

PARTICULARS REQUIRED UNDER THE COMPANIES (DISCLOSURE OF PARTICULARS IN THE REPORT OF THE BOARD OF DIRECTORS) RULES, 1988:

A. CONSERVATION OF ENERGY:

a) Energy conservation measures taken:

Some of the important energy conservation measures taken during the FY year 2010-2011 in different areas are as under:

ENERGY AUDITS

During FY 2010-11, 96 energy audits in the areas of auxiliary power consumption, water balance, cooling water system, thermal insulation, compressed air, coal handling plant, milling system, air conditioning, ash handling system, WHRB performance, lighting etc. were carried out at different stations of NTPC. A workshop on "Opportunities for APC reduction and Water conservation" was conducted at Patna.

AUXILIARY POWER CONSUMPTION

Replacement of inefficient BFP cartridges and attending BFP recirculation valves at Talcher, Farakka, Dadri, Rihand, Singrauli, Unchahar, Kahalgaon, Korba, Badarpur, Kawas, Kayamkulam etc., Modifying APH sector angle at Tanda, Removal of one stage in CEP at Vindhyachal, Application of efficiency improvement coating on cooling water pump internals at Talcher Thermal, Gandhar & Kawas, Installation of VFD's in HFO pressurizing pumps at Korba and in raw water pumps at Gandhar, Optimization of operation of CW pumps, ARCW and clarified water pumps & Cooling Tower Fans at Talcher, Kahalgaon, Sipat, Anta, Auraiya, unchahar, Farakka and Vindhyachal.

Maintaining optimum DP across Feed Regulating Station at Kahalgaon, Korba, Singrauli and Vindhyachal, Optimizing operation of HP/LP / Seal water pumps at Vindhyachal, Dadri coal and Rihand, Optimizing operation of air compressors at Singrauli and Talcher.

LIGHTING

Replacement of conventional GLS lamps and conventional FTLs with CFLs at Farakka, Rihand, Singrauli, Unchahar, Ramagundam, Anta, Auraiya, Kayamkulam, Kawas and Gandhar, replacement of HPMV lamps with HPSV lamps at Singrauli, replacement of HPSV fixtures with LED light fixtures at Kayamkulam.

HEAT ENERGY

Commissioning of new mixed bed unit enabling injection water to be sourced from D/A at Gandhar. External surface cleaning of WHRB tubes with ammonia at Auraiya, Attending / upgrading thermal insulation at Auraiya, Kawas, Kayamkulam, Rihand and Vindhyachal. Adopting new chemical treatment of cooling water at Talcher Thermal. Attending passing in HP heaters / HP drain valves at Ramagundam and Rihand.

MISCELLANEOUS WATER

Reuse of water from ash pond at various stations, Reuse of clarified water after equipment cooling, Retrieval and reuse of raw water from coal settling pond, attending leakages in various lines at various stations, etc.

b) Additional investments and proposals for reduction in consumption of energy:

Provision of ₹ 994 lacs has been kept in BE 2011-12 for different energy conservation schemes like:

- On-Line Energy Management System
- Vapor absorption system for Air Conditioning
- Installation of VFD in ID fans

c) Impact of measures taken for energy conservation:

Savings achieved during FY 2010-11 on account of specific efforts for energy conservation:-

S.No.	Area/Activities	Energy Unit	Savings Qty. of units	₹ (in Crore)
1	Electrical	MU	102.33	19.09
2.a	Heat Energy (equivalent MT of coal)	MT	22774	3.29
2.b	Heat Energy (equivalent MCM of Gas)	MCM	6.577	6.27
2.c	Heat Energy (equivalent MT of Naptha)	MT	10.298	0.041
3	Miscellaneous Water	M.Cu M	6.129	1.93
	Grand Total			30.621

Savings achieved during 2009-10: ₹ 29.60 Crore

B. Technology Absorption:

Efforts made towards technology as per Form -B (Form-B enclosed)

C. FOREIGN EXCHANGE EARNINGS AND OUTGO

Activities relating to export initiative taken to increase export, development of new export markets for products and services and export plan:

