स्वच्छ भारत
एक कदम स्वच्छता की ओर

Digital India
Power To Empower

50+ GW Company

एनटीपीसी
NTPC
A Maharatna Company

41st Annual Report 2016-17











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

- **I** - INTEGRITY
- **C** - CUSTOMER FOCUS
- **O** - ORGANIZATIONAL PRIDE
- **M** - MUTUAL RESPECT & TRUST
- **I** - INNOVATION AND LEARNING
- **T** - TOTAL QUALITY AND SAFETY



CORPORATE OBJECTIVES

To realise the vision and mission, eight key corporate objectives have been identified. These objectives would provide the link between the defined mission and the functional strategies:

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:
  - Adopting a portfolio approach to new business development.
  - 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 and 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. . 011-24361018
Email: ntpccc@ntpc.co.in
Web site: www.ntpc.co.in
CIN: L40101DL1975GOI007966

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.

Registrar & Share Transfer Agent

Karvy Computershare Pvt. Ltd.
Karvy Selenium Tower-B,
Plot No. 31 & 32,
Gachibowli Financial District,
Nanakramguda, Serilingampally,
Hyderabad – 500 008
Phone No.: 040-67161518
Email: einward.ris@karvy.com

Shares listed at

National Stock Exchange of India Limited
BSE Limited

Depositories

National Securities Depository Limited
Central Depository Services (India) Limited

ED (Law) & Company Secretary

K. P. Gupta

Bankers

Allahabad Bank
Axis Bank
Bank of Baroda
Bank of India
Canara Bank
Central Bank of India
Corporation Bank
HDFC Bank
ICICI Bank
IDBI Bank Ltd.
IDFC Bank
Indian Bank
Indian Overseas Bank
IndusInd Bank
Jammu & Kashmir Bank Ltd.
Karnataka Bank Ltd.
Oriental Bank of Commerce
Punjab & Sind Bank
Punjab National Bank
State Bank of India
Syndicate Bank
UCO Bank
Union Bank of India
United Bank of India
Vijaya Bank
Yes Bank

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

CONTENTS

- Letter to Shareholders 07
- Notice of AGM 09
- Station-wise Generation 19
- Selected Financial Information 21
- Directors' Profile 22
- Senior Management Team 27
- Directors' Report 28
- Management Discussion and Analysis 59
- Report on Corporate Governance 85
- Corporate Social Responsibility Report 131
- Business Responsibility Report 136
- Standalone Financial Statements (SFS) 154
- Independent Auditors' Report on Standalone Financial Statements 281
- Comments of the Comptroller and Auditor General of India on SFS 291
- Employee Cost Summary 292
- Revenue Expenditure on Social Overheads 293
- Consolidated Financial Statements (CFS) 294
- Independent Auditors' Report on Consolidated Financial Statements 427
- Comments of the Comptroller and Auditor General of India on CFS 433

GREEN INITIATIVE IN THE CORPORATE GOVERNANCE

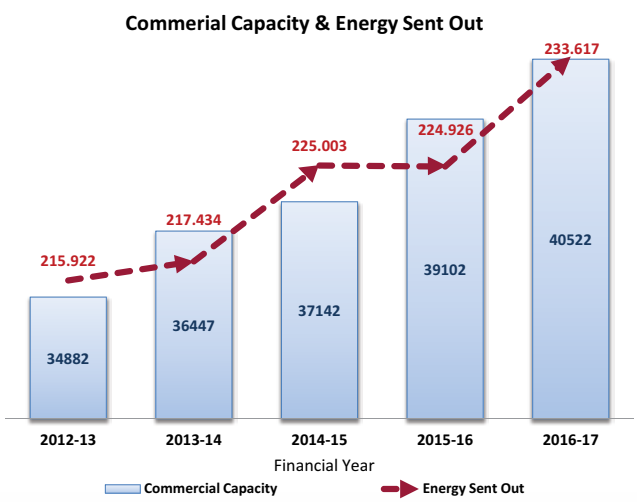
The Ministry of Corporate Affairs has taken a "Green Initiative in the Corporate Governance" by allowing paperless compliances by the companies and has issued circulars stating that service of notice/ documents including Annual Reports can be sent by e-mail to its members. To support this green initiative 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 Karvy Computershare Private Limited, RTA of the Company.

