s Dhananjay V. Joshi & Associates, Pune, Maharashtra, (ii) M/s Jugal K. Puri & Associates, Gurgaon, Haryana, (iii) M/s Mandal Mukherjee Datta & Associates, Kolkata, West Bengal, (iv) M/s S.C. Mohanty & Associates, Bhubhaneshwer, Orissa, (v) M/s V.P. Gupta & Co., Noida, Uttar Pradesh and (vi) M/s Chandra Wadhwa & Co., Daryaganj, Delhi.

The due date for filing consolidated Cost Audit Report in XBRL format for the financial year ended March 31, 2012 was September 27, 2012 which was subsequently extended upto 28<sup>th</sup> February 2013 through General Circular No. 2/2013 dated 31.01.2013 issued by Ministry of Corporate Affairs and the consolidated Cost Audit Report for your Company was filed with the Central Government on 15.01.2013.

The due date for filing consolidated Cost Audit Report for the financial year ended March 31, 2013 is September 27, 2013 and the consolidated Cost Audit Report as prescribed for the financial year 2012-13 shall be filed within the prescribed time period.

#### 29. BOARD OF DIRECTORS

Dr. Alwyn Didar Singh has joined as Non-Official Part-time Director of the Company with effect from August 23, 2012.

Dr. M. Govinda Rao has ceased to be the Non-Official Part-time Director with effect from February 4, 2013.

Shri U.P. Pani has taken over as Director (Human Resources) with effect from March 1, 2013. Shri S.P. Singh has ceased to be the Director (Human Resources) of your Company with effect from February 28, 2013 on attaining the age of superannuation.

Shri Rakesh Jain has ceased to be the Director of your Company w.e.f. July 9, 2013 on ceasing to be the official of Ministry of Power.

Shri Prashant Mehta has joined as Non-Official Part-time Director of the Company with effect from July 30, 2013.

The Board wishes to place on record its deep appreciation for the valuable services rendered by Dr. M. Govinda Rao, Shri S.P. Singh and Shri Rakesh Jain during their association with the Company.

In accordance with the provisions of Article 41(iii) of the Articles of Association of the Company four directors - Shri A.K. Singhal, Shri N.N. Misra, Shri S.B. Ghosh Dastidar and Shri R.S. Sahoo shall retire by rotation at the Annual General Meeting of your Company and, being eligible, offer themselves for re-appointment.

#### 30. DIRECTORS' RESPONSIBILITY STATEMENT

As required under Section 217(2AA) of the Companies Act, 1956, your Directors confirm that:

1. in the preparation of the annual accounts, the applicable accounting standards had been followed along with proper explanation relating to material departures;
2. the Directors had selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company at the end of the financial year 2012-13 and of the profit of the company for that period;

3. the Directors had taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities; and

4. the Directors had prepared the Annual Accounts on a going concern basis.

#### 31. INFORMATION PURSUANT TO STATUTORY AND OTHER REQUIREMENTS

Information required to be furnished as per the Companies Act, 1956, Listing Agreement with Stock Exchanges, Government guidelines etc. is annexed to this report as below:

Particulars	Annexure
Management Discussion & Analysis	I
Report on Corporate Governance	II
Information on conservation of energy, technology absorption and foreign exchange earnings and outgo	III
Statement pursuant to Section 212 of the Companies Act, 1956 relating to subsidiary companies	IV
Statistical data of the grievance cases	V
Statistical information on persons belonging to Scheduled Caste / Scheduled Tribe categories	VI
Information on Physically Challenged persons	VII
UNGC – Communications on progress	VIII
Project Wise Ash Utilisation	IX
Business Responsibility Report for the year 2012-13	X

#### 32. ACKNOWLEDGEMENT

Your Directors acknowledge with deep sense of appreciation, the co-operation received from the Government of India, particularly the Prime Minister's Office, Ministry of Power, Ministry of Finance, Ministry of Environment & Forests, Ministry of Coal, Ministry of Petroleum & Natural Gas, Ministry of Railways, the Planning Commission, Department of Public Enterprises, Central Electricity Authority, Central Electricity Regulatory Commission, Appellate Tribunal for Electricity, State Governments, Regional Power Committees, State Electricity Boards and Office of the Attorney General of India.

Your Directors also convey their gratitude to the shareholders, various international and Indian Banks and Financial Institutions for the confidence reposed by them in the Company.

The Board also appreciates the contribution of contractors, vendors and consultants in the implementation of various projects of the Company.

We also acknowledge the constructive suggestions received from Government and Statutory Auditors.

We wish to place on record our appreciation for the untiring efforts and contributions made by the employees at all levels to ensure that the Company continues to grow and excel.

For and on behalf of the Board of Directors



(Dr. Arup Roy Choudhury)  
Chairman & Managing Director

Place: New Delhi  
Date: 2<sup>nd</sup> August 2013