

DIRECTORS' REPORT

Dear Members,

Your Directors are pleased to present the 38th Annual Report and the audited financial statements for the year ended March 31, 2014.

Financial Year 2013-14 has been yet another year of achievements for your Company. With the addition of 1,835 MW capacity (including 610 MW through JV Companies) during the year, your Company crossed 43,000 MW capacity reaching a total capacity of 43,108.31 MW. Major highlights for the year are:

- Commissioned solar plants of 65 MW capacity during the year. With the commercialization of 20 MW Rajgarh Solar Power Project on 30.04.2014, cumulative solar capacity of 95 MW has already been commissioned, which is a substantial contribution to renewable energy.
- Declared 2,675 MW (including 1,110 MW through JV Companies) on commercial generation. Total commercial capacity of NTPC group has become 41,879 MW.
- Average PLF of 81.50% as against all India PLF of 65.55% with four stations recording more than 90% PLF.
- Exceeded the Capital expenditure (CAPEX) target of ₹20,200 crore. CAPEX target was ₹ 21,797.24 crore as against the previous year's target of ₹ 19,925.53 crore.
- 100% realization of current bills from customers.
- Recorded total income of ₹ 74,707.82 crore, an increase of 8.5% as compared to ₹ 68,855.81 crore in the FY 2012-13. Net Profit after Tax (PAT) of ₹ 10,974.74 crore against previous year's PAT of ₹12,619.39 crore. (PAT for financial year 2012-13, includes a write-back of provision of ₹835.97 crore and an Exceptional item of income of ₹1,684.11 crore towards interest. Both these relates to

payment towards settlement of dues of erstwhile DESU).

- Dividend of ₹5.75 per share (total ₹4,741.15 crore) which comprises interim dividend of ₹ 4.00 per equity share paid in February 2014 and recommendation for final dividend of ₹ 1.75 per equity share for the year 2013-14, subject to approval of the shareholders.
- Coal Supply Agreements signed for 14,010 MW capacity commissioned/ to be commissioned between April 2009 to March 2015.
- Operation started on Inland Waterways Transportation of Imported Coal for Farakka station and about 2 lac MT imported coal has been supplied through this mode to Farakka.
- Issued Tax-free, Secured, Redeemable Non-Convertible Bonds having tax benefits under Section 10 (15) (iv) (h) of the Income Tax Act, 1961 for an aggregate amount of ₹2,250 crore. Out of ₹2,250 crore, bonds of ₹1,750 crore were issued to the public through the Stock Exchanges, which received over-whelming response and was over-subscribed by 3.7 times and bonds of ₹500 crore were issued under private placement.
- Excellent MOU rating by Government of India for the year 2012-13.
- NTPC was the only PSU among the top 35 companies, ranked 6th in the prestigious study of 'The Economic Times and Great Place to Work Institute' for 2013 covering 550 companies, 22 industries and close to 1 lac employees.

You will appreciate the fact that even amid the general down turn in the economy and market (including the financial markets), the company demonstrated the tremendous investor confidence enjoyed by it and recorded excellent performance despite the challenge before the sector.

1. FINANCIAL RESULTS

Revenue	2013-14		2012-13	
	₹ Crore	US \$ Mn*	₹ Crore	US \$ Mn*
Net Revenue from Operations (including Energy Sales, Consultancy, Energy consumed internally)	72,018.93	11,882.35	65,737.04	10,845.91
Other Income	2,688.89	443.64	3,118.77	514.56
Total Revenue	74,707.82	12,325.99	68,855.81	11,360.47
Expenses				
Fuel	45,829.71	7,561.41	41,018.25	6,767.57
Employee Benefits Expense	3,867.99	638.18	3,415.96	563.60
Finance Costs	2,406.59	397.06	1,924.36	317.50
Depreciation and amortization expense	4,142.19	683.41	3,396.76	560.43
Generation, administration & other expenses	4,543.85	749.69	4,235.68	698.84
Prior period items (net)	12.84	2.12	(29.72)	(4.90)
Total Expenses	60,803.17	10,031.87	53,961.29	8,903.04
Profit before Tax and exceptional items	13,904.65	2,294.12	14,894.52	2,457.43
Exceptional items	-	-	1,684.11	277.86
Profit before tax	13,904.65	2,294.12	16,578.63	2,735.29
Tax Expense	2,929.91	483.40	3,959.24	653.23
Profit for the year	10,974.74	1,810.71	12,619.39	2,082.06

Appropriations:	2013-14		2012-13	
	₹ Crore	US \$ Mn*	₹ Crore	US \$ Mn*
Transfer to bond redemption reserve	576.08	95.05	492.79	81.31
Transfer to general reserve	5,000.00	824.95	6,500.00	1,072.43
Transfer to capital reserve	4.98	0.82	0.97	0.16
Interim dividend	3,298.19	544.17	3,092.07	510.16
Proposed dividend	1,442.96	238.07	1,649.09	272.08
Tax on dividend	804.74	132.77	781.87	129.00

*1 US \$ = ₹ 60.61 as on March 31, 2014

2. OFFER FOR SALE TO EMPLOYEES

In terms of CCEA's approval dated 26.11.2012 and Department of Disinvestment's communication dated 26.06.2013, Offer for Sale of NTPC's Equity Shares by Government of India to the Eligible Employees was successfully concluded and the proceeds amounting to ₹48,16,38,656/- was credited to the account of Government of India. A total of 34,83,320 shares were allotted to 3,407 employees.

Consequent upon sale of shares from Government of India to the eligible employees, the equity holding of Government of India in NTPC has reduced to 74.96% from 75%.

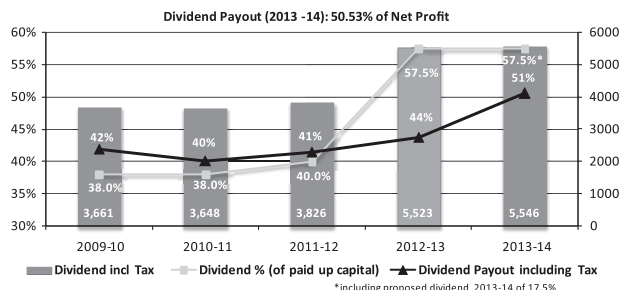
3. DIVIDEND

3.1 Interim and Final Dividend:

In addition to interim dividend of ₹ 4.00 per equity share paid in February 2014, your Directors have recommended a final dividend of ₹ 1.75 per equity share for the year 2013-14. With this the total dividend for the year is ₹5.75 per equity share of ₹10/- each. In the year 2012-13 also, the total dividend paid was ₹5.75 per equity share of ₹10/- each (including special dividend of ₹1.25 per share).

The total dividend payout is 43.20% and the total dividend payout including dividend tax is 50.53% of profit after tax. The 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 233,284 BUs (248 BUs including JVs) of electricity (including solar power) which was 24.26% (25.80% including that generation by JVs) of the total power generated in India (without Bhutan import).

The total power generated by the Company has registered an increase of 0.54% over the previous years' generation of 232,028 BUs. The total generation contributed by coal stations is 220,700 BUs during the year against generation of 212,329 BUs last year registering a growth of 3.94%.

Generation from coal based units could have been still higher but due to less generation schedule there was generation loss of 23,083 BUs. The coal based stations of your company operated at average Plant Load Factor (PLF) of 81.50% (All India PLF 65.55%) and average Availability Factor of 90.32% on bus bar during the year. During the year, 4 coal based stations out of 16 achieved more than 90% PLF.

The gas stations having a capacity of 4,017 MW achieved annual generation of 12,569 BUs at a PLF of 35.72% as against 19,699 BUs last year mainly due to less generation schedule which accounted for a generation loss of 20,652 BUs. The average declared capacity of gas based stations for the year was 95.24% as compared to 93.14% 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

5.1 Billing and Realisation

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

Most of the customers were making their payments within 60 days of billing and had established LCs at 105% of the average monthly billing.

The Company has realized ₹2,520.08 Crore (₹ 835.97 crore as principal and ₹ 1,684.11 crore as interest and surcharge) towards DESU dues payable by Government of NCT of Delhi.

5.2 Rebate Scheme for realization of dues:

In order to encourage early and full realization of dues, your Company has formulated a special scheme called 'NTPC Rebate Scheme'. In this Scheme for 2013-14, graded rebate was given to those customers who were making due payment upto 55th day of billing.

The Rebate Scheme for 2014-15 has been modified to align with CERC Regulations for 2014-19 keeping other provisions similar to 2013-14.