Total Foreign Exchange Used/Earned (2010-2011)	₹ (in Crore)
1. Foreign Exchange Outgo	
a) Value of Imports calculated on CIF basis:	
Capital Goods	965.31
Spare Parts	98.73
b) Expenditure:	
Professional and Consultancy Charges	5.80
Interest	514.43
Others	12.21
2. Foreign Exchange Earned	
Consultancy	1.01
Interest	-
Others	0.11

FORM FOR DISCLOSURE OF PARTICULARS WITH RESPECT TO ABSORPTION OF TECHNOLOGY**1.0 Specific areas in which NETRA activities have been carried out during 2010 - 11:**

- a. **MOU Projects for 2010 – 11 Completed:** Feasibility study for CO₂ fixation for development of product /EOR; Feasibility Report for setting up of 100 Kg/day pilot plant of Micro Algae based CO₂ capture technology; Award for Solar heating ventilation and air conditioning (HVAC) system (in final stages); Installation of a demonstration pilot plant at Dadri Thermal for the proof of concept of the theoretical model developed for extraction of moisture from flue gas; Field measurement and validation of Integrated Polarization Depolarization Current – Recovery Voltage measurement (PDC-RVM) apparatus for Insulation condition monitoring of Transformers; 5kW test loop and data generation for performance study of aqua ammonia cycle for efficiency improvement and setting up of 8 Sensor Solar Radiation Station at NETRA.
- b. **Developmental Projects undertaken by NETRA:** Preparation of TS for 100 TR Flue gas heat recovery Air Conditioning plant; Field trials of Robotic based inspection system at one station; Procurement processing for components of Heat pipe based air-preheater pilot plant; Preparation of feasibility report of 1 MW solar thermal pilot plant; Finalization of Technical Specifications for 2nd Phase Advanced computing Center; Installation & Commissioning of integrated biodiesel pilot plant to produce energy for existing biodiesel plant at Dadri; Experimental set up of Thermoelectric Generation; NIT for Pressure swing absorption (PSA) based CO₂ capture pilot plant of 100 Kg/hr flue gas capacity.
- c. **Scientific Support to NTPC Stations:**
- NETRA continued to provide scientific support to NTPC stations such as: Trial Installation of Software for online chemical monitoring & advisory of Water Chemistry parameters at Singrauli; Trial installation of Artificial Intelligence (AI) based operator advisory for plant performance improvement at Simhadri Unit # 2; Development and Trials of Robotic inspection devices at stations; Retrofitting of VFD drives in existing cooling tower fan motor at Dadri; CFD modeling of 500 MW boilers of Vindhyachal & Korba; Development of PDC-RVM Instrument for Condition Monitoring Transformer Insulating paper; Installation of Integrated biodiesel plant at Dadri; Design of Cathodic protection system for Control of Corrosion Induced damages to RCC structures at Simhadri (Stage 1); Treatment technology of raw water of Badarpur for use in DM and cooling water; Post operational chemical cleaning of 11 boilers; Installation & Commissioning of 8 Sensors Solar Radiation Stations; Fabrication, commissioning and trials of pilot plant for reconditioning FRF at NETRA; Development of Chemical treatment program for cooling water systems at Tanda, Jhajjar, Dadri, Talcher Kaniha, Talcher Thermal, etc; Developed guidelines for cooling water treatment & online corrosion, fouling and microbiological fouling/corrosion and post operational chemical cleaning of boilers; Anticorrosive coatings suitable for DM plant and immersed structures such as condenser water boxes & pipes has been recommended to Badarpur & other stations that also included design of cathodic protection system for condenser water boxes of Badarpur; Recommendations have been given for improving the performance of pre-treatment plants of Kahalgaon, Badarpur & Kawas.
 - Environmental Appraisal of 20 stations have been carried out and corrective actions are being taken by the stations based on the appraisal.
 - Health Assessment:** Fact finding of gas turbine components during its major/minor inspection, Special NDT of generator components (retaining ring, rotor wedge, rotor coupling), Referral jobs for health/life management of boiler components (CBB certified RLA agency).
 - Failure Investigations:** Failure Investigations of Condenser tubes of Tanda, Failure investigation of Condenser tubes of Badarpur, Failure Investigations of Clarified water pipeline at Unchahar, Failure Investigations of Condenser tubes of Tarapore Atomic Power station.
 - Condition Monitoring:** 500 number HV transformers through dissolved gas analysis, over 1300 rotating components through wear-debris analysis, ion-exchange resins of 20 stations.
 - Specialized Testings of over 4000 samples in an year.

