









41st Annual Report 2016-17



Annual General Meeting at 11:00 a.m. on Wednesday, 27th September, 2017 at Jal Tarang Auditorium, NHPC Office Complex, Sector 33, Faridabad, Haryana

CORPORATE VISION

To be a global leading organization for sustainable development of clean power through competent, responsible and innovative values.

CORPORATE MISSION

- To achieve excellence in development of clean power at international standards.
- To execute & operate projects through efficient and competent contract management and innovative R&D in environment friendly and socio-economically responsive manner.
- To develop, nurture and empower the human capital to leverage its full potential.
- To practice the best corporate governance and competent value based management for a strong corporate identity and showing concern for employees, customer, environment and society.
- ◆ To adopt & innovate state-of-the-art technologies and optimize use of natural resources through effective management.



Shri Ratish Kumar, Director (Projects) (3rd from left), Shri Balraj Joshi, Director (Technical) (4th from left) and Shri Mahesh Kumar Mittal, Director (Finance) (2nd from left) with other senior officers of NHPC during the Analyst Meet at Mumbai on 02.06.2017

Annual Report 2016-17

NHPC	
Digest of Important Financial Data (Five Years)	2
Reference Information	3
Letter to Shareholders	5
NHPC's Performance	7
Directors' Profile	8
Directors' Report	12
Report on Corporate Governance	26
Compliance Certificate on Corporate Governance	49
Management Discussion and Analysis Report	50
Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and Outgo.	65
Business Responsibility Report	67
Annual Report on CSR Activities	75
Extract of Annual Return	81
Dividend Distribution Policy	92
Secretarial Audit Report	95
Statutory Auditor's Report	97
Financial Statements	104
CONSOLIDATED	
Statutory Auditor's Report	220
Financial Statements	224
Comments of Comptroller and Auditor General of India and Management Reply thereon	347
E-Communication Registration Form	



DIGEST OF IMPORTANT FINANCIAL DATA (STANDALONE ACCOUNTS)