5.3 Commercial Capacity:

The following units were declared commercial during the year 2013-14, adding 2,675 MW (including 65MW of solar capacity) to commercial capacity of your Company:

Project/ Unit	Capacity (MW)	COD*
NTPC Units- Coal Based (I)		
Rihand-III, Unit#2	500	27.03.2014
Vindhyachal-IV, Unit#2	500	27.03.2014
Mauda-I, Unit#2	500	30.03.2014
Total (I)	1,500	
NTPC Units-Renewable Energy Units (II)		
Ramagundam Solar PV	10	29.01.2014
Talcher Solar PV	10	28.03.2014
Faridabad Solar PV	5	31.03.2014
Unchahar Solar PV	10	31.03.2014
Rajgarh Solar PV	30	31.03.2014
Total (II)	65	
NTPC's JV Units- Coal Based (III)		
Jhajjar, Unit#3 (JV with IPGCL and HPGCL)	500	26.04.2013
Vallur, Unit#2 (JV with TANGEDCO)	500	25.08.2013
Kanti, Unit#1 (subsidiary of NTPC in JV with BSPGCL)	110	01.11.2013
Total (III)	1,110	
Total Capacity declared commercial during 2013-14 (incl. JVs) (I)+(II)+(III)	2,675	

* COD- Commercial Operation Date

Further, after the close of financial year 2013-14, 20 MW capacity of Rajgarh Solar PV was declared commercial on 30.04.2014.

5.4 Tariff Regulations:

Central Electricity Regulatory Commission (CERC) has issued the CERC (Terms and Conditions of Tariff) Regulations, 2014 on 21.02.2014, which are applicable for the period 01.04.2014 to 31.03.2019. The tariff of electricity generated from NTPC stations would be determined by CERC based on these regulations for the above mentioned period. The salient features of Tariff Regulations 2014-19 are discussed in the Management Discussion and Analysis Report.

Being aggrieved on certain provisions of the CERC (Terms and Conditions of Tariff) Regulations, 2014, your Company has filed a writ petition before the Hon'ble High Court of Delhi.

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 (BE COMMITTED) which emphasize 'Customer Focus' as one of the key values of NTPC.

Under CRM, your Company has designed and executed several structured activities with the objective of sharing of experiences, capturing the feedback 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 2013-14, 62 such services were provided to the customers on the basis of the requirement expressed by various customers.

Your Company conducted Power Meet with top level officials and Business Partner Meets with middle level officials of beneficiaries to discuss various issues and sharing of experiences. In 2013-14, Power Meet was organized with the top officials of Southern Region beneficiaries and 4 Business Partner Meets were conducted with 9 beneficiaries of different regions.

Besides the above, 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.

5.6 Other Activities:

250 MW power has been allocated by the Ministry of Power from the unallocated quota of NTPC stations for export to Bangladesh through NVVN.

6. INSTALLED CAPACITY

6.1 Installed Capacity of NTPC Group:

During the year 2013-14, your Company added 1,835 MW as per details given below:

Project/ Unit installed during FY 2013-14	Capacity (MW)
NTPC owned	
Coal Based Power Projects	
Barh-II, Unit#4	660
Rihand, Unit # 6	500
Renewable Energy Projects	
Ramagundam Solar PV	10
Unchahar Solar PV	10
Talcher Kaniha Solar PV	10
Faridabad Solar PV	5
Rajgarh Solar PV	30
Under JVs (Coal Based Power Projects)	
Kanti (subsidiary of NTPC in JV with BSPGCL), Unit#1	110
Vallur (JV with TANGEDCO), Unit# 3	500
Addition during FY 2013-14	1,835

With above capacity addition during 2013-14, capacity added in the first two years of 12th Plan Period has reached 6,005 MW against 12th Plan target of 14,038 MW.

The total installed capacity of the NTPC Group was 41,184 MW as on 31.03.2013. For gas based power projects, till now the capacity was indicated based on Net Guaranteed Output as per Main Plant Specifications. It has been revised to capacity at Generator Terminal w.e.f. 01.04.2014. Accordingly, the installed capacity as on 01.04.2014 has become 43,108.31 MW as tabulated below:

Owned by NTPC	MW
Coal based projects	33,015.00
Gas based projects	4,017.23
Renewable Energy Projects	75.00
Sub-total	37,107.23
Joint Ventures & Subsidiaries	
Coal based projects	4,034.00
Gas based projects	1,967.08
Sub-total	6,001.08
Total	43,108.31

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 class integrated power major.

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 22,434 MW including 4,690 MW, being undertaken by Joint Venture companies are under implementation as on 31.03.2014. This includes 20,900 MW through coal based projects, 1,534 MW through renewable energy projects, comprising 1,499 MW through hydro capacity and 35 MW through solar energy. The details of such projects are as under:

Ongoing Projects as on 31.03.2014	Capacity (MW)
I. NTPC owned:	
A. Coal Based Projects	
1. Bongaigaon, Assam	750
2. Barh-I, Bihar	1,980
3. Barh-II, Unit V, Bihar	660
4. Lara-I, Chattisgarh	1,600
5. North Karanpura, Jharkhand	1,980
6. Kudgi-I, Karnataka	2,400
7. Gadarwara-I, Madhya Pradesh	1,600
8. Vindhyachal-V, Madhya Pradesh	500

Ongoing Projects as on 31.03.2014	Capacity (MW)
9. Mouda-II, Maharashtra	1,320
10. Solapur, Maharashtra	1,320
11. Darlipalli, Odisha	1,600
12. Unchahar, Uttar Pradesh	500
Sub Total (A)	16,210
B. Renewable Energy Projects	
B1. Hydro Electric Power Projects (HEPP)	
13. Koldam, Himachal Pradesh	800
14. TapovanVishnugad, Uttarakhand	520
15. LataTapovan, Uttarakhand	171
16. Singrauli CW Discharge (Hydro), Uttar Pradesh	8
Sub Total (B1)	1,499
B2. Solar Energy Projects	
17. Rajgarh Solar PV, Madhya Pradesh*	20
18. Singrauli Solar PV, Uttar Pradesh	15
Sub Total (B2)	35
Total I (A)+(B1)+(B2)	17,744
II Projects under JVs & Subsidiaries	
Coal Based Projects	
19. Nabinagar- JV with Railways, Bihar	1,000
20. Muzaffarpur Expansion (MTPS)– Subsidiary of NTPC in JV with BSPGCL, Bihar	390
21. Nabinagar, JV with BSPGCL, Bihar	1,980
22. Meja, JV with UPRVUNL, Uttar Pradesh	1,320
Total II	4,690
III Total On-Going Projects as on 31.03.2014 (I)+(II)	22,434

*Subsequently declared commercial on 30.04.2014

7.2 New Projects

Currently, your Company has projects for 6,800 MW capacity under bidding. Feasibility Reports of 17,900 MW capacity have already been approved by your Board and project development activities are in various stages of completion.

Further, West Bengal State Government has approved transfer of the proposed 2X800 MW Coal Based Katwa Project from West Bengal Power Development Corporation Limited to NTPC and your Board has also approved the proposal for taking over the Project.

7.3 New Technology

To meet the challenges of fulfilling India's electricity demands 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.

Your Company is planning to set up coal fired units with ultra supercritical parameters targeting efficiency comparable to best available technology in the world. It is planning to establish integrated gasification combined

cycle for high ash Indian coal. It has planned to implement 100MWe IGCC Technology Demonstration Project at NTPC Dadri. The plant is intended to be implemented in two stages with Stage-I comprising installation and stabilization of coal gasifier, gas clean up and other associated systems and Stage-II comprising gas turbine combined plant. Stage-II shall be implemented after successful completion and stabilization of Stage-I.

Your Company has adopted several new technologies, system and practices including combined cycle gas-fired power stations, Merry-Go-Round, 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 are already under operation at Sipat-I where steam parameters are 247 kg/cm²/537°C/565°C. For all the new sub-critical 500 MW units also, reheat temperature has been increased to 565°C resulting in 0.7% gain in efficiency over conventional sub-critical 500 MW units.

Your Company has entered into MOU with BHEL and Indira Gandhi Centre for Atomic Research (IGCAR) for indigenous development of advanced ultra super critical technology which will have enhanced efficiency of around 46% and about 15-20% less CO₂ emission as compared to conventional 500 MW sub-critical thermal power plants. The program is targeted to deliver a plant having 800 MW unit with steam parameters of 310 kg/sq cm-710°C/720°C at super heater outlet and 720°C at re-heater outlet.