d. Scientific Support to Other Utilities:

- Scientific services provided to other utilities such as Panipat, Kota Thermal, Lehra Mohabat, Faridabad, JPL (Raigarh), Neyveli, IPGCL, DVC, PGCIL, NHPC, etc.
- International Consultancy to Fujairah power plant (UAE) for Root Cause investigation of BTF in HRSG's.

2.0 Benefits derived as a result of above Research & Technology Development:

NETRA activities as carried out have helped in increasing the availability, reliability and efficiency of the stations. Chemical treatment and corrosion control measures suggested is helping the stations in improving the efficiency, availability and life of various heat exchangers/cooling towers. Techniques developed by NETRA are implemented at stations, which are enhancing the life of boiler & turbine components.

The timely and scientific failure analysis of various components helped in identifying the cause of failure and thus providing necessary input for taking corrective action in preventing re-occurrence of similar failures thereby increasing the availability of power plant equipment.

Studies on CO₂ fixation/utilization; solar thermal; biofuels will result into development of technologies for reduction in the impact on climate change and technologies for affordable renewable energy sources. Development of technologies for efficiency improvement will help in reducing cost of generation.

3.0 FUTURE PLANS

Developmental Projects planned to be taken up:

- Completion of Installation and Commissioning of bench scale test loop at NETRA of PSA based CO₂ capture technology.
- Lab scale testing and design of Pilot plant for CO₂ utilization through mineralization of fly ash at Ramagundam.
- Supply of equipment and commencement of erection of 40TR solar HVAC plant at NETRA through in-house design & engineering.
- Development of software and its trials for On-line chemical parameter monitoring and advisory at one station through in-house efforts.
- Design and preparation of feasibility report & DPR for 1MW solar Thermal R&D Pilot plant having provision of three type of concentrators.
- Study of micro-algae strains and short listing for detailed CO₂ capturing studies to 10 Nos.
- Draft submission to the Management of R&D Policy in line with DPE's forthcoming guidelines
- Study of low energy absorption building envelope design.
- Specification of bench scale prototype to convert Municipal Solid Waste to fuel.
- Design & Specification of Pilot plant for Moisture Extraction from flue gas at Ramagundam.
- Deployment of Artificial Intelligence based pilot program for performance optimization at 1 station (Simhadri)
- NIT of 100TR FGHR-AC Pilot Plant at Ramagundam
- Lab scale studies for Thermal Monitoring of Water Wall tubes to identify level of deposits in the tubes.
- Assessment of corrosivity of condenser cooling water and recommending corrective measures at stations.

4.0 Expenditure on R&D:

S.No.	Description	Expenditure in (₹/Crore)	
		2010 – 2011	2009 - 2010
a)	Capital	3.68	1.40
b)	Recurring	28.30	20.56
c)	Total	31.98	21.96
d)	Total R&D expenditure as a percentage of total turnover	0.0583%	0.0475%

5.0 Technology Absorption, Adaptation and Innovation

Particulars of some of the important technology imported during last five years are as follows:

