



A Maharatna Company



42ND

ANNUAL REPORT 2017-18



VISION

**TO BE THE WORLD'S LEADING POWER
COMPANY, ENERGIZING INDIA'S GROWTH**

MISSION

**“PROVIDE RELIABLE POWER AND RELATED SOLUTIONS
IN AN ECONOMICAL, EFFICIENT AND
ENVIRONMENT FRIENDLY MANNER, DRIVEN
BY INNOVATION AND AGILITY”**

CORE VALUES

ICOMIT



Integrity
सत्यनिष्ठा



Customer Focus
ग्राहक को प्रधानता



Organisational Pride
संगठन पर गौरव



Mutual Respect & Trust
परस्पर आदर एवं विश्वास



Innovation & Learning
नवप्रवर्तन एवं ज्ञानार्जन



Total Quality & Safety
संपूर्ण गुणवत्ता एवं सुरक्षा

CORPORATE OBJECTIVES

■ BUSINESS PORTFOLIO GROWTH

- To sustain NTPC's position as the leading power generation company in the world.
- To broad base the generation mix with significant proportion of clean energy sources.
- To enable the generation fleet to operate at optimum efficiency while meeting the demand and stability in the grid.
- To diversify into emerging businesses and markets across the power value chain including coal mining, power trading, ancillary services, E-mobility, storage and related adjacencies.
- To establish a strong services brand in domestic and international markets.

■ CUSTOMER FOCUS

- To foster a collaborative style of working with customers, growing to be a preferred brand for supply of quality and reliable power.
- To expand the customer portfolio through profitable diversification into downstream business inter alia E-mobility and direct supply.
- To ensure rapid commercial decision making, using customer specific information, with adequate concern for the interest of the customer.
- To adapt business models and organisation structures to capture value which is progressively shifting towards the customers.

■ AGILE CORPORATION

- To ensure effectiveness in business decisions and responsiveness to changes in the business environment by:
 - o Adopting a portfolio approach to new business development.
 - o Continuous and co-ordinated assessment of the business environment to identify and respond to opportunities and threats.
- To create lean organization and business processes.
- To develop a learning organization having knowledge-based competitive edge in current and future businesses.
- To develop a culture of curiosity and innovation in learning and adopting new technologies, business models and operational philosophies in line with the evolving market and changing customer needs.

■ PERFORMANCE LEADERSHIP

- To continuously strive for innovation in reducing costs, enhancing operational flexibility and in addressing changing customer needs.
- To continuously improve on project execution time and cost in order to sustain long term competitiveness.
- To effectively leverage Information Technology to drive process efficiencies and enable system flexibility in line with the market needs.
- To create capabilities to attain leadership in the new and emerging businesses.
- To embed quality and safety in all systems and processes.
- Support evolution of power markets to meet customer needs through products, platforms, services etc. to

create a win-win opportunity across stakeholders.

- To lead development efforts in the Indian power sector through stakeholder consultation.
- To assist in capacity creation of key stakeholders.

■ HUMAN RESOURCE DEVELOPMENT

- To enhance organizational performance by institutionalizing an objective and open performance management system.
- To align individual and organizational needs and develop business leaders by implementing a career development system.
- To build a lean organization with diverse skills and high ability to adapt to change.
- To build and sustain a learning organization of competent world-class professionals.
- To institutionalize core values and create culture of team-building, ownership, empowerment, equity, innovation and openness which would motivate employees and enable achievement of strategic objectives.

■ FINANCIAL SOUNDNESS

- To maintain and improve the financial soundness of NTPC by prudent management of the financial resources.
- To continuously strive to reduce the cost of capital through prudent management of deployed funds, leveraging opportunities in domestic and international financial markets.
- To promote innovative funding models to support entry into new businesses and sustain long term growth.
- To develop appropriate commercial policies and processes which would ensure remunerative tariffs, balance capital work-in-progress and minimize receivables.

■ SUSTAINABILITY AND CORPORATE SOCIAL RESPONSIBILITY

- To deliver business and environmental value through projects which are beneficial for business and larger ecosystem.
- To ensure sustainable power development by ensuring minimal wastage across operations.
- To actively contribute towards societal development.
- To lead the sector in the areas of resettlement and rehabilitation and environment protection including effective ash-utilization, peripheral development and energy conservation practices.