						(₹ in crore)
	FINANCIAL	2016-17	2015-16	2014-15	2013-14	2012-13
Α	SALE OF ENERGY	7,139.46	7,265.71	6,736.64	5,335.11	5,049.13
В	OTHER OPERATING INCOME & REVENUE FROM	131.71	87.29	65.61	201.93	257.51
	CONTRACTS, PROJECT MANAGEMENT AND					
	CONSULTANCY WORKS					
C	OTHER INCOME (INCLUDES EXCEPTIONAL ITEM)	1,458.67	992.07	861.33	1,456.95	1,232.79
D	TOTAL INCOME (A)+(B)+(C)	8,729.84	8,345.07	7,663.58	6,993.99	6,539.43
Е	GENERATION & OTHER EXPENSES	1,932.69	2,125.94	1,604.49	2,119.10	1,095.22
F	EMPLOYEE BENEFITS EXPENSES	1,574.92	1,158.36	1,149.23	1,058.67	887.41
G	DEPRECIATION & AMORTIZATION EXPENSES	1,388.40	1,359.07	1,425.87		969.29
Н	FINANCE COST	1,073.22	1,072.10	1,179.77		
ı	PROFIT BEFORE TAX AND RATE REGULATED INCOME	2,760.61	2,629.60	2,304.22	1,583.06	3,202.13
J	RATE REGULATED INCOME / EXPENDITURE	713.99	550.90	521.95	-	-
K	PROFIT BEFORE TAX (I) + (J)	3,474.60	3,180.50	2,826.17	1,583.06	•
L	INCOME TAX EXPENSES	679.01	750.61	701.70	604.27	853.91
M	PROFIT AFTER TAX (K) - (L)	2,795.59	2,429.89	2,124.47		2,348.22
N	OTHER COMPREHENSIVE INCOME	7.67	3.24	-	-	-
0	TOTAL COMPREHENSIVE INCOME (M) + (N)	2,803.26	2,433.13		978.79	2,348.22
P	AUTHORISED SHARE CAPITAL	15,000.00			15,000.00	15,000.00
Q	PAID UP EQUITY SHARE CAPITAL	10,259.32			11,070.67	12,300.74
R	RESERVE AND SURPLUS/ OTHER EQUITY	16,682.81			14,996.98	
S T	LONG TERM/NON CURRENT BORROWINGS	17,245.64			18,580.52	
U	OTHER LONG TERM LIABILITY & LONG TERM PROVISONS	1,985.03 938.49	1,829.95	2,224.12	2,420.51 766.67	2,427.61 460.69
V	DEFERRED TAX LIABILITIES	20,977.21	861.93	810.44	24,079.54	
W	NET TANGIBLE & INTANGIBLE FIXED ASSETS CAPITAL WORK-IN-PROGRESS	17,350.13			14,657.13	
X	INVESTMENTS (NON CURRENT)	2,100.32	1,683.01	1,977.75	2,227.02	2,400.61
Y	OTHER LONG TERM LOANS & ADVANCES AND OTHER	3,424.21	3,645.30	1,977.73	1,986.06	2,400.01
'	NON-CURRENT ASSET	3,424.21	3,043.30	1,976.10	1,980.00	2,105.11
Z	REGULATORY DEFERRAL ACCOUNT DEBIT BALANCES	2,904.32	2,181.28	1,630.39	_	_
AA	WORKING CAPITAL	355.10	5,241.91	5,155.86	4,885.60	5,813.60
AB	GROSS CAPITAL EMPLOYED $(V)+(W)+(X)+(Y)+(Z)+(AA)$		50,634.11			
AC	NET WORTH (Q)+(R)		29,761.15			
AD	DIVIDEND PAID (INCLUDING INTERIM DIVIDEND)	2,524.13	1,461.33	553.55	738.04	861.05
	RATIOS	2016-17	2015-16	2014-15	2013-14	2012-13
	RETURN ON CAPITAL EMPLOYED $[(H) + (K)]/(AB)$	9.65%	8.40%	8.09%	5.45%	7.45%
	RETURN ON NET WORTH (M) / (AC)	10.38%	8.16%	7.51%	3.75%	8.43%
	NET PROFIT TO SALE OF ENERGY (M) / (A)	39.16%	33.44%	31.54%	18.35%	46.51%
	BOOK VALUE PER SHARE	26.26	26.88	25.55	23.55	22.63
	EARNING PER SHARE	2.53	2.19	1.92	0.82	1.91
	DIVIDEND PER SHARE (INTERIM+PROPOSED FOR THE YEAR)	1.80	1.50	0.60	0.30	0.60
	DEBT EQUITY RATIO	0.70	0.67	0.64	0.71	0.67
	CURRENT RATIO	1.07	2.10	2.08	1.80	1.91
	OPERATING PERFORMANCE	2016-17	2015-16	2014-15	2013-14	2012-13
	GENERATION (MUs)	23,275	23,683	22,038	18,386	18,923
	CAPACITY (IN MW)	5,171.20	5,041.20	4,961.20	4,831.20	4,186.20
	PLANT AVAILABILITY FACTOR (%)	83.41	81.60	77.30	77.70	85.30
	MAN POWER (Nos.)	8,009	8654	9211	9838	10410

Note:-1 Figures upto Financial Year 2014-15 are IGAAP compliant and figures from Financial Year 2015-16 are IND AS compliant.

Note:-2 Dividend at S.No-"AD" is actual dividend paid during the year.

REFERENCE INFORMATION

Registered & Corporate Office

NHPC Office Complex, Sector-33, Faridabad, Haryana-121 003

Ph.: +91 129 2588500, +91 129 2588110

Fax: +91 129 2277941 Website: www.nhpcindia.com CIN: L40101HR1975GOI032564

Company Secretary

Shri Vijay Gupta

Statutory Auditors

M/s S.N. Dhawan & Co. (Now known as M/s S.N. Dhawan & Co., LLP)

Chartered Accountants, 410, Ansal Bhawan, 16, Kasturba Gandhi Marg, New Delhi-110001

M/s Gupta Gupta & Associates

Chartered Accountants, 142/3, Trikuta Nagar, Jammu - 180012 Jammu & Kashmir

M/s Ray & Ray

Chartered Accountants, Webel Bhawan, Ground Floor, Block EP & GP, Salt Lake, Sector-V, Kolkata-700091

Cost Auditors

M/s H. Tara & Co.