Your Company has taken an initiative 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 being

integrated along with feed heaters in the turbine cycle for conversion of solar heat to electrical power by utilizing it in existing steam cycle of 210 MW. Once integrated, this will reduce coal consumption, thereby reducing CO₂ 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 integrated enterprise-wide collaborative system to facilitate consolidation of project related issues and their resolution. Features like SMS based information delivery, real time video capture, storage and retrieval facility and conference facility are extensively utilized for project tracking, issues resolutions and management intervention. It has helped in providing effective coordination between the agencies and has provided enhanced/ efficient monitoring of the projects leading to better, faster and holistic approach to project implementation.

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
KBUNL (Kanti Bijlee Utpadan Nigam Ltd.)	Bihar State Power Generation Company Limited (erstwhile (BSEB))	A subsidiary Company in which NTPC holds 65% shares in joint venture with BSPGCL (erstwhile BSEB), took over MTPS having 2 units of 110 MW each from BSEB. Unit-I of Stage-I has been declared on commercial operation w.e.f. 01.11.2013. Unit-II of Stage-I is 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.
BRBCL (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 activities are in progress. In addition, NTPC Limited has signed Memorandum of Understanding with Ministry of Railways to set up 1,320 MW captive power project for Railways at Adra, West Bengal through Bhartiya Rail Bijlee Company Limited. Ministry of Railways is taking steps for allocation of coal mine to the proposed project.
NSPCL (NTPC-SAIL Power Co. Pvt. Ltd.)	Steel Authority of India Ltd. (SAIL)	A 50:50 JVC which owns and operate captive power plants for Steel Authority of India Limited at Durgapur (120 MW), Rourkela (120 MW) and Bhilai Steel Plant (74 MW). 2X250 MW units have been implemented at Bhilai. Total installed capacity of NSPCL is 814 MW. The promoters i.e. NTPC and SAIL have agreed to add coal based Bhilai (Stage-II) – 2X250MW, Rourkela (Stage-I) – 1X250MW, Jagdishpur – 2X250 MW and Durgapur – 2X20 MW.

Name of Company	JV Partner(s)	Details
NTECL (NTPC Tamil Nadu Energy Co. Ltd.)	Tamilnadu Generation and Distribution Corporation Limited (TANGEDCO) (erstwhile TNEB)	A 50:50 JVC has commissioned 3x500 MW coal based power project at Vallur, Tamilnadu. Two units have been declared on commercial operation.
APCPL (Aravali Power Company Pvt. Ltd.)	Indraprastha Power Generation Co Ltd. (IPGCL) and Haryana Power Generation Co Ltd. (HPGCL).	This JVC is operating 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 declared on commercial operation.
MUNPL (Meja Urja Nigam Pvt. Ltd.)	Uttar Pradesh Rajya Vidyut Utpadan Nigam Ltd. (UPRVUNL)	A 50:50 JVC is implementing 1,320 MW (2X660 MW) coal based power project in the state of Uttar Pradesh. Construction activities are in progress.
NPGL (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. Construction activities are in progress.
RGPLL (Ratnagiri Gas and Power Pvt. Ltd.)	GAIL, ICICI Bank, SBI, IDBI, Canara Bank and MSEB Holding Co.	NTPC is having a stake of 32.86%. All the three Power Blocks with a combined capacity of 1,967.08 MW (after re-rating) are under commercial operation since May 2009. Currently, Power block is being preserved due to non-availability of domestic gas supply/ non-scheduling of power available on R-LNG. The LNG terminal has been commissioned and the company received and unloaded 9 RLNG cargo(s) during the financial year.
ASHVINI (AnushaktiVidhyut Nigam Ltd.)	Nuclear Power Corporation of India Ltd. (NPCIL)	NTPC is having a stake of 49%. 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. project site at Gorakhpur, Haryana has been finalized for setting up Haryana Atomic Power Plant (2X700 MW) for which physical possession of land has been completed. Topographical survey has been completed and geo-technical investigations are in progress. Cost estimate and financial analysis of the project has been finalized at the end of NPCIL. However, the project is yet to be formally allocated to ASHVINI. The JV Company may establish the nuclear power project subject to the amendment in the Atomic Energy Act.

Further, an MOU has been signed on 22.02.2014 among NTPC, Bihar State Power Generation Company Limited (BSPGCL) and Lakhisarai Bijlee Company Private Limited for implementation of 2X660 MW Kajra Coal based power project at Lakhisarai, Bihar. The project is proposed to be developed as a Joint Venture Company between NTPC and BSPGCL.

7.6 Hydro Power

7.6.1 Your Company is setting up hydro projects for increasing its footprints in renewable energy development by developing Koldam Hydro Electric Power Project (800 MW), Tapovan Vishnugad HEPP (520MW), Lata Tapovan HEPP (171MW) and Rammam HEPP (120 MW).

Koldam HEPP is under construction on river Satluj at Barmana, district Bilaspur, Himachal Pradesh. Three units are targeted to be commissioned in Feb-March 2015. 124.054 hectares of forest land in the submergence area of reservoir is falling under Majathal Wild Life area for which Supreme Court of India has already accorded clearance. Proposal for diversion of 44.9585 hectares of this land is in process for Forest Advisory Committee (FAC) clearance.

For Rammam HEPP Stage-III (120 MW), construction of approach roads and bridges for power house and barrage has been completed. Award of contract for

barrage and part of head race tunnel package are held up for want of investment approval for which PPA is required. PPA documents have been submitted to WBSSEDCL for approval.

Though construction work was in progress in Tapovan – Vishnugad HEPP, Uttarakhand and Lata Tapovan HEPP, Uttarakhand, due to flash floods in June 2013, there was devastation in the projects which affected their schedule. After this devastation, Supreme Court of India had directed Ministry of Environment and Forests (MOEF) constituted a committee for review of all 24 proposed hydro projects in Uttarakhand, as included in report of Wildlife Institute of India. This included Lata Tapovan HEPP also. Based on the recommendation of the committee constituted by MOEF in this regard, Supreme Court of India in the hearing on 07.05.2014, had directed to stop the construction at Lata Tapovan HEPP till further orders. Since Lata Tapovan HEPP was under construction, review petition has been submitted for modification of order to the extent that the said order may be waived for Lata Tapovan HEPP.

Also, on 31.03.2014, Regional Office of MOEF, Lucknow had directed Government of Uttarakhand that project developers should apply for obtaining clearance from National Board for Wildlife as the projects were falling within 10km periphery of Nandadevi National Park. Your

company had submitted proposal for both the projects with Dy. Conservator of Forest, Nandadevi on 30.04.2014.

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, which has been received by the Company. As liabilities of the contractors are increasing day by day due to non- settlement of claims in time, Ministry of Power has been requested to constitute a 'Settlement Commission' with single point responsibility to evaluate and settle claims of all the contractors. Further, Government of Uttarakhand has identified Uttaranchal Jal Vidyut Nigam Limited as nodal agency for taking over the closed project on as-is-where-is basis in terms of the MOU signed between NTPC and Government of Uttarakhand.

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 has been cleared by Central Electricity Authority.

7.7 Capacity Addition through other Renewable Energy Sources

Your Company is adding capacity through renewable sources of energy as it offers environmentally clean power.

Your Company plans to broad-base its generation mix to ensure long term competitiveness and mitigation of fuel risks and promotion of sustainable power development.

In pursuit of these objectives, 75 MW Solar power capacity has already been commissioned till 31.03.2014 and 20 MW solar capacity has been further added on 30.04.2014. 15 MW capacity solar power projects is presently under execution, details of which are given under the heading project implementation.

A Joint Venture Company among NTPC Limited, Asian Development Bank and Kyuden International Cooperation, Japan under the name PAN-ASIAN Renewables Private Limited was incorporated to develop projects portfolio of about 500 MW of renewable power generation resources in India. Though, the company was searching for another strategic investor for investing in the Company, it could not find the same.

Your Company has signed an MOU with Chattisgarh Renewable Energy Development Agency (CREDA) for development of Tatapani Geothermal project. Another MOU has been signed with Geological Survey of India for detailed study and analysis for preparation of feasibility report.

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.

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

8.1.1 The details of joint venture companies which are taking up activities in other business areas 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.
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 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 for civil & electrical works and current limiting series reactors are in progress. Four transformers have been placed on the transformer foundations.
NPEX (National Power Exchange Ltd.)	NHPC, PFC TCS, BSE, IFCI, Meenakshi, DPSC	The Company was formed to facilitate, promote, assist, regulate and manage nationwide 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. The Board of NPEX has now decided to voluntary wind up the Company on the recommendations of the promoters.

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.