■ RESEARCH & DEVELOPMENT

- To undertake R&D initiatives in sync with the overall business portfolio.
- To pioneer the adoption of reliable, efficient and cost-effective technologies by carrying out fundamental and applied research in alternate fuels and technologies.
- To collaborate with leading institutes, technology players and service providers, particularly in the area of power plant construction, generation technology, operations, renewable energy sources, storage, e-mobility, etc. that can contribute towards efficiency, reliability and environment friendliness.



REFERENCE INFORMATION

Registered Office

NTPC Bhawan, SCOPE Complex,
7, Institutional Area, Lodhi Road,
New Delhi-110 003
Phone No.: 011-2436 0100
Fax No. : 011-2436 1018
Email: ntpccc@ntpc.co.in
Web site: www.ntpc.co.in
CIN: L40101DL1975GOI007966

Registrar & Share Transfer Agent for Equity Shares

M/s Alankit Assignments Limited,
Alankit Heights, 1E/13, Jhandewalan Extension,
New Delhi-110055
Contact Person: Shri Mahesh Pandey,
Shri Surinder Sharma
Tel No.: 011-42541234
Fax No.: 011-41543474
Email: alankit_ntpc@alankit.com

Depositories

National Securities Depository Limited
Central Depository Services (India) Limited

Shares listed at

National Stock Exchange of India Limited
BSE Limited

Subsidiaries

NTPC Electric Supply Company Ltd.
NTPC Vidyut Vyapar Nigam Ltd.
Kanti Bijlee Utpadan Nigam Ltd.*
Bhartiya Rail Bijlee Company Ltd.
Patratu Vidyut Utpadan Nigam Ltd.
Nabinagar Power Generating Company Pvt. Ltd.*

*Became wholly owned Subsidiary Companies of NTPC Ltd. w.e.f. 29.6.2018

ED (LAW) & Company Secretary

K. P. Gupta (Upto 31.7.2018)

Company Secretary

Ms. Nandini Sarkar (w.e.f. 1.8.2018)

Auditors

1. M/s T R Chadha & Co LLP
2. M/s PSD & Associates
3. M/s Sagar & Associates
4. M/s Kalani & Co.
5. M/s P. A. & Associates
6. M/s S. K. Kapoor & Co.
7. M/s B M Chatrath & Co LLP

Bankers





SUPPORT 'GREEN INITIATIVE'

GREEN INITIATIVE IN THE CORPORATE GOVERNANCE

The Ministry of Corporate Affairs has taken a "Green Initiative in the Corporate Governance" by allowing paperless compliances by the companies and has issued circulars stating that service of notice/ documents including Annual Reports can be sent by e-mail to its members. To support this green initiative of the Government in full measure, members who have not registered their e-mail addresses, so far, are requested to register their e-mail address, in respect of electronic holdings with the Depository through their concerned Depository Participants. Members who hold shares in physical form are requested to get their e-mail address registered with Alankit Assignments Limited, RTA of the Company.

CONTENTS

• Letter to Shareholders	07
• Key Highlights	09
• Notice of AGM	14
• Station-wise Generation	31
• Selected Financial Information	33
• Directors' Profile	34
• Senior Management Team	42
• Directors' Report	43
• Management Discussion and Analysis	75
• Report on Corporate Governance	103
• Corporate Social Responsibility Report	153
• Business Responsibility Report	158
• Standalone Financial Statements (SFS)	173
• Independent Auditors' Report on Standalone Financial Statements	289
• Comments of the Comptroller and Auditor General of India on SFS	298
• Employee Cost Summary	299
• Revenue Expenditure on Social Overheads	300
• Consolidated Financial Statements (CFS)	301
• Independent Auditors' Report on Consolidated Financial Statements.....	435
• Comments of the Comptroller and Auditor General of India on CFS	441

Annual General Meeting

Date	:	20 th September, 2018
Time	:	10:30 A.M.
Venue	:	Manekshaw Center, Parade Road, New Delhi – 110 010