A-1-B/49-B, Paschim Vihar, New Delhi-110063

M/s V. P. Gupta & Co.

B-25, Sector-23, Noida -201301, Uttar Pradesh

M/s SKR & Associates

D-9/177, Govind Marg, Chitrakoot Scheme, Ajmer Road, Jaipur-302021

M/s Jugal K Puri & Associates

K-19 (GF), South Extension Part II, New Delhi – 110049

M/s N K Jain & Associates

2D, OCS Apartments, Mayur Vihar, Phase-I, Delhi – 110091

M/s S P Bhattacharyya & Co.

A-202, KV Vasundhara, VIP Road, Kolkata – 700052

M/s Musib & Co.

A-1/364, Janakpuri, New Delhi - 110058

Secretarial Auditor

M/s P. P. Agarwal & Co.

C-5/64, East of Kailash, New Delhi - 110065

Internal Auditor

Shri Vijay Kumar, Executive Director (Finance)

Bankers

State Bank of India
Indian Overseas Bank
ICICI Bank Limited
Jammu & Kashmir Bank Limited
Bank of India
Axis Bank
State Bank of Patiala
State Bank of Bikaner & Jaipur
HDFC Bank
Indusind Bank

Indusind Bank Bank of Baroda Deutsche Bank Central Bank of India Kotak Mahindra Bank RBL Bank



Registrar & Share Transfer Agent

For Equity Shares & Tax Free Bonds:

M/s Karvy Computershare Private Limited Karvy Selenium Tower B, Plot No. 31-32, Gachibowli Financial District, Nanakramguda,

Hyderabad - 500 032

Ph: +91 40 67161500, 67162222 Email: einward.ris@karvy.com

Website: www.karvycomputershare.com

For other Bonds:

M/s RCMC Share Registry Private Limited B-25/1, First Floor, Okhla Phase-II, New Delhi-110020

Ph: 011-26387320

Email: info@rcmcdelhi.com

Chief Investor Relations Officer

Shri Anuj Kapoor, Chief (Finance)

Listing of Securities

Share & Tax Free Bonds:

BSE Limited

National Stock Exchange of India Limited

Other bonds issued on Private Placement (Under Wholesale Debt Market Segment):

'V' Series Bonds – BSE Limited All other Bonds – National Stock Exchange of India Limited

Depositories

National Securities Depository Limited Central Depository Services (India) Limited

Debenture Trustees

7.70% O Series Bonds

Axis Trustee Services Ltd.

2nd Floor, Red Fort Capital Parsvanath Tower, Bhai Veer Singh Marg, Gole Market, New Delhi -110 001

Ph.: +91 11 47396656

Email: debenturetrustee@axistrustee.com

9% P Series, 9.25% Q Series, Tax Free Bonds NHPC 2013 (Series 1A, 1B, 2A, 2B, 3A and 3B), 8.49% S1, 8.54% S2 Series, 8.50%

T Series Bonds

and 6.84% V Series Bonds

IDBI Trusteeship Services Ltd.

Asian Building, Ground Floor 17, R. Kamani Marg Ballard Estate,

Mumbai- 400 001 **B,** Ph.: +91 22 40807000 **and** Email: itsl@idbitrustee.com

8.70% R1, 8.85% R2, 8.78% R3 Series, 8.24% U Series and 8.17% U1 Series Bonds

SBICAP Trustee Company Ltd.