The Company is making continuous efforts for acquisition of distribution circles through various modes including franchisee bidding mode.

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.

8.2.2 NTPC Vidyut Vyapar Nigam Limited (NVVN), a wholly owned subsidiary is involved in power trading, sale of fly ash and cenosphere.

During the year 2013-14, the Company transacted business with various state electricity boards spread all over the country and traded 9,322 MUs of electricity.

NVVN has been appointed as the nodal agency for cross border trading of electricity with Bhutan and Bangladesh. The power supply to Bangladesh from NTPC stations under PPA signed between NVVN and Bangladesh Power Development Board has commenced from 05.10.2013.

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 JawaharLal Nehru National Solar Mission. The total solar capacity commissioned till 31.03.2014 under JNNSM Phase-I is 548 MW which includes 498 MW of Solar PV Projects and 50 MW of Solar Thermal Project.

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 with BHEL was incorporated for taking up activities of engineering, procurement and construction (EPC) 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, Namrup Combined Cycle Power Plant in Assam, Balance of Plant including Erection & Commissioning works of the entire plant at Monarchak, Tripura for NEEPCO and EPC Contract for Unchahar.

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

As in the recent past thermal power capacity addition program has suffered a major setback due to a variety of reasons including slow environment clearance of new projects, non-availability of land, shortage of Indian coal

and costly imported coal, this JVC is being reconsidered.

8.3.3 Your Company has acquired 44.6% stake in **Transformers And Electricals Kerala Limited (TELK)** from Government of Kerala on June 19, 2009. The Company deals in manufacturing and repair of Power Transformers. TELK order booking as on 31.03.2014 was ₹142.59 crore and the total turnover of the Company was ₹166.07 crore in the financial year 2013-14.

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 (TPCL), a 50:50 joint venture Company between NTPC and Ceylon Electricity Board was formed to undertake the development, construction, establishment, operation and maintenance of a coal based electricity generating station of 2X250 MW capacity at Trincomalee at Sri Lanka. All major agreements like Power Purchase Agreement, Implementation Agreement and Board of Investment Agreement have been signed. NTPC has been appointed as the 'Owners' Engineer for the project. TPCL is taking necessary actions for obtaining environmental clearance for the project from Central Environment Authority of Sri Lanka. Public Utilities Commission of Sri Lanka has granted electricity license to TPCL in May 2014.

9.2 Bangladesh-India Friendship Power Company Private Limited, a 50:50 joint venture company between NTPC and Bangladesh Power Development Board (BPDB) has been formed for developing a 2X660 MW Coal based power project at Khulna Division, Rampal, Bangladesh. All major project arrangements like Power Purchase Agreement and Implementation Agreement have been signed. The Company has appointed its 'Owners' Engineer'. Project activities at site have commenced.

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 of repute by 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 international markets in Gulf countries, Bangladesh, Nepal, Sri Lanka and Bhutan. The services include consultancy for training, design review, review engineering, supervision of erection, testing & commissioning, performance monitoring, due diligence, operation of plant, construction of sub-stations, preparation of feasibility reports, site selection, site specific studies etc for various projects. The international projects include 2X660 MW Khulna Power Project at Bangladesh and 2X250 MW Trincomalee Coal Power Project at Sri Lanka. 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. It has also recently signed a contract for providing entire Owners' Engineer Services for proposed 2X250 MW Trincomalee Coal Power Project at Sri Lanka.

On the domestic front too, Consultancy Wing has been effectively sharing its expertise with State and Central PSUs and private 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 2013-14, term loan agreements of ₹5,775 crore were entered into including loan agreement of ₹2,000 crore each executed with Bank of India and IDFC Limited. The cumulative amount of domestic loans tied up till March 31, 2014 was ₹63,174.35 crore (excluding undrawn loans short-closed as per agreements).

During 2013-14, an amount of ₹7,750 crore was drawn from domestic banks and the cumulative drawl upto 31st March 2014 was ₹51,504.35 crore.

Your Company tied-up two loan facilities with Japan Bank for International Cooperation (JBIC) and a commercial bank for USD 350 million and JPY 8,021 million for its Kudgi project and renovation & modernization of Auraiya Gas Power Station respectively. The Company also signed three facility agreements with KfW for an aggregate amount of Euro 202 million to part finance the capital expenditure on retrofit of Electrostatic Precipitators of Tanda Stage-II.

In pursuance of CBDT Notification No. 61/2013/F. No. 178/37/2013 – (ITA.1) dated 08.08.2013, Ministry of Finance allocated tax free bonds of ₹1,750.00 crore to the Company to be raised during financial year 2013-14. The Company made public issue of tax free bonds amounting to ₹1,750.00 crore during December 2013. Further, tax free bonds amounting to ₹500.00 crore was also issued on private placement basis in pursuance to CBDT Notification No. 11/2014 F.No. 178/9/2014- (ITA.1) dated 13.02.2014.

For the first time, taxable bonds amounting to ₹750.00 crore were issued directly on 'private placement basis' to Employees' Provident Fund Organisation, which invests through its fund managers. The total bonds issued during financial year 2013-14 aggregated to ₹3,000.00 crore.

12. FIXED DEPOSITS

The cumulative deposits received by your Company from 71 depositors as at March 31, 2014 stood at ₹0.52 crore. Further, an amount of ₹0.18 crore has not been claimed on maturity by 11 depositors as on March 31, 2014.

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

During Financial Year 2013-14, your Company has signed long term Fuel Supply Agreements (FSA) with subsidiaries of Coal India Limited (CIL) for 14,010 MW including 4,390 MW of JVs for units commissioned after 31st March 2009 and expected to be commissioned by 31st March 2015.

Amendments in FSA have been made to FSA-2009 and FSA-2012 pertaining to Useful Heat Value to Gross Calorific Value migration and Third Party Sampling.

The Company has signed short term MOU for one year with The Singreni Collieries Company Limited for supply of 3.5 MMT of coal for Ramagundam and Simhadri stations. Another short term MOU for one year has been signed with Eastern Coalfields Limited for supply of 5.0 MMT to enhance coal supply at critical stations.

Coal linkage of North Karanpura STPP (1980 MW) with Central Coalfields Limited, which was cancelled by Standing Linkage Committee (Long Term) in 2008, has been restored.

13.1.2 Domestic Coal and Imported Coal

During 2013-14, your Company received 160.63 MMT of coal as against 155.06 MMT in 2012-13 marking an increase of 3.59%.

Total domestic coal supply during 2013-14 was 149.79 MMT as against 145.97 MMT during 2012-13. Out of 149.79 MMT of coal, 144.69 MMT was from Annual Contracted Quantity of coal.

The total coal supply from CIL was 138.4 MMT and from SCCL was 11.4 MMT. 2.0 MMT of coal was procured through bilateral MOU during 2013-14.

During 2013-14, your Company imported 10.84 MMT of coal as against 9.09 MMT in 2012-13.

13.1.3 Sourcing of coal through E-auction

Your Company participated in 40 e-auctions for coal procurement during the financial year 2013-14 in which total coal allotted was 4.76 MMT. Total coal received through e-auction was 3.2MMT during 2013-14 as compared to 0.23MMT during 12-13.

13.1.4 Supply through Inland Waterways

During 2013-14, operation was started on inland waterways for transportation of imported coal for Farraka station. About 2 lac MT imported coal has been supplied through this mode to Farakka station.

13.2 Gas supplies

During 2013-14, your Company received 6.87 MMSCMD of gas and RLNG as against 10.67MMSCMD received during 2012-13. The gas off-take in 2013-14 includes 6.72 MMSCMD of gas and 0.15 MMSCMD of RLNG. Gas off-take was less due to less availability of generation schedule on RLNG from the beneficiary states.

Your Company has Administered Price Mechanism (APM) gas agreements up to the year 2021 and Panna Mukta Tapti (PMT) gas agreements up to the year 2019 for its gas stations. The term sheet for non-APM gas with GAIL is valid till 2016 and long-term RLNG supply agreement with GAIL is valid till 2019.

The agreements for KG D6 gas with RIL/Niko/BPEAL expired on 31.03.2014. Now, RIL has forwarded a term sheet for supply of KG D6 gas beyond 31.03.2014 which is under discussion. The entire existing KGD6 production is being supplied to fertilizer sector in line with Empowered Group of Ministers/ MOP&NG directive to supply KG D6 gas as per sectoral priority basis. The supplies to the power sector became NIL from March 2013 and shall pick up only after production is adequate to meet the requirement of fertilizer and Liquefied Petroleum Gas sectors.