A View of NTPC - Dadri

THE YEAR AT A GLANCE

Gross Generation
Commercial Generation
Energy sent out
Sale of Energy (including Electricity duty) *
Profit before tax
Profit for the year
Dividend
Dividend tax
Retained Profit
Total Fixed Assets
Net Worth
Borrowings
Capital Employed
Net Cash From Operations
Value Added
No. of Employees
Value added per employee
Debt to Equity
Debt Service Coverage Ratio (DSCR)
Interest Service Coverage Ratio (ISCR)
Return on Capital Employed
Face Value Per share
Dividend Per Share
Book Value Per Share
Earnings Per Share

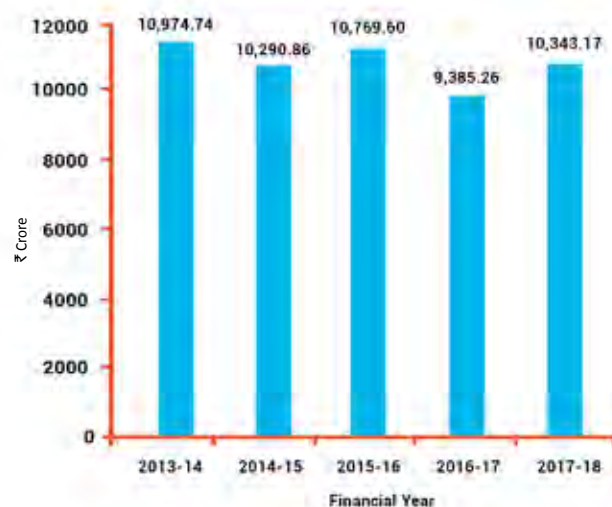
* Including Sale of Energy through trading

	2017-18	2016-17
Million Units	265798	250314
Million Units	265003	250086
Million Units	247905	233617
₹ Crore	81113	77071
₹ Crore	12339	12052
₹ Crore	10343	9385
₹ Crore	4040	3595
₹ Crore	816	728
₹ Crore	5486	5062
₹ Crore	198835	180093
₹ Crore	101778	96231
₹ Crore	115104	103840
₹ Crore	119711	100757
₹ Crore	19248	20014
₹ Crore	31164	29159
Number	19739	20593
₹ Crore	1.58	1.42
Ratio	1.13	1.08
Times	2.14	1.52
Times	5.93	6.40
%	11.52	13.39
₹	10.00	10.00
₹	4.90	4.36
₹	123.43	116.71
₹	12.54	11.38

Commercial Capacity & Energy Sent Out



Profit for the Year





Letter to Shareholders

Dear Shareowners,

Your Company had another year of strong performance. Total generation grew over 6% in FY18 (NTPC Group Generation - 294BU; NTPC Standalone - 265 BU), and it has further grown at nearly 7.5% in Q1 FY19. These numbers indicate substantial growth in energy demand of the country. With the implementation of Govt.'s SAUBHAGYA and DDUGJY Schemes, growth in power demand is expected to keep ticking. As demand will keep growing, your Company is poised to clock significant growth in next few years as well. The growth numbers in both cases were much higher than national average.

Your Company's PLF has consistently maintained a positive difference of over 15% as compared to the National PLF. Company's coal stations achieved a PLF of 77.9% during the year 2017-18 as against National PLF of 60.7%. Six stations of NTPC figured in top ten stations list of the country in terms of PLF.

Your Company added 4,423 MW to its commercial capacity during FY'18. This is the second highest ever commercial capacity added in any year. With this, the commercial capacity of NTPC Group is now 51,391 MW. This includes 870 MW Solar, 50 MW Wind and 8 MW small hydro. With 20 GW capacities under construction, the target for this year is for adding 5GW of commercial capacity. Pursuing inorganic growth path – your Company acquired JV partner's equity in two power plants in Bihar. The combined capacity of these plants is 2,590 MW.

Substantial progress was made on the coal-mining front to ensure fuel security. 2.68 MMT of coal was extracted from Pakri Barwadih mine during FY18. Mining operations have started at second mine.