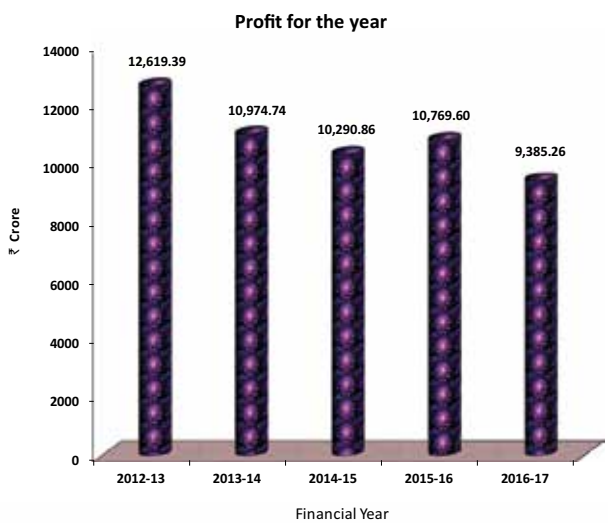


A VIEW OF NTPC JHANOR GANDHAR PROJECT SITUATED IN GUJARAT

THE YEAR AT A GLANCE

		2016-17	2015-16
Gross Generation	Million Units	250314	241975
Commercial Generation	"	250086	240778
Energy sent out	"	233617	224926
Sale of Energy (including Electricity duty)	₹ Crore	77071	69962
Profit before tax	"	12388	10596
Profit for the year	"	9385	10770
Dividend	"	3595	2762
Dividend tax	"	728	562
Retained Profit	"	5062	7446
Total Fixed Assets	"	180093	158196
Net Worth	"	96231	91294
Borrowings	"	103840	91828
Capital Employed	"	100757	94931
Net Cash From Operations	"	20301	23987
Value Added	"	29159	27440
No. of Employees	Number	20593	21633
Value added per employee	₹ Crore	1.42	1.27
Debt to Equity	Ratio	1.08	1.01
Debt Service Coverage Ratio (DSCR)	Times	1.55	1.74
Interest Service Coverage Ratio (ISCR)	Times	6.50	5.94
Return on Capital Employed	%	13.39	14.56
Face Value Per share	₹	10.00	10.00
Dividend Per Share	"	4.36	3.35
Book Value Per Share	"	116.71	110.72
Earnings Per Share	"	11.38	13.06







Letter to Shareholders

Dear Shareowners,

You will be delighted to note that FY 16-17 turned out to be a pivotal year for your Company NTPC, as it crossed the 50,000MW+ mark in Installed Capacity. With its strong overall performance, your Company is expected to retain the "Excellent" rating for the MoU signed with Government of India.

Your Company commissioned 3845 MW and added 2190 MW to its commercial capacity during FY16-17. The installed capacity of NTPC Group is 51,671 MW as on 31.07.2017.

Your Company has over 28,000 MW capacities under construction and is committed to deliver these projects in time. Your Company is growing at a brisk pace, indicated by the all-time high capex of ₹ 28,252 crore (standalone basis).

The coal based stations of your Company achieved a plant load factor (PLF) of 78.59% against the all-India thermal PLF of 59.88%. Three stations - Talcher Thermal, Sipat and Korba were ranked as the Top 3 stations in the country, and 6 stations clocked a PLF of over 85% during this period. Very significantly, your Company added Wind to its power generation portfolio and has commissioned 18 MW as on 31.07.2017.

FY16-17 saw the flag off of your Company's first coal rake, from its mining operations at Pakri Barwadih. This coal is being used at Barh Thermal Station of NTPC, in Bihar. This is an important step in the direction of secured fuel supplies for your Company. The medium term target for mining will be able to cater to more than 10% of its present coal requirements.

Your Company realized huge cost efficiencies during the year by swapping and rationalization of coal, appointing agency for third party coal sampleing, and reducing imported coal consumption by 85% of previous year. By these measures, your Company was able to reduce per unit cost by nerarly 40 paise in FY16-17 as commpared to FY14-15. This transalates into savings of more than ₹ 8000 crore to the state over to years. Government of India has recently approved "SHAKTI" policy which will further increase transparency in coal allocation, and improve cost efficiencies.

Your Company was the first Company to offer Green Masala Bonds, raising ₹ 2000 crore through Rupee-denominated bonds from international markets. The cost of debt has also been substantially brought down this year, primarily by domestic loan restructuring. Robust cash flows will be assured by extending TPAs with 27 States & UTs. FY16-17 saw 100% realization of current bills for the fourteenth year in a row.

Power generation of your Company (Group) increased by 5.07%, contributing around 24% to the country's generation. Although profit before tax of NTPC increased by as high as 16.91%, Profit After Tax looks subdued, primarily due to substantial offset of income tax by way of refunds received in previous fiscal and impairment loss on investment in RGPPL.

Your Company's management has always believed in maximizing shareholders' wealth. The Company has already paid an interim dividend of ₹ 2.61 per share and has recommended a final dividend of ₹ 2.17 per share for FY16-17, subject to your approval. This is a whopping 143% of that paid out last year. The holding of the Government in your Company stands at 69.74%.

Moving beyond its conventional power generation business, your Company is now looking at diversification in allied sectors, such as setting up electric vehicle charging infrastructure, ancillary services and energy storage.

Your Company is investing substantially in order to comply with the environmental norms, and is geared to become fully compliant with new environmental norms. This means we will be able to provide not only affordable and reliable power, but cleaner power too. Apart from this, NTPC is taking several initiatives to contain pollution in various forms. Two such projects, your Company is experimenting with are Waste-to-Energy and Biomass Co-firing. Your Company is also proud to share that it planted one crore trees in a short duration of 3 months during FY16-17 for carbon sequestration.

Your Company is placing enormous focus on water, a life-giving but stressed resource. Apart from launching an internal Water Policy to become a conscious steward, your company has adopted technologies like Air-Cooled-Condenser instead of Water-Cooled-Condenser in two of its upcoming projects, making all its projects Zero Liquid Discharge, and is tying up with Municipal Corporations to use treated sewage water.

Your Company commissioned a solid waste management plant at Karsara in Varanasi. Varanasi now ranks 32nd in Swachh Survekshan Survey by GoI - a jump of 33 positions over previous year. Other initiatives include opening of generic medicine stores at 12 locations to make affordable medicines available to all, and promoting cashless economy, by making townships digital-payment enabled.

I assure you that Team NTPC shall continue to put its best efforts in sustaining the leadership position of your Company and thereby ensure sustained returns to its stakeholders.

With best wishes
Yours sincerely



(Gurdeep Singh)
Chairman & Managing Director