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 ten coal blocks by the Government of India namely Pakri-Barwadiah, Chatti-Bariatu, Kerandari, Talaipalli, Dulanga, Chatti-Bariatu (South), Bhalumuda, Banai, Chandrabila and Kudanali-Luburi with estimated geological reserves of about 5.7 billion tonnes and production potential of about 100 million metric tonnes per annum (MMTPA) which will cater to the requirement of 20,000 MW of generation capacity of NTPC.

Detailed exploration is being carried out in Banai, Bhalumuda and Chandrabila and exploration is going to start in Kudanali-Luburi.

In Pakri-Barwadiah coal mining block, all the necessary statutory clearances are available. Mine opening permission has already been received from Coal Controller and DGMS. Mining operations could not be commenced mainly because of adverse law and order situation at project site and non-cooperation of State Government. Also, a termination notice has been served to Theiss, Mine Developer & Operator appointed for Pakri-Barwadiah, due to its poor performance.

In Chatti-Bariatu and Kerandari Coal Blocks, mining plan and mine closure plans have been approved by the Ministry of Coal. For Kerandari Coal Block, environment clearance and Stage-I forest clearance has been accorded by Ministry of Environment and Forests. For Chatti-Bariatu, environment clearance and both Stage-I and Stage-II forests clearances have been accorded. The Mine-developer-cum-operator has been appointed for Chatti-Bariatu. NIT has been issued in March 2014 for appointment of the Mine-developer-cum-operator for Kerandari Coal Mine Block.

In Dulanga and Talaipalli Coal Mining Block, mining plan and mine closure plans have been approved by the Ministry of Coal. For Talaipalli Coal Block, environment clearance and both Stage-I and Stage-II forest clearance have been accorded by Ministry of Environment and Forests. For Dulanga Coal Block, environment clearance and Stage-I forest clearance have been accorded by Ministry of Environment and Forests. For Dulanga Coal Block, NIT shall be published shortly for appointment of the Mine-developer-cum-operator.

A joint venture company is proposed to be formed between NTPC and Jammu & Kashmir State Power Development Corporation Limited (J&KSPDCL) for development of Kudanali-Luburi coal block in Odisha which has been jointly allocated to NTPC and J&KSPDCL.

Your Company has formed the Joint Venture Companies

namely CIL NTPC Urja Private Limited, NTPC-SCCL Global Ventures Private Limited and International Coal Ventures Private Limited to explore further avenues in the area of coal mining. However, these JV companies have not been able to achieve their objectives owing to certain constraints like inability of the JV Company to execute the work, Government Directive etc.

13.4 Exploration Activities

In Cambay exploration block allotted under NELP-VIII, held by NTPC as operator with 100% participating interest, 3D Seismic Data Acquisition and processing and interpretation of data has been completed. Based on the results, locations have been identified for drilling of exploratory wells. Exploration drilling is planned in 2014-15.

In the other three blocks, in each of which NTPC has 10% participating interest and Oil and Natural Gas Corporation Limited is the operator, exploration activities are in progress. Drilling of an exploratory well has commenced from March 2014 in one of the blocks in KG basin.

14. BUSINESS EXCELLENCE: GLOBAL BENCHMARKING

In pursuit of actualizing our vision and with a view to achieve higher levels of excellence, the 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 stakeholders' engagement, accelerating critical processes and developing leadership potential.

The outcome of this model is identification of organizational strengths, opportunities for improvement, issues of concern and best practices.

In the financial year 2013-14, the 4th cycle of assessment was completed in which 21 generating stations were assessed by a team of certified and proficient assessors. Business Excellence Awards for Best Performance to Ramagundam and Runner-up shield to Unchahar stations were presented by the Secretary (Power), GOI and Chairperson, CEA in the Indian Power Conference- 2014 held at New Delhi.

As a next step on the Journey of Excellence, the company is planning to implement Corporate Performance Measure and Dashboard initiative 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 2013-14, Jyotikiran Quality Circle from Faridabad CCPP represented NTPC in the International Convention of Quality Control Circle (ICQCC-2013) held at Tapie, Taiwan. Team Jyotikiran presented their case study titled 'Interruption in Natural Gas Supply to Gas Turbines' and won 'Excellence Award'. Total 300 Quality Circles from 13 countries participated in this convention.

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 life of the plant, improves performance & availability, enhances 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. It also helps in compliance of environment norms.

Keeping in view the ageing of the fleet over the years, investment approval accorded for R&M in 19 stations (Coal & Gas based) is ₹10,993 crore till 31.03.2014. As against this, cumulative expenditure till 31.03.2014 was ₹4,610 crore. Out of this, R&M capital expenditure in FY 2013-14 alone was ₹1,162.37 crore.

With a view to removing technological obsolescence, renovation of control & instrumentation (C&I) is in progress in Singrauli-II, Korba -I & II, Ramagundam -I & II, Farakka-II, Dadri Thermal- I, Unchahar- I and Talcher STPS I. On completion of these schemes, the C&I systems in these stations will be brought nearly on par with the new power projects.

Because of the very high working temperatures, R&M of Gas Turbines including their Control & Instrumentation is essential after around 15 years of life. During the year, this activity was completed in 2 out of 4 Gas Turbines (GT) in Kawas and 1 out of 3 GT in Gandhar. In Auraiya, the GT R&M package has been awarded and implementation is planned in 2014-15, in addition to the next GT in Kawas and Gandhar.

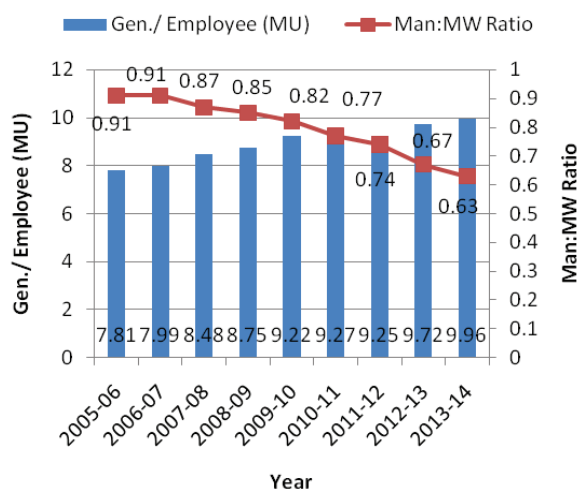
With a view to comply with increasingly stringent environment norms of reduced emission level prescribed by State Pollution Control Boards, Renovation and Retrofitting of Electrostatic Precipitator (ESP) packages have been awarded and work is in progress in Badarpur-II, Singrauli-I & II, Farakka-I, Unchahar-I, Korba-I & II, Rihand-I, Vindhyachal-I & II, Talcher STPS -I and Talcher TPS-II. In 2013-14, investment approval was accorded for R&M of ESP of Talcher STPS-II, award of which is in progress.

In the coming years, life extension of coal based stations on completion of 25 years is planned for Singrauli-II, Korba- II, Ramagundam- II, Vindhyachal- I, Farakka- I, Rihand- I and Unchahar- I units, aimed at extending their useful life and capturing the benefit of latest technological advancements.

The taken-over stations of Tanda and Talcher TPS continued their superior performance levels in 2013-14 on account of R&M intervention. The PLF of Tanda was 92.80% and the PLF of Talcher TPS was 95.02% during 2013-14.

16. HUMAN RESOURCE MANAGEMENT

16.1 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 reduction of Man-MW ratio. The over-all Man-MW ratio for the year 2013-14 excluding JV/subsidiary capacity is 0.63 and 0.58 including capacity of JV/ Subsidiaries. Generation per employee was 9.96 MUs during the year based on generation of NTPC stations.



The total employee strength of the company stood at 25,013 as on 31.3.2014 against 25,484 as on 31.3.2013.

	Fiscal 2014	Fiscal 2013
NTPC		
Number of employees	23,411	23,865
Subsidiaries & Joint Ventures		
Employees of NTPC in Subsidiaries & Joint Ventures	1,602	1,619
Total employees	25,013	25,484

The attrition rate of the NTPC executives (including Executive Trainees and those posted in Subsidiaries and JVs) during the year was 1.68%.

16.2 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 contributing towards the success of the Company and sustaining the same over the years. As a commitment towards the Company's core values, Employees' Participation in Management was made effective 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.

16.3 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. Your Company 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 (Occupational Health and Safety Management System). 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 sites to monitor working conditions at site and their rectification, if required.

Height permit and height check list are implemented to ensure safety of workers at high elevations. 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.