S.No.	Technology	Year	Stations
1.	Super critical Technology with 256 Kg/cm ² Steam Pressure and 565/595 CMS/RH steam temperature is being adopted for improvement in thermal efficiency and reduced emission of green house gasses.	2008-10	Being Implemented in Barh-II and further being implemented in 11 units of 660 MW (in Mauda, Sholapur, Meja, Nabinagar and Raghunathpur plant) through bulk tendering mechanism & envisaged for 800 MW units (Kudgi, Darlipalli, Gajmara & Lara through Bulk tendering.)
2	Implementing IGCC technology for high ash Indian coal	2010	Demonstration plant of about 100 MW capacity at Dadri project of NTPC.
3	Communicable Numerical Relay Technology (on IEC 618500) along with Networking Systems introduced in 33 KV/11KV /6.6 KV/3.3 KV and LV System	2009	Implemented at Dadri-II, Korba-III & IGSTPP, Simhadri-II. Being Implemented in all ongoing projects.
4	Boiler Flame Viewing Camera	2009	Implemented in Kahalgaon and Sipat-II
5	4000 TPH Capacity & 4.4 Km long pipe conveyors for transporting coal from port to plant .	2006	Implemented in Vallur. This is highest capacity pipe conveyor in Asia.
6	Advanced Class Gas Turbines with approx. 60% combined cycle efficiency	2011	Envisaged for Kawas-II, Gandhar-II and Kayamkulam-II
7	As a part of green technology adoption, LED based large video screens have been adopted for control rooms, from 660MW bulk tendering projects onwards.	2010	Incorporated in the Station C&I specifications of 660MW bulk tender projects. (Mauda-II, Sholapur, Meja, Nabinagar).
8	Secured & Improved Network design of DDCMIS has been adopted. This secured network design has been incorporated in the specifications along with network security policies & procedures, provision of security audits and specialized training.	2008	Incorporated in technical specifications from Bongaigaon onwards. For existing projects, these security policies & procedures have been circulated to all sites.

For and on behalf of the Board of Directors


 (Arup Roy Choudhury)
 Chairman & Managing Director

Place : New Delhi
 Dated : August 04, 2011

Annex-V to Directors' Report

**STATEMENT PURSUANT TO SECTION 212 OF THE COMPANIES ACT, 1956 RELATING TO
SUBSIDIARY COMPANIES**

	NAME OF THE SUBSIDIARY*	NTPC ELECTRIC SUPPLY COMPANY LTD.	NTPC VIDYUT VYAPAR NIGAM LTD.	NTPC HYDRO LTD.	KANTI BIJLEE UTPADAN NIGAM LIMITED	BHARTIYA RAIL BIJLEE COMPANY LIMITED
1.	Financial year of the Subsidiary ended on	March 31, 2011	March 31, 2011	March 31, 2011	March 31, 2011	March 31, 2011
2.	Date from which they became Subsidiary	August 21, 2002	November 1, 2002	December 12, 2002	September 6, 2006	November 22, 2007
3.	Share of the subsidiary held by the company as on March 31, 2011					
	a) Number & face value	80,910 equity shares of ₹ 10/- each	2,00,00,000 equity shares of ₹ 10/- each	11,39,59,500 equity shares of ₹ 10/- each	5,71,51,000 equity shares of ₹ 10/- each	35,52,00,000 equity shares of ₹ 10/- each
	b) Extent of holding	100%	100%	100%	64.57%	74%
4.	The net aggregate amount of the subsidiary companies Profit/(loss) so far as it concerns the member of the holding company					
	a) Not dealt with in the holding company's accounts					
	i) For the financial year ended March 31, 2011	6,01,49,800	30,05,81,892	NIL	(14,58,26,762)	(2,31,384)
	ii) Upto the previous financial years of the subsidiary company	43,19,34,036	79,61,907	(813,26,692)	(7,78,816)	(48,87,604)
	b) Dealt with in the holding company's accounts					
	(i) For the financial year ended March 31, 2011	Nil	Nil	Nil	Nil	Nil
	(ii) For the previous financial year of the subsidiary company since they become the holding company's subsidiaries	Nil	Nil	Nil	Nil	Nil

* The name of Pipavav Power Development Company Limited, a wholly-owned subsidiary of NTPC Limited has been struck off from the Registrar of Companies, Delhi & Haryana w.e.f. 28.01.2011 pursuant to Section 560 of the Companies Act, 1956 and the said Company stands dissolved w.e.f. 28.01.2011.