Apeejay House, 6th Floor, 3, Dinshaw Wachha Road, Church Gate, Mumbai - 400020

Ph.: +91 22 43025553

8.17% U1 Series Email: helpdesk@sbicaptrustee.com

LETTER TO SHAREHOLDERS



Dear Shareowners,

I feel privileged to share the achievements of our Company made during the Financial Year 2016-17 and present the 41st Annual Report of the Company for 2016-17. Your Company has been able to harness its core competencies to achieve new milestones and set new standards of performance by increasing its profitability and creating value for stakeholders.

During the Financial Year, your Company has generated 23,275 MUs as compared to the target of 23,000 MUs committed for "Very Good" rating under Memorandum of Understanding signed with Govt. of India. Your Company has contributed to the growth of power sector by commissioning the remaining two units of 40 MW each of Teesta Low Dam-IV H.E. Project (160 MW) in West Bengal and 50 MW Wind Power Project in Jaisalmer during Financial Year 2016-17. After commissioning of these projects, the standalone installed capacity of the Company has increased to 5,171 MW. Your Company is committed to achieve sustained growth and high performance in future also.

On financial fronts, your Company had earned a profit of ₹ 2,795.59 crore as compared to ₹ 2,429.89 crore in the previous year. Sales during Financial Year 2016-17 were ₹ 7,191.53 crore whereas realization, including liquidation of outstanding amount of previous years were ₹ 7,676.27 crore. Further, it has successfully transitioned to Ind AS regime and has prepared accounts for the year 2016-17 accordingly.

Maximizing shareholders' wealth has always been an area of concern of your Company. An interim dividend of ₹ 1.70/- per share had already been paid in January, 2017. The Board of Directors has recommended a final dividend of ₹ 0.10 per equity share (excluding dividend distribution tax) for Financial Year 2016-17, subject to your approval at the forthcoming Annual General Meeting. On approval, the total dividend pay-out for Financial Year 2016-17 will be 71% of the profit after tax.

During the Financial Year under report, Govt. of India had divested 11.36% of the paid up equity share capital of the Company, by Offer For Sale (OFS) through Stock Exchange mechanism in April, 2016. Subsequently, in November, 2016 the Government of India further divested 0.09% of the paid up equity share capital through OFS to eligible employees of the Company. After these divestments, the holding of the Government of India in your Company was reduced to 74.51%.

Your Company had also bought back 81,13,47,977 fully paid equity shares of ₹ 10/- each at a price of ₹ 32.25/- per equity share in March, 2017. Post buyback paid up equity share capital of your Company has reduced to ₹ 10,259.32 crore.

Your Company constantly endeavors to harness available hydro power potential in the country. At present, 3,130 MW capacity projects are under construction stage. It gives me great pleasure to inform that 1st and 2nd unit of Parbati-II H.E. Project (800 MW), Himachal Pradesh has been spun by using



water of Jiwa Nallah. On July 29, 2017, Unit-I of the Parbati HE Project, Stage-II has been successfully synchronized on part load. We are targeting to commission this project by December, 2018. Construction works at Kishanganga HE Project (330 MW), Jammu & Kashmir, are in advanced stage and its 1st unit is expected to be commissioned during the current year and remaining two units by January, 2018. Management of your Company is in constant touch with the Central Government, State Govt. of Assam and all the stakeholders for early resumption of construction activities at Subansiri Lower H.E. Project. The project is expected to be commissioned within 4 year time from the date of resumption of works.

Your Company has the privilege of holding leadership position in the development of hydro power in the country and being committed to maintain its leadership, we are in the process of obtaining necessary clearances for five prospective projects having planned capacity of 4,995 MW. Joint venture companies have already been formed in Jammu & Kashmir and Manipur for development of 1,230 MW hydropower projects.

Efforts are being made by your Company for diversification into different sources of energy viz. wind, solar and thermal which have now started showing results. During the Financial Year, a 50 MW Wind Power Project in Jaisalmer has been commissioned. Your Company has also started activities for the development of 50 MW Solar Power Plant at Theni & Dindigul Districts in Tamil Nadu. An EPC Contract with ten years O&M has been awarded to M/s Larsen & Toubro Ltd. and an Energy Purchase Agreement (EPA) for the generation from project has also been signed with TANGEDCO. Your Company in joint venture with UPNEDA is in process of executing a 32 MW Solar Power Project in Uttar Pradesh. In addition to above, your Company is also gearing up for availing business opportunities in thermal sector through development of Pirpainti Thermal Power Project (1,320 MW) in Bihar, through joint venture mode. Opportunities are also being explored actively for the development of pumped storage schemes in different states like Karnataka, Maharashtra, Odisha etc.