Many of our plants have been awarded with prestigious safety awards conferred by various Institutions and Bodies like Ministry of Labour & Employment, Govt. of India, National Safety Council, Institution of Engineers (India) and Greentech Foundations 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.

16.4 Training and Development

In line with its objective of being a learning organization with skilled and committed employees, your Company has relentlessly promoted training and development of not only its own employees but also other professionals of the power sector. The objective is being driven by a comprehensive infrastructure comprising Power Management Institute (PMI) at the corporate level and Employee Development Centers at its sites. The training imparted is in tune with emerging needs and challenges and for this purpose, the existing training programs are reviewed and some new programs are included in the annual calendar every year. The business scenario in our country is changing with new legislations like the fair compensation, R&R and Land Acquisition Act, Companies Act, 2013 and your Company is committed to add large capacities in this changing scenario. Considering the imperative of upgrading the capability in project management, an Integrated International

Project Management framework is being developed through international faculties for achieving competitive advantage, besides entering into a long term institutional tie-up with IIM-Indore in this area. A similar tie-up has been done with IIM-Ahmedabad for knowledge creation.

Apart from this, the usual programs include topics on power project execution, operation & maintenance, ash dyke management, environment management, advanced welding technologies for super critical boilers, performance enhancement of existing plants, electrical protections and relays, information technology and general management areas.

Presently, there are 25 ITIs with which your Company is associated. NTPC has adopted 17 existing Govt. ITIs out of which 14 ITIs have been adopted under the PPP scheme of Gol and 3 Govt. ITIs have been adopted under bilateral agreement with different State governments. Moreover, NTPC is also setting up 8 new ITIs near its plants/stations. These initiatives by your Company have resulted in creation of total 1,595 new seats by starting of new trades/units in the adopted & new ITIs, and, till 31.03.2014, a total of 19,377 students have benefited by taking admission in these ITIs. For these ITI students, NTPC organised total 23,459 mandays of industrial training/plant visits. Due to all these, your Company has been conferred "The Education Excellence Award 2013" for its Skill Development Initiative.

During 2013-14, your Company organized a number of training programmes in power and energy related areas which, inter-alia, included an "Integrated Conclave on Data Analytics, Business Intelligence, Action Research & Cases" in Dubai, a need-based "Workshop on Knowledge Management" in Goa and hands-on training of 197 participants on the 660 MW supercritical simulator at PMI.

Your Company has also formulated Corporate Governance Training Policy as per the requirement of DPE Guidelines on Corporate Governance for imparting training to the Directors. In order to give an impetus to developing leadership orientation at senior Management level, PMI conducted a conclave for NTPC Board members (Directors & CMD) called SIR (Strategic Institutional Renewal) program. PMI also partnered with BHEL to conduct the SMILE (Strategic Management Initiative for Leadership Effectiveness) program for Executive Directors of NTPC and BHEL, conducted consecutively for second year to orient the participants toward cutting edge leadership and strategic thinking. In addition, newly promoted General Managers of the Company were also subjected to an intensive program on developing cross-functional insights and developing Boundary Management skills.

PMI conducted 429 training programmes during 2013-14 with a participant base of 10,811. The training mandays clocked were 37,493.

PMI also conducted 20 training programmes through video conferencing to reach out in one go, to large audiences in remote sites in 2013-14. In addition to this methodology and in order to take training a further step closer to the employees, PMI this year introduced training through Web Conferencing, whereby an employee can undergo training at his or her workstation itself. PMI conducted 3 training programs through this platform during 2013-14.

17. SUSTAINABLE DEVELOPMENT

Corporate Sustainability is a business approach that creates long-term consumer and employee value by creating a 'green' strategy aimed towards the natural environment and taking into consideration every dimension of how a business operates in the social, cultural and economic environment. The sustainability agenda of your Company addresses all aspects related to sustainable development and promotes leadership in environmental management, social responsibility and economic performance (triple bottom line approach).

Your Company has prepared its Sustainability Report 2012-13 based on various initiatives taken in area of environment, economic, labour practices, human rights, society and product responsibility. The report was in line with internationally accepted 'Global Reporting Initiative' guidelines. The report has been assured by an independent external assurance provider.

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 2013-14. It mainly covers area of waste management, water management, bio-diversity conservation, energy management and promotion of renewable energy, life-cycle studies and reduction in air emissions. Major activities carried out under this plan included plantation of more than 4 lac saplings in and around NTPC plants, installation of roof top solar PV, solar street lights at various stations, rehabilitation of water body, rain water harvesting, installation of bio-methanation plant, vermin composting, other techniques for conversion of domestic waste in organic fertilizer, studies like pollutant source apportionment, human health risk assessment and environment impact assessment.

A total expenditure of ₹ 18.58 crore was incurred on these Sustainable Development Projects during the Financial Year 2013-14.

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:

17.1 Inclusive Growth –Initiatives for Social Growth

17.1.1 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.

CSR has been synonymous with NTPC's core business of power generation. NTPC's spirit of caring and sharing is embedded in its mission statement. NTPC has a comprehensive Resettlement & Rehabilitation (R&R) policy covering community development (CD) activities which has been revised and updated from time to time. CD activities in green field area are initiated as soon as project is conceived and thereafter extensive community / peripheral development activities are taken up along with the project development. A separate CSR- Community

Development Policy, formulated in July 2004 and revised in August 2010 in line with DPE guidelines, covers a wide range of activities including implementation of key programmes through a trust 'NTPC Foundation'.

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 ₹109.77 crore was incurred towards Corporate Social Responsibility expenses during the Financial Year 2013-14, which was 0.87% of the net profit after tax of the previous year.

Awards:

Your Company received Golden Peacock Award 2013 for CSR, Appreciation Certificate from ASSOCHAM CSR Excellent Award 2013 and Special Jury Commendation from FICCI CSR Award 2012-13.

17.1.2 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.

17.1.3 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.

Initial community development (ICD) activities in the area of Health, Education, Sanitation, Drinking water, Infrastructure facilities etc for Bilhaur project was approved after consultation with the stakeholders and for Khargone project, provisions for ICD activities was enhanced during the year. Implementation of earlier approved ICD activities continued at Barethi, Darlipali, Gajmara, Khargone, Jhajar, Nabinagar (BRBCL) and Nabinagar (NPGC) projects.

R&R activities and CD activities in the area of in the area of Health, Education, Sanitation, Drinking water, Infrastructure facilities, capacity building etc were implemented at the new Greenfield projects after finalization of respective R&R Plan in consultation and participation of the stakeholders at Gadawara, Lata-Tapovan and Dulanga projects. Provisions under R&R Plans was enhanced for North Karanpura, Tapovan-Vishnugad, Pakri-Barwadih, Chatti-Bariatu and Kerandari projects. At other thermal, hydro and coal mining projects like Barh, Bongaigaon, Dadri, Kanti, Korba, Kudgi, Lara, Mouda, Solapur, Tanda, Vallur, Vindhychal, Koldam, Talaipalli projects, R&R activities continued throughout the year.

For the benefits of project affected persons and neighbouring population, 'Mobile Health Clinic' was deployed by Kudgi and Nabinagar (NPGC) projects. Toilets have been constructed for PAPs at Kudgi and Khargone projects. Drinking water facility has been augmented for supplying of water for project affected villages at Solapur project.

Socio-economic Survey (SES) for Bilhaur, Mouda-II and Gajmara is in progress.

17.2 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 21st 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. Your company is augmenting its capacity by installing solar power systems and micro hydel power systems attached to its thermal power stations, wherever possible, so as to encourage garnering of renewable energy resources. The Company is also designing its up-coming plants to use beneficiated coal and imported low ash coal. These measures are aimed not only to achieve reduction in pollution and minimize use of precious natural resources but also to lead to reduction of CO₂ emissions per unit of generation thereby reducing global warming.

17.2.1 Control of Air Emissions: High efficiency Electrostatic Precipitators (ESPs) with efficiency of the order of 99.97% 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, retrofitting of advanced ESP controllers and adoption of sound O&M practices. Flue Gas Conditioning systems have also been provided at our old units which are helping in reduction of SPM emissions below statutory limits even during coal quality variations due to blending of coal etc. 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, 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 and 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.

17.2.2 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. All these measures have resulted in reduction of effluent discharge from the power plants of NTPC.

17.2.3 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.

17.2.4 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 the Central Pollution Control Board and State Pollution Control Boards. Additional ozone analyzers for ambient air are also being provided at the stations. Continuous Emission Monitoring Systems (CEMS) to monitor SOx, NOx and CO₂ in all its units on real time basis are being installed in all existing units of the Company. For all the upcoming projects, real time monitors for ambient air and emissions are included in the engineering packages during design stage itself.