For and on behalf of the Board of Directors



(Arup Roy Choudhury)
Chairman & Managing Director

Place : New Delhi
Dated : August 04, 2011

STATISTICAL DATA OF GRIEVANCE CASES

2010-2011

S. No.	Particulars	Public Grievance Cases	Staff Grievances Cases
1.	Grievance cases outstanding at the beginning of the year	-	6
2.	Grievance cases received during the year	1	22
3.	Grievance cases disposed of during the year	-	26
4.	Grievance Cases outstanding at the end of the year	1	2

For and on behalf of the Board of Directors



(Arup Roy Choudhury)
Chairman & Managing Director

Place : New Delhi
Dated : August 04, 2011

Annex-VII to Directors' Report

STATICAL INFORMATION ON RESERVATION OF SCs/STs FOR THE YEAR 2010

Representation of SCs/STs as on 01.01.2011:

Group	Employees on Roll	SCs	%age	STs	%age
A	14005	1674	11.95	589	4.20
B	5085	788	15.49	356	7.00
C	5877	1038	17.66	410	6.97
D	1137	241	21.19	152	13.36
Total	26104	3741	14.33	1507	5.77

Recruitment of SCs/STs during the year 2010:

Group	Total Recruitment	SCs	%age	STs	%age
A	1129	121	10.71	51	4.51
B	-	-	-	-	-
C	132	30	22.72	1	0.75
D	23	8	34.78	7	30.43
Total	1284	159	12.38	59	4.59

Promotions of SCs/STs during the year 2010:


Group	Total	SCs	%age	STs	%age
A	3154	377	11.95	119	3.77
B	1084	144	13.28	66	6.08
C	1237	232	18.37	75	6.06
D	149	31	20.80	9	6.04
Total	5624	784	13.94	269	4.78

The following backlog vacancies reserved for SCs/ STs/ OBCs have been filled through special recruitment drive/ advertisement of backlog vacancies along with current vacancies:

SCs : 14

STs : 14

For and on behalf of the Board of Directors



(Arup Roy Choudhury)
Chairman & Managing Director

Place : New Delhi
Dated : August 04, 2011

PHYSICALLY CHALLENGED PERSONS

With a view to focus on its role as a socially responsible and socially conscious organization, your Company has endeavored to take responsibility for adequate representation of physically challenged persons (PCP) in its workforce. In this view, your Company NTPC launched a massive recruitment drive to make up the shortfall of PCP. Presently, 470 PCP (94 VH, 106 HH and 270 OH) are on rolls of NTPC. Reservation has been provided for PH as per rules/ policy. Some of the other initiatives taken for the welfare of physically challenged persons by NTPC over the years are as under:

- For individual needs of the Visually Hampered employees, screen reading software and Braille shorthand machines, made available by the Projects of NTPC. A website has been made PCP friendly particularly for Low Vision Employees.
- "Sign language" training for the employees in general.
- Changes in the existing building have been/ are being made to provide barrier free access to physically challenged.
- Ramps have also been provided for unhampered movement of wheel chairs.
- At most of the NTPC Projects, wherever houses are located in multi-storied structures, allotments to PCP has been made on the ground floor.
- Special parking enclosure near the ramp at the office entrance as well as Physically Handicapped friendly toilet and lift at CC and Projects.
- Wheel chairs have been provided to employees with orthopedics disabilities. If required, the assistance of an attendant has also been sanctioned.
- Wherever required, gates/ door of the quarter have been widened.
- At CC, procurement of stationery items like files, envelopes are mainly being done from NGOs/ Agencies like ADDI, MUSKAN, Blind Relief Association who are working for physically challenged thereby creating indirect employment.
- Paintings made by disabled persons have also been procured and placed at different locations in the Company Offices.
- Medical camps have been organized in various projects of NTPC for treatment and distribution of aids like artificial limbs, tricycles, wheelchairs, calipers etc.
- Shops have been allotted in NTPC Township to PCP so that they may earn their livelihood. Similarly, PCOs within/ outside plant premises are also allotted to PCP.
- Regular interactive meetings are being organized with physically challenged employees.
- Training needs are being fulfilled as per the individual requirement.
- 10 number of Scholarships @ ₹1,500/- per month/ per student are given to PH students pursuing MBA/ PGDBM/Degree in Engineering Courses.
- Petty contracts like book binding, scribbling pad preparation from waste paper, file binding, furniture repair, screen printing, spiral binding, painting contract are also being given to disabled persons.
- Physically challenged (Orthopedically Handicapped) employees have been allowed to purchase a three wheeler vehicle with a hand fitted engine against their normal entitlement (advance for scooter/ motorcycle/ moped) under NTPC conveyance Advance Rules.
- At all Projects/ Offices, Nodal Officers (Physically Challenged) have been nominated.
- Reimbursement towards low vision aids, dark glasses etc. subject to maximum of ₹ 1,000/- every year has been introduced. Similarly hearing aid behind the ear model for each ear restricted to ₹ 10,000/- or actual cost whichever is lower has been introduced. It may be replaced every four years subject to certificate of condemnation by ENT Specialist.
- Relaxation in qualifying marks for open recruitment: pass marks only and also 10% relaxation in written test and interview from the year-2002 onwards.
- The minimum performance level marks for promotions within the cluster is relaxed by 3 marks in case of employees belonging to SC/ ST/ Physically Challenged category.
- NTPC had launched special recruitment drive for filling up 18 backlog vacancies for PCP in Group-A Posts out of which 16 posts have been filled during the year 2010.