The affairs of your Company are conducted in a socially responsible manner by maintaining high level of integrity and ethical behavior. During the Financial Year, your Company has undertaken various CSR initiatives in the field of Education and Skill development, Health & Sanitation, Rural Development, Environment & Sustainability, Women Empowerment, Swachh Bharat Abhiyan/Swachh Vidyalaya Abhiyan, sports, arts and culture etc. The expenditure on CSR & SD activities during the Financial Year 2016-17 was ₹ 75.82 crore as against the mandatory requirement of ₹ 44.23 crore under the Companies Act, 2013.

Your Company takes utmost care to maintain the highest standards of Corporate Governance in its business activities. Besides adhering to the provisions of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, your Company also follows the guidelines on Corporate Governance for CPSEs issued by Department of Public Enterprises (DPE), Government of India. Your Company has also adopted Whistle Blower Policy for reporting the instances of unethical/improper conduct. The Corporate Governance practices of your Company was recognized by ASSOCHAM and was conferred the Runner-up prize in Listed Public Sector Company category at 2nd Corporate Governance Excellence Awards 2015-16.

Your Company's achievements in various spheres have earned it a number of prestigious awards and accolades such as Best Miniratna by Dun & Bradstreet PSU Awards 2016, Best Hydropower Enterprise Award by Hydropower forum of India, Golden Peacock Business Excellence Award 2016 by Institute of Directors etc.

I take this opportunity to express my sincere gratitude to all stakeholders, business partners, customers, CERC and various Ministries of Govt. of India, especially Ministry of Power for providing valuable guidance and support in our efforts. I would also like to thank various State Government(s) for all the support they had extended to our business. I would also like to place on record my sincere appreciation to my esteemed colleagues on the Board for their guidance and support. I would like to thank all the employees for their continuous and untiring efforts in achieving the Company's objectives.

I assure you that the Management's top priority would be to bring the projects under various stages of development to operative phase and to kick start other ventures for diversification of the Company, to support the growth of clean and green power. We will continue to implement our mission driven strategy by efficiently operating the power stations, implementing the projects and continue to invest in technology, infrastructure and talent, which are the critical inputs for the future of your Company. We look forward for your continued and unstinted support for the years to come.

With best wishes,

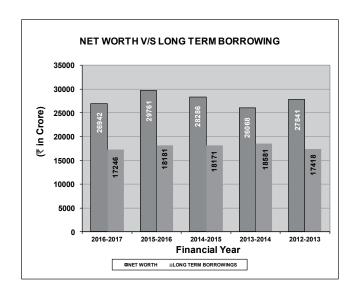
Your sincerely,

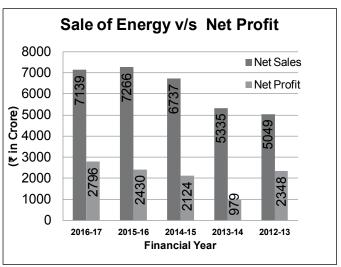
(Ratish Kumar)

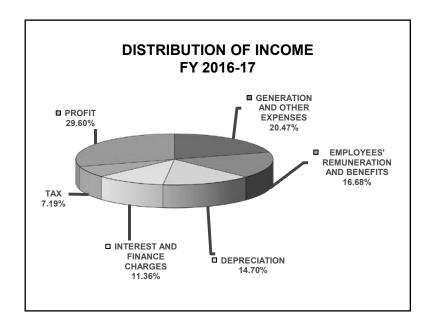
Chairman and Managing Director DIN 06852735

Date: 11th August, 2017 Place: Faridabad

NHPC's PERFORMANCE









DIRECTORS' PROFILE



Shri Ratish Kumar, Director (Projects) and Chairman & Managing Director

DIN 06852735

Shri Ratish Kumar (56 years) holds B.Tech in Electrical Engineering from GB Pant University of Agriculture & Technology, Pantnagar (Uttarakhand). Shri Ratish Kumar started his professional career in NHPC Limited as Trainee Engineer in October, 1982 from Bairasiul Project.

