



A Maharatna Company



43rd ANNUAL REPORT 2018-19

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
I R fu"Bk



Customer Focus
xgd dksi zkuk



Organisational Pride
I æBu ij xkSo



Mutual Respect and Trust
i jLi j fo'ok , oavknj



Innovation and Learning
uoi ær Z , oakkukt Z



Total Quality and Safety
I ævZxqokk , oal jkK

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

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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-110 055
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 Ltd.
(previously Nabinagar Power Generating Company
Private Ltd.)

Company Secretary

Ms. Nandini Sarkar

Auditors

1. M/s T R Chadha & Co LLP
2. M/s S N Dhawan & Co LLP
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 send 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.

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Annual General Meeting

Date	:	21 st August, 2019
Time	:	10:30 A.M.
Venue	:	Manekshaw Center, Parade Road, New Delhi – 110 010



A View of NTPC - Sipat

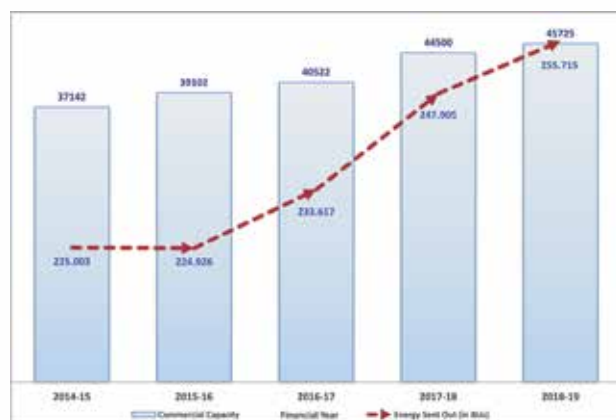
THE YEAR AT A GLANCE

Particulars		2018-19	2017-18
Gross Generation	Million Units	274454	265798
Commercial Generation	"	273540	265003
Energy sent out	"	255715	247905
Sale of Energy (including Electricity duty)*	Rs. Crore	89316	81113
Profit before tax	"	12673	12339
Profit for the year	"	11750	10343
Dividend	"	4923	4040
Dividend tax	"	1000	816
Retained Profit	"	5827	5486
Total Fixed Assets	"	216827	198835
Net Worth	"	107408	101778
Borrowings	"	127430	115104
Capital Employed	"	131354	119711
Net Cash From Operations	"	16030	19248
Value Added	"	33571	31164
No. of Employees	Number	18359	19739
Value added per employee	Rs. Crore	1.83	1.58
Debt to Equity	Ratio	1.19	1.14
Debt Service Coverage Ratio (DSCR)	Times	2.21	2.14
Interest Service Coverage Ratio (ISCR)	Times	5.26	5.93
Return on Capital Employed	%	12.51	11.52
Face Value Per share	Rs.	10.00	10.00
Dividend Per Share**	"	5.97	4.90
Book Value Per Share	"	108.55	102.86
Earnings Per Share	"	11.88	10.45

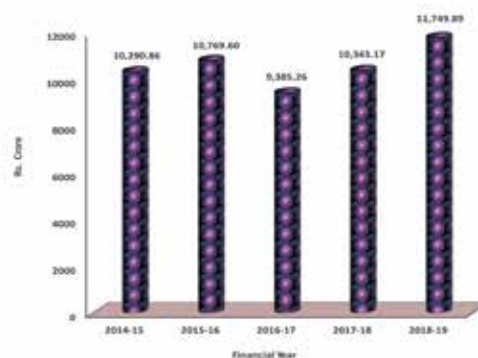
* Including Sale of Energy through trading.

** Bonus Shares issued in March 2019 in the proportion of 1 equity share for every 5 existing equity shares

Commercial Capacity & Energy Sent Out



Profit for the Year





Letter to Shareholders

Dear Shareowners and Partners,

As I reflect on the progress of past year, first, I would like to say thanks to each one of you for your continued support and investment in NTPC. I am proud of what we have accomplished together this past year, and I am even more optimistic about the opportunities ahead.