For and on behalf of the Board of Directors



(Arup Roy Choudhury)
Chairman & Managing Director

Place : New Delhi
Dated : August 04, 2011

UNGC – Communication on Progress (2010-11)

NTPC expresses its continued support for the Global Compact and its commitment to take action in this regard, as was communicated by the Chairman & Managing Director, NTPC in his letter dated May 29, 2001 addressed to Secretary General, United Nations.

NTPC has posted the brief of Global Compact and its commitment to the principles of GC on its website at www.ntpc.co.in. The principles of GC were communicated to all employees through in-house magazines, internal training programmes and posters. NTPC, a core member of Global Compact Network (GCN), India, (formerly known as Global Compact Society) actively participated in the Annual Convention of the Global Compact Network at Mumbai and Asia Pacific Regional Conclave at New Delhi. NTPC representative contributed as faculty for various training programmes organized by GCN for Global Compact Member Organizations in Chennai and Delhi.

NTPC is in the process of preparing its "Corporate Sustainability Report" covering Economic, Environmental and Social aspects with the "triple bottom line" approach based on widely accepted and updated Global Reporting Initiative (GRI) Guidelines.

Human Rights: Principle 1-2

Most of NTPC's operating power stations are located in remote rural areas which are socio-economically backward and deficient in the basic civic amenities. NTPC, as responsible corporate citizen has been addressing the issue of community development in the neighbourhood areas of its stations impacted due to establishment of the project, initially as part of Resettlement and Rehabilitation (R&R) effort continued subsequently under the "Community Development (CD) Policy".

Keeping in view the changed Business environment, Global practices and detailed guidelines issued from DPE, Ministry of Heavy Industry & Public Enterprises, revised CSR Community Development (CD) policy of NTPC has been approved by Board of Directors in August 2010.

Under this policy, during 2010-11, your Company has taken up a large number of activities for carrying out comprehensive Community Development work in the area of health, education, drinking water and peripheral development in the neighbourhood of 20 operating stations. In addition, Quality Circles (QCs) are functioning in neighborhood villages of its stations. NTPC employees participate in various CD activities through Employee Voluntary Organization for Initiative in Community Empowerment (EVOICE).

NTPC supported/ committed support to various Institutions/ Bodies and undertook initiatives for major activities like self reliance for tribal girls/ women, construction of girls hostel, construction of school sum multi-purpose building, preparation and development of Audio Study material for visually challenged persons, construction of houses for affected people due to damage caused by cloud burst in August 2010 in Leh, construction of road, supply of drinking water through pipeline to villages, construction of a bridge over drain, etc.

NTPC members were actively involved in reviews of draft preparation of "ISO 26000 Guidance on Social Responsibility and the implications for Developing Countries" by Bureau of Indian Standard (BIS) and participated regularly in various workshops/ meetings in the capacity of "industry experts on CSR".

NTPC is also member of Corporate Roundtable on Development of Strategies for Environment (CoRE) initiated by TERI and is supporting its principles outlined in the CoRE sustainability Charter drawn from International Chamber of Commerce's Business Charter for Sustainable Development.

NTPC has also adopted the Social Code framed by India partnership Forum promoted by Confederation of Indian Industries (CII) and UNDP and is closely associated with Bureau of Indian Standard (BIS) in formation of "Standard on Good Governance" and with Ministry of Corporate Affairs in drafting Draft National Voluntary Guidelines on Social, Environmental & Economic responsibilities of Business.