Shri Ratish Kumar has over 34 years of experience in NHPC where he climbed up the professional ladder with utmost sense of responsibility, ethics and dedication. In his present assignment as Director (Projects), Shri Ratish Kumar is in-charge of all NHPC projects which are under construction and pre-construction stages. This includes hydro as well as solar & wind renewable energy projects. He is also responsible for Joint-ventures and Consultancy Assignments being undertaken by the Company. In addition, major functions viz. Contracts (E&M), Project Monitoring and Support Group,

Cost Engineering, Business Development and Design (E&M) also come under his ambit.

Prior to joining NHPC Board, Shri Ratish Kumar served NHPC in various capacities including as the Executive Director (Design-E&M). His major contributions include construction and erection of Salal Power Station Stage-II, commissioning of major projects of NHPC, restoration of Dhauliganga and Uri-II Power Station, advancement of commissioning of TLDP-IV, construction of Dam of Kishanganga HEP in 2016. It further includes design and engineering of E&M packages of projects viz. Parbati-III, Parbati-III, Subansiri Lower HE Project, Teesta-V, Sewa-II, Chamera-III, Dhauliganga projects etc. and O&M of Hydro Power stations. He was also associated with various International assignments including preparation of DPR of Tamanthi & Shwezaye in Myanmar, Kuri-Gongri, Chamkharchhu & Mangdechhu in Bhutan. Shri Ratish Kumar had been a Nominee Director on the Board of National High Power Test Laboratory Private Limited w.e.f. 24.03.2014 to 08.02.2016.

Shri Ratish Kumar has excellent command in construction & erection of Hydro Power Plants, Design & Engineering of E&M equipments, Power Potential and Optimization Studies, layout engineering, preparation of detailed project report including project appraisal and cost benefit analysis for obtaining TEC from CEA. He has been an expert member in numerous National Level Publications, CBIP Manual on GIS 2013, Bus Duct 2013 and Transformer 2013 etc.

Shri Ratish Kumar joined the Board of NHPC Limited w.e.f. 6th January, 2016. Shri Ratish Kumar is also holding additional charge of the post of Chairman and Managing Director of the Company w.e.f. from 1st August, 2017.



Shri Balraj Joshi, Director (Technical)

DIN 07449990

Shri Balraj Joshi (57 years) holds a degree in Civil Engineering from Govt. Engineering College, Karad, Maharashtra. He also holds PG qualification in Hydropower Development and Planning from the prestigious Norwegian Technical Institute, Trondheim, Norway under NORAD Scholarship. Shri Joshi joined NHPC in October, 1982 as a Probationary Executive (Engg.) at Salal Project (J&K).

During his distinguished career spanning over 34 years, Shri Joshi scaled new heights and contributed to NHPC's development by serving many projects namely Salal, Dul Hasti, Kurichu Project (Bhutan), Teesta-V, Teesta Low Dam-III & IV, Parbati-III, Chutak, Chamera-III, Parbati-II etc. and rose to the position of Executive Director (Design & Engineering), NHPC. He has also been associated with NHPC's Consultancy assignments for many projects as 1200 MW Tamanthi and 880 MW Shwezaye

in Myanmar, 720 MW Mangdechhu, Bhutan & Bakreswar thermal power project of M/s West Bengal Development Corporation etc. He has also represented NHPC at International Court of Arbitration at 'The Hague' for Kishanganga Project. In an outstanding display of commitment Shri Joshi successfully undertook the highly challenging work of resurrecting the Dhauliganga Power Station after its flooding.

Shri Balraj Joshi has taken over as Director (Technical) of NHPC Limited on 1st April, 2016.