Your Company had shown all round performance and strengthened its fundamentals further. The company's total generation grew at ~4% in FY19 (Group Generation-306 BUs; Standalone - 274 BUs) and the Coal generation growth is higher than national average. Further, the country's electricity demand is growing at a very fast rate; it has grown at nearly 8% in Q1 FY20 and the peak demand has crossed 182 GW. With every Indian now having access to electricity, the power sector is poised for long term growth. With Govt.'s initiative "24X7-Power for all" the growth is expected to reach new heights. As the demand grows, there is a sizeable growth ahead for the company.

In FY19, your Company recorded a profit of over ₹ 12,600 Crore which is a growth of 20.3% as compared to previous year, revenue almost touched ₹ 1,00,000 Crore and the company declared dividend of over ₹ 5,400 Crore to shareholders. This is the 26th consecutive year that company has paid dividend and the increase in dividend is 28.5% over last year. Your Company has also issued bonus shares for the 1st time.

Another important event has been the issuance of Tariff Regulations 2019, effective from 1st April 2019 for a five-year period by Hon'ble Central Electricity Regulatory Commission (CERC). The Govt. has also launched a scheme; Security Constrained Economic Dispatch (SCED) on pilot basis with the objective of reducing cost of power. These are forward looking regulations and capture the need of the sector through various provisions. These regulations coupled with the pilot rollout of SCED scheme will lead to more efficiency and optimal use of resources.

In FY19, 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 76.81% during the year 2018-19 as against National PLF of 61.07%. Five stations of NTPC figured in top ten stations list of the country in terms of PLF.

Your Company added 2180 MW to its commercial capacity during FY19. It has further added 1460 MW in FY20 till Q1. With this, the commercial capacity of NTPC Group is now 54,326 MW. This includes 928 MW of renewables. With 19 GW capacities under construction, the target for this year is for adding around 3.5GW of Commercial capacity for the balance period. Pursuing inorganic growth path – your Company acquired Barauni Thermal Power Station in Bihar [Stage# I: 220 MW and Stage#II: 500 MW (Under Construction)]. Further, Badarpur plant (705 MW) in NCT of Delhi has been permanently shut down with effect from October 15, 2018. Even though the plant was meeting environmental norms, Delhi's poor air quality index has led to this decision.

Your Company is going aggressively in the renewable space. The company has won 545 MW of capacity through participation in Tariff Based Competitive Bidding conducted by States and SECI which proves the competitive edge. Setting up 100 MW of floating solar in the State of Telangana and for 92 MW of floating solar in Kerala, discussions are in advanced stage for signing of PPA. Further, PPAs have been signed for 2000 MW solar and 1150 MW wind in developer mode. Your Company is looking at the possibility of setting up renewable projects as merchant plants in future. Further, the policy issued by Govt. of India - "Flexibility in generation and scheduling of thermal power stations to reduce emissions" is being actively pursued for implementation.

Your Company has been ranked No#1 "Independent Power Producer and Energy Trader" in the Platts Top 250 Global Energy rankings 2018. Improving its position, your Company has been ranked 492 in Forbes Global 2000 – The world's largest public companies list.

Your Company is working with the objective of "Low Cost, Low Emission and Highest Safety". Even though the cost of coal has increased over years, average Power Charges were maintained at nearly the same level. Various optimization and technological measures are being taken for resource utilization and keeping expenses under control.

Your Company has made substantial progress in coal-mining. Pakri-Barwadih mine was declared commercial w.e.f 1st April 2019. It has surpassed the mine plan production target and extracted 6.81 MMT of coal during FY19. Further 0.5 MMT was extracted from Dulanga. Your Company is working relentlessly to enhance production from all the captive mines to ensure fuel security and adopting best mining technologies. I am very proud to mention that Director General Mine Safety (DGMS), a Statutory Authority of Govt. of India, has selected Pakri-Barwadih as a model mine, the one out of two in the entire country.