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

17.2.6 Tree Plantation: Your Company has planted about 21 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 CO₂ released from the stations and thereby protecting the quality of ecology and environment in and around the projects.

17.2.7 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 environment management systems and practices.

17.3 Quality Assurance and Inspection (QA&I)

Your Company has a quality assurance and inspection division which mainly focuses on quality assurance in every aspect like quality and timely supplies for large capacity units. It continues to emphasize the strict implementation of quality systems in construction as well as in operations of all the projects/ stations. Regular quality system audits are undertaken at our project construction sites to ensure continuous improvements in implementation of quality system improvements.

Your company has now added four overseas inspection offices at Japan, China, Germany and Vietnam.

A recent initiative has been undertaken by your Company to improve the procurement of critical/ bulk spares for power stations, to ensure quality and reliability of spares and standard quality plans for 30 such spares have been prepared by QA&I Department.

Your Company is represented on various technical committees of ISO and IEC and is actively contributing in formulation and updation of power sector technical and quality standards/ guidelines.

17.4 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 registered with UNFCCC. 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. Verification/ issuance of CERs for 5 MW solar power PV project at Dadri and 5MW solar power PV project at A&N are in process.

In addition, your company's projects namely North Karanpura, Tapovan Vishnugad HEPP, energy efficiency projects at Singrauli and Dadri have got host Country Approval from National CDM Authority.

17.5 Ash Utilisation

During the year 2013-14, 57.83 million tonnes of ash was generated and 25.37 million tonnes of ash had been utilized for various productive purposes. This was 43.88% 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. 7.19 million tonnes of ash has been issued to cement, RMC and other industries in the financial year 2013-14.

Pond ash from all stations of NTPC is being issued free of cost to all users. Fly ash is also being issued free of cost to fly ash/ clay-fly ash bricks, blocks and tiles manufacturers on priority basis over the other users from all NTPC coal based thermal power stations. 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 2013-14 from NTPC Stations is at Annex-IX.

17.6 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 Gramen Vidyutikaran Yojana (RGGVY). During this period, 1,442 villages were electrified and 24,742 Below Poverty Line (BPL) connections were provided. The cumulative achievement till 31st March 2014 is 33,807 villages and 26,27,485 BPL connections.

17.7 CenPEEP – towards enhancing efficiency and protecting Environment

NTPC initiated a unique voluntary program of GHG emission reduction by establishing 'Center for Power Efficiency and Environmental Protection (CenPEEP)' and under this program, it is estimated that over 37 million tons of CO₂ has been avoided since 1996.

CenPEEP is also coordinating the implementation of 'Perform, Achieve & Trade (PAT) Scheme' under Prime Minister's National Mission on Enhanced Energy Efficiency (NMEEE) in NTPC where all 22 stations of NTPC are designated Consumers (DC). Based on gap analysis, a joint action plan is prepared with Station for improvement of efficiency and auxiliary power to achieve the PAT targets in the year 2014-15.

Thrust has been given to efficiency improvement & auxiliary power reduction through strategic initiatives of Energy Efficiency Management System (EEMS), Energy management System (EMS), Energy Audit System and reliability improvement through 'Knowledge Based Maintenance' systems. Optimization of cooling tower performance and air-preheater has also been taken up as thrust area. Leveraging the use of information technology, new initiatives have been taken with installation of on-line systems such as Thermal Loss Analyser (TLA) and System Energy Efficiency Display (SEED) for tracking and gap analysis of heat rate and auxiliary power consumption. These systems assist the operator and facilitate the trending of degradation of equipment performance and formulation of action plans for improvement. Evaluation has also been done for use of performance diagnostics off-line tool based on first principle energy / mass balance to help in efficiency and capacity gap analysis and performance baselining of some of the NTPC units thereby enhancing skill for problem analysis.

Under Indo-US bilateral program 'Partnership to Advance Clean Energy – Deployment (PACE-D)' being implemented

with support of USAID, assessment of efficiencies has been done for two State utilities namely Haryana and Maharashtra and action plans were formulated for them. A 'Best practices manual for super critical units' has been prepared jointly with US experts and was released by Secretary (Power) Govt of India on the occasion of NTPC International O&M Conference 2014. Work on 'benchmarking methodology document', 'coal blending impact studies' and pilot program on Advanced Pattern recognition (APR) is underway with the help of US experts.

18. 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 eminent scientists and experts from India and abroad is in place to steer research. Scientific Advisory Council (SAC) with Executive Directors as its members provides directions for undertaking specific applied research projects aimed to develop techniques in power plant for efficient, reliable and environment friendly operation with emphasis on reducing cost of generation. The meetings for both these Advisory Councils were held periodically.

In order to provide maximum possible benefit to the stations, many projects/activities have been undertaken for implementation like waste Flue gas based air conditioning system for control rooms at Ramagundam, Computational Fluid Dynamics (CFD) modeling based plant improvement in boiler and CW system for increasing efficiency and reducing auxiliary power consumption, robotic inspection of boiler pressure parts, PDC-RVM based expert system for transformer condition monitoring etc. Development of many in-house products/technologies is in advance stage like NETRA e Power Plant Solution (NePPS) based on Artificial Intelligence Software for real time plant performance monitoring, optimization & diagnostic, Flue gas utilization for pH reduction of re-circulating ash pond water at Ramagundam etc. NETRA continued to provide scientific support to all NTPC stations as well as many other utilities stations in the area of oil/water chemistry, environment, electrical, Rotor dynamics etc for efficient performances.

Some state-of-the-art facilities established for condition monitoring and diagnostic techniques include frequency scanning eddy current system for evaluation of coating on gas turbine blades; portable automated ball indentation for evaluation of in-situ mechanical properties; eddy current array, Time of Flight Diffraction technology for rapid, reliable, accurate inspection of weldments of high pressure and high temperature pipeline and headers, Energy Dispersive X-Ray Fluoresce, Frequency Domain Spectroscopy, Simultaneous Thermal Analyzer, Particle Counter (NAS Value) etc.

NTPC has inked an umbrella MOU with Indian Institute of Science, Bangalore to promote research in CFD, renewable, water chemistry, ash utilization etc.

Agreement has been signed with KFW, Germany for setting up of (i) Advanced Test and Qualification Centre for Concentrating Solar Thermal Technologies with

DLR Germany (ii) Advance pilot test setup for 91kwp concentrating solar PV and PV characterization test lab with ISE-Fraunhofer, Germany.

NETRA laboratories are accredited as per ISO 17025 and its NDT laboratory has also been recognized as "Well known Remnant Life Assessment Organization" under the Boiler Regulations, 1950.

Phase-II NETRA infrastructure is under construction with approx 21,000 sq m floor area and is expected to be completed in FY 2014-15. Phase II will have 30 laboratories, workshop, pilot plant bay and an auditorium with seating capacity of 400 persons.

NETRA organized National Workshops during 2013-14 in the area of Sensors for Power Plant Process & Equipment, Metallurgical Aspects in Power Plants, Condition monitoring and Life Assessment of Transformers, and also Coordinated International Conference on "Advances Technologies & Best Practices for Super Critical Thermal Plants" under PACE-D Technical Assistance Program.

19. IMPLEMENTATION OF OFFICIAL LANGUAGE

Your Company has taken several steps for the propagation and implementation of Official language 'Hindi' in the Company. The progress of usage of Hindi was inspected and proper suggestions were given to the Heads of the Offices. The quarterly meetings of the Official Language Implementation Committee were held to review the implementation of 'Hindi' in the organization.

Hindi Diwas and Hindi Competitions were organized from 1st to 13th September, 2013 in the Corporate Office as well as in all the Projects and Regional HQ of NTPC. NTPC Limited received All India Indira Gandhi Rajbhasha Second Prize from Hon'ble President of India, Shri Pranab Mukherjee. Various Hindi workshops and Hindi Computer Training were conducted for the employees. Your Company organized Akhil Bhartiya Rajbhasha Sammelan for Power Sector Undertakings on 9th May, 2013. Annual Rajbhasha Conference for the Heads of Rajbhasha was held on 10th & 11th May, 2013.

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. Two issues of half-yearly Hindi magazine 'Vidyut Swar' was published to promote creative writing in Hindi.

Your Company's website also has a facility of operating in bilingual form- in Hindi as well as in English.

20. VIGILANCE

20.1 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 (DPC), 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.