Your Company's profit rose by 10.2% in FY18 as compared to previous year and revenue from operations increased by 6.6%. NTPC management is committed to maximizing your wealth. The Company has already paid an interim dividend of ₹ 2.73 per share and has recommended a final dividend of ₹ 2.39 per share for FY'18, subject to your approval. The increase in dividend is 7.1% over last year.

Your Company has robust finance management system in place, which resulted in reducing the weighted average cost of borrowings to less than 7% in FY18. The Company has achieved 100% realization of current bills for the fifteenth year in a row.

Your Company has been working tirelessly for maximizing its profitability. Various steps have been taken for eliminating under recovery by ensuring fuel availability and controlling equipment forced outage. To ensure high coal availability, action has been taken for importing coal. Agreement has been signed with Railways for prioritizing dispatch to the plants and the results are very encouraging.

With robust all round performance, your Company is expected to retain the "Excellent" rating for the MoU signed with Government of India again.

Even as financial and physical numbers are important, your Company has taken significant steps towards Environmental Protection, Water Conservation, better Project Management and laid foundation for future growth.

Your Company has become the first PSU to have a Biodiversity Policy. Your Company shall be developing an Eco park at the ash pond of Badarpur power plant (after the plant is shut down) which would be bigger than New York city Central park and shall act as "Green Lungs" for National Capital Region of Delhi.

Substantial investment is being made towards environmental norms compliance. First Flue-gas desulphurisation system became operational at Vindhyachal. Work is in progress at 7.23 GW capacity. Fresh tenders are finalized for 9.94 GW and award for all coal based capacity shall be completed in about 12 months so that all units are compliant with the norms as per deadlines given by Government agencies. Action has also been taken for De-NOx and particulate emission control too. Your Company has placed an order for procurement of crop residue based pellets for co-firing at Dadri plant. This would help in avoiding crop residue burning which led to haze that enveloped northern part of India during winter months.

As a responsible Corporate, your Company has taken various steps for reducing water consumption. Specific water consumption has been reduced by 3.3%. The Company is implementing Zero Liquid Discharged and higher CoC across all plants. Besides these, Air Cooled Condenser is being implemented at two of the new projects, which has potential for saving water consumption upto 75%.

Your Company is committed for increasing the share of renewables in its portfolio. Govt. of India recently issued a policy on "Flexibility in generation and scheduling of thermal power stations to reduce emissions". This policy is likely to help renewable capacity addition and will also help in balancing of the grid. As per this policy, generating companies would be allowed to replace their scheduled thermal power by renewable power and there would be no need to sign PPA with beneficiaries. To leverage this opportunity, tenders have been floated for procuring 2 GW Solar and 1.2 GW Wind capacity.

Your Company is actively looking at other business opportunities including overseas operations. Construction activities of (2X660) MW Coal based project at Bangladesh are under progress. Further, the Company is keenly looking at Middle East and African continent. Discussions are underway for setting up electric charging infrastructure and providing complete e-mobility solutions.

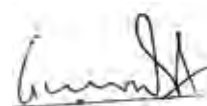
Your Company is putting major thrust on employee capability improvement. Leadership program for senior management team has been conducted at Harvard and Wharton. NTPC's Power Management Institute was facilitated by the most coveted ATD award. Further, your Company is Ranked 25th in Best Companies to Work for-2018, first among PSUs.

Your Company is committed to Corporate Social Responsibility. Girl Empowerment Mission has been launched to give inputs on academics, health, hygiene, self-defence, yoga and personality development for 400 girls from villages around Vindhyachal, Singrauli and Rihand power plants.

I take this opportunity to put on record Your Company's deepest condolences on the loss of lives during the tragic incident at Unchahar Power Station. Your Company provided all support and financial assistance to the families of deceased. Further, your Company has reviewed all operational and safety systems and engaged the services of a leading global consultant on safety to improve various aspects.

On behalf of Team NTPC, I assure you that your Company will continue to put best efforts and committed to fulfill the vision "To be World's leading Power Company, energizing India's growth" and thereby ensuring sustained returns to its stakeholders.

With best wishes,
Yours sincerely,



(Gurdeep Singh)
Chairman & Managing Director