Robust financial management system put in place by your Company has resulted in reducing the weighted average cost of borrowings to less than 7% in FY19. The Company has achieved 100% realization of current bills for the sixteenth year in a row. This has been possible only with effective stake holder management.



Tireless efforts are underway for maximizing profitability. Steps have been taken for eliminating under recovery by ensuring fuel availability and controlling equipment forced outage. The availability of coal Stations has increased significantly in Q1 FY20. With robust all round performance, your Company is expected to retain the "Excellent" rating for the MoU signed with Government of India again.

Reduction of water consumption, increasing ash utilization and environmental protection are the top most priorities of your Company.

Rain Water Harvesting policy has been put in place. Significant steps are being taken for reducing water consumption. Specific water consumption has been reduced by 1.3% (3.02 l/kWh) when compared to FY18. Implementation of Zero Liquid Discharge (ZLD) scheme has been completed at ten Stations. Implementation of higher CoC across all Stations is being done to reduce fresh water intake. Besides these, Air Cooled Condenser is being implemented at new projects.

To address the issue of ash utilization, your Company had conducted 'Grand Ash Challenge' to invite innovative ideas on pan India basis for 'Productive ash utilization'. Five best ideas were selected for implementation. This initiative will not only benefit the company but the country at large. Your Company has also tied up with Indian Railways for setting up of fly ash depots.

To meet the Flexibilization requirement with increased penetration of renewables in to the grid, pilot testing has been started at one of the Stations and a road map has been prepared for retrofitting of the Units for enhancing Flexibilization characteristics.

To maximize the geo-strategic reach, your Company is actively looking at business opportunities overseas. First international office has been opened at Myanmar. Construction activities of a Coal based project at Bangladesh are under progress. Further, the company is actively looking at Middle East and African continent for business opportunities. Setting up of electric charging infrastructure has been started in NCR and will be operationalized soon. The company is actively pursuing with various States for providing complete e-mobility solutions.

Your company's Sustainability Report for FY18 has been assured by Deloitte with Type-II, High Level category. This is the highest level of assurance in accordance with Global Reporting Initiative (GRI), conforming to AA1000AS (2008) Standard. NTPC is one of the three organizations and first PSU in India to have such highest level of assurance. Your Company had won the most coveted Frost & Sullivan and TERI Sustainability 4.0 Award 2019 for best sustainability practices.

Improving its position significantly, your Company is Ranked 14th in Best Companies to Work for-2019, first among PSUs. Your company is putting continued thrust on employee capability improvement. To bridge the skill gap, leadership programmes for senior management has been conducted at Harvard and Wharton. To inculcate leadership skills and business acumen in middle level management - Young leaders programme has been started. NTPC was facilitated by the most coveted ATD BEST award in training domain, consecutively three times in a row from ATD, USA.

Corporate Social Responsibility has been the prime focus of your Company. With the success of Girl Empowerment Mission (GEM) launched in FY18, the programmes has been started at 23 locations in FY19, covering 1900 school girls and inputs are given on academics, health, hygiene, self-defense, yoga and personality development.

To address the problem of municipal waste, a 24 TPD pilot scale Waste to Energy (WtE) Plant has been commissioned at Varanasi. This is the 1st Waste to Energy Plant owned by NTPC. Many such proposals are on the cards along with large scale Waste to Energy plants.

On behalf of NTPC family, I assure you that your Company will continue to put tireless efforts and commitment to fulfill your expectations. With the unmatched knowledge pool and skill of Team NTPC, I once again assure you that each employee of the company will work as a "Power Soldier" for improving the performance in the years to come.

With best wishes,

Yours sincerely,



(Gurdeep Singh)
Chairman & Managing Director