Surprise checks are being conducted in various

departments and recovery is being made against discrepancies, if any, found. Vigilance department issued various circulars for improvements in systems like import of coal, material handling, single tender awards, owner issue materials, utilization of non-moving items etc. A total of 146 vigilance complaints were received during the year, out of which 82 complaints have been resolved and balance 64 complaints are under various stages of investigations.

As per the directive of DOPT/ MOP, the property returns of all the executives have been published on NTPC Website.

20.2 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. 19 such workshops were held across NTPC in which 529 employees participated.

Vigilance awareness week was observed from October 28, 2013 to November 2, 2013 across all NTPC projects and sites.

20.3 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. Regular meetings are being organized with Independent External Monitors.

20.4 Implementation of various policies/ circulars

20.4.1 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.

20.4.2 Complaint Handling Policy

Vigilance department has formulated and implemented Complaint Handling Policy w.e.f. 01.08.2013 which contains the procedure for handling various complaints lodged with the department.

20.4.3 Whistle Blower Policy

Whistle Blower Policy has been issued to build and strengthen a culture of transparency and trust in the organization and to provide employees with a framework/ procedure for responsible and secure reporting of improper activities within the company and to protect employees who raise concern about improper activities/ serious irregularities.

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 2013-14, 1,226 applications were received under the RTI Act, out of which 1,171 applications were replied to.

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.

A state-of-the-art main data center with centralized server facility to cater to the needs of entire Company is located 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 management reviews/ training/ deliberations among locations. The facility has also been augmented to hold VC with external agencies in secured manner.

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.

An emergency response system (ERS) has been deployed and hosted centrally at Noida to cater to different requirements of sending information to the employees using SMS services and emergency alerts during Voice Calls.

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 is being regularly used for publishing all open tenders on the Internet. Additional Website www.ntpcemployees.co.in for facilitating superannuated employees has also been hosted.

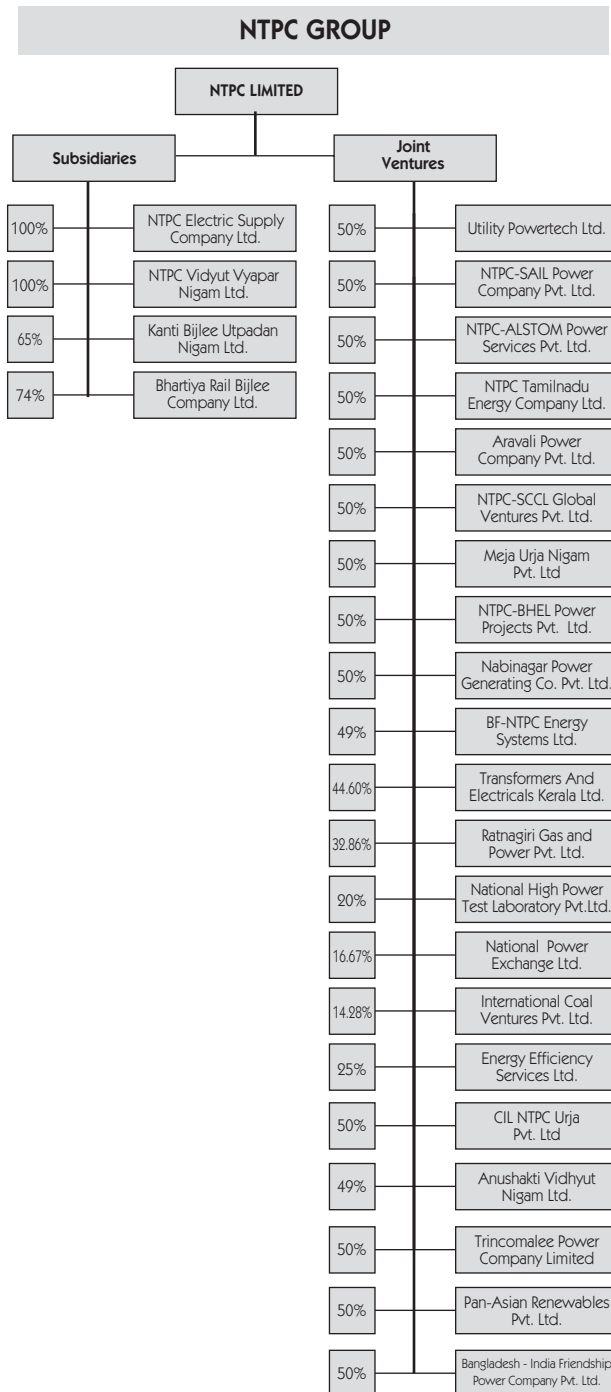
The Information Technology department at Corporate Center Noida has been awarded certificate in recognition of the organization's Quality Management System which complies with ISO 9001:2008 for "Providing IT Enabled Services".

23. NTPC GROUP: SUBSIDIARIES AND JOINT VENTURES

Your Company has currently 4 subsidiary companies and 21 joint venture companies for undertaking specific business activities.

NTPC Hydro Limited, a wholly owned subsidiary of NTPC has been merged with NTPC Limited on 18.12.2013 in terms of Section 391-394 of the Companies Act, 1956.

The names of Subsidiaries and Joint Venture Companies and the percentage of your Company's shareholding in these Companies as on 31.03.2014 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

As per provisions of Section 217 (2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 1975, every company is required to

provide particular of employees in the Directors' Report exceeding the stipulated remuneration limit(s).

However, as per notification dated 31.03.2011 issued by the Ministry of Corporate Affairs, amending provisions of said rules, Government Companies are exempted from including such particulars in the Directors' Report.

As your Company is a Government Company, such particulars have not been included in the Director's Report. Any member desirous of obtaining such particulars may write to the Company Secretary at the Registered Office of the Company or download them from the website 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 27.08.2014.

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 2013-14.

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 2013-14. They have drawn attention towards Note-32 to the financial statements in respect of the accounting of fuel on GCV based pricing system.

The issue has been adequately explained in Note 32 of the financial statements of NTPC for FY 2013-14 referred to by the Auditors.

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

You would be pleased to know that for the fifth 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 2013-14 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, 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 2012-13 were (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, Bhubhaneshwar, 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 2013-14 were (i) M/s Narasimha Murthy & Co., Hyderabad, (ii) M/s Musib & Co., Mumbai, (iii) M/s Sanjay Gupta & Associates, Delhi, (iv) M/s Bandopadhyay Bhaumik & Co., Mumbai, (v) M/s S. Dhal & Co., Bhubhaneshwar and (vi) M/s R.J. Goel & Co., Delhi.

The due date for filing consolidated Cost Audit Report in XBRL format for the financial year ended March 31, 2013 was September 27, 2013 and the consolidated Cost Audit Report for your Company was filed with the Central Government on September 16, 2013.

The Cost Audit Report for the financial year ended March 31, 2014 shall be filed within the prescribed time period under the Companies Act, 2013.

29. BOARD OF DIRECTORS

Dr. Pradeep Kumar, JS & FA, Ministry of Power has joined as Government Nominee Director of the Company with effect from September 10, 2013 in place of Shri Rakesh Jain who ceased to be the Director of the Company w.e.f. July 9, 2013 consequent upon his transfer from Ministry of Power.

Shri A.K. Singhal, Director (Finance) ceased to be the Director of the Company w.e.f. October 9, 2013 consequent upon his appointment as Member of the Central Electricity Regulatory Commission.

Consequent upon superannuation of Shri B.P. Singh on September 30, 2013, Shri S.C. Pandey has taken over as Director (Projects) with effect from October 1, 2013.

Shri I.C.P. Keshari has ceased to be the Director of your Company w.e.f. September 30, 2013 on ceasing to be the official of Ministry of Power.

Shri G. Sai Prasad, JS (Thermal), Ministry of Power had joined as Government Nominee Director of the Company with effect from December 5, 2013. However, he has ceased to be the Director on the Board w.e.f. June 16, 2014 consequent upon his transfer from Ministry of Power.

Shri Kulamani Biswal, Director (Finance), Mahanadi Coalfields Limited has taken over the charge of the Director (Finance) of the Company with effect from December 9, 2013.

The Board wishes to place on record its deep appreciation for the valuable services rendered by Shri Rakesh Jain, Shri A.K. Singhal, Shri B.P. Singh, Shri I.C.P. Keshari and Shri G. Sai Prasad during their association with the Company.

In accordance with Section 152 of the Companies Act, 2013 and the provisions of Article 41(iii) of the Articles of Association of the Company – Shri I.J. Kapoor shall retire by rotation at the Annual General Meeting of your Company and, being eligible, offers himself 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 2013-14 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 2013-14	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, Comptroller & Auditor General of India, 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 : 11th July 2014