Major activities taken up by NTPC in this area are highlighted under the head "Inclusive Growth" and "NTPC Foundation" under Directors' Report for the Annual Report 2010-11.

Labour Standard: Principle 3-6

For addressing the issue of labour standard in comprehensive manner, NTPC has decided to adopt international standards like SA-8000 and OHSAS-18001.

During the year 2010-11, Kawas and Kayamkulam got Accreditation for SA-8000. Anta, Farakka, Faridabad, Jhanor-Gandhar, and Simhadri stations of NTPC got revalidated for accreditation for SA-8000 and Surveillance Audit for the same was conducted at 09 Stations i.e. Anta, Auraiya, Badarpur, Farakka, Faridabad, Jhanor-Gandhar, Kawas, Rihand and Simhadri. Revalidation for SA-8000 is in process at Ramagundam, Singrauli and Unchahar.

Environment: Principle 7-9

NTPC has taken a number of initiatives towards preservation of the environment by providing state-of-the art pollution control systems, regular environment monitoring and judicious use of natural resources, adoption of advanced and high efficiency technologies such as super critical boilers for the up-coming projects (Sipat, Stage-I). High efficiency Electrostatic Precipitators (ESPs) with efficiency of the order of 99.9% or higher with advanced ESP control systems have been provided in all coal based plants.

For institutional strengthening, NTPC organized specialized training programmes in 2010-11 viz 'Environment Management, Climate Change & Carbon Mitigation' for executives directly working for Environment functions, 'Environmental Concerns' for the executives working in non Environment functions and 'Insight into the Environment Management' for high level executives

Major activities taken up by NTPC in the area of Environment are highlighted under the head "Environment Management" under Directors' Report for the Annual Report 2010-11.

Anti-corruption: Principle 10

NTPC has a Vigilance Department headed by Chief Vigilance Officer, a nominee of the Central Vigilance Commission. The four units of Vigilance Deptt, namely Corporate Vigilance Cell, Departmental Proceeding Cell (DIPC), MIS Cell, Technical Cell (TC) deal with various facets of Vigilance Mechanism. Exclusive & independent functioning of these units ensure transparency, objectivity and quality in Vigilance functioning. The Vigilance Department submits its reports to Competent Authority including the Board of Directors. The CVO also reports to the Central Vigilance Commission as per their norms.

Major activities taken up by NTPC in the area regarding Implementation of Integrity Pact, Implementation of Fraud Policy, Preventive Vigilance Workshops and Vigilance Awareness Week etc. are highlighted under the head "Vigilance" under Directors' Report for the Annual Report 2010-11.

For and on behalf of the Board of Directors



(Arup Roy Choudhury)
Chairman & Managing Director

Place : New Delhi
Dated : August 04, 2011

Annex-X to Directors' Report

The quantity of ash produced, ash utilized and percentage of such utilization during the FY 2010-11 from NTPC Stations is as under:

Sl. No.	Stations	Ash Produced	Ash Utilization	% Utilization
		Lakh MTs	Lakh MTs	%
1	Badarpur	11.05	9.86	89.23
2	Dadri	25.50	21.01	82.40
3	Singrauli	40.49	24.30	60.02
4	Rihand	29.05	17.58	60.52
5	Unchahar	23.21	20.27	87.33
6	Tanda	11.59	6.96	60.04
7	Korba	53.40	21.40	40.08
8	Vindhyachal	50.74	32.09	63.25
9	Sipat	22.09	2.32	10.52
10	Ramagundam	40.66	26.11	64.22
11	Simhadri	21.92	13.16	60.04
12	Farakka	24.81	21.57	86.94
13	Kahalgaon	38.12	9.12	23.93
14	Talcher-Thermal	11.93	11.93	100.00
15	Talcher-Kaniha	67.49	22.60	38.48
	Total	472.05	260.28	55.14

For and on behalf of the Board of Directors

Place : New Delhi
Dated : August 04, 2011


(Arup Roy Choudhury)
Chairman & Managing Director