43rd ANNUAL REPORT

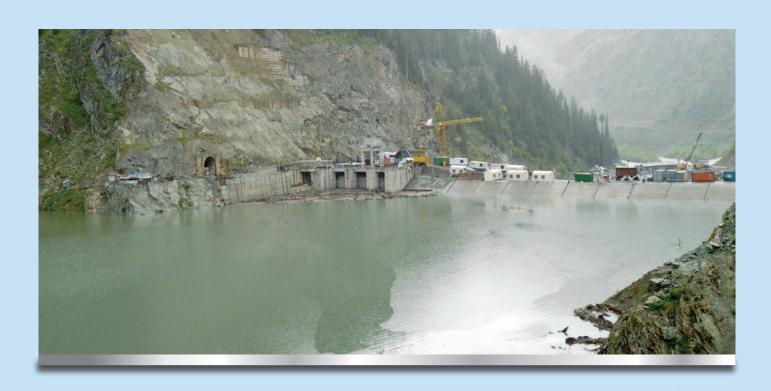








2018-19







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.



Annual Report 2018-19

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		13
Report on Corporate Governance		26
Compliance Certificate on Corporate Governance		56
Management Discussion and Analysis Report		57
Conservation of Energy, Technology Absorption and Foreign Exchange Earnings and	d Outgo.	73
Business Responsibility Report		75
Annual Report on CSR Activities		84
Extract of Annual Return		89
Dividend Distribution Policy		100
Secretarial Audit Report		103
Statutory Auditor's Report		107
Financial Statements		118
CONSOLIDATED		
Statutory Auditor's Report		243
Financial Statements		252
Comments of Comptroller and Auditor General of India and Management Reply the	ereon	381
E-Communication Registration Form		



DIGEST OF IMPORTANT FINANCIAL DATA (STANDALONE ACCOUNTS)

						(₹ in crore)
	FINANCIAL	2018-19	2017-18			2014-15
Α	SALE OF ENERGY	8,095.13	6,868.64	7,139.46	7,265.71	6,736.64
В	OTHER OPERATING INCOME, REVENUE FROM POWER			131.71	87.29	65.61
	TRADING & REVENUE FROM CONTRACTS, PROJECT					
	MANAGEMENT AND CONSULTANCY WORKS					
C	OTHER INCOME (INCLUDES EXCEPTIONAL ITEM)	924.78	1,420.55	1,457.67	992.07	861.33
D	TOTAL INCOME (A) $+$ (B) $+$ (C)	9,085.96	8,358.77	8,728.84	8,345.07	7,663.58
Ε	PURCHASE OF POWER TRADING	12.68	-	-	-	-
F	GENERATION EXPENSES	796.85		773.67	790.87	778.91
G	EMPLOYEE BENEFITS EXPENSES	1,704.65		1,574.84		1,149.23
Н	DEPRECIATION & AMORTIZATION EXPENSES	1,589.99		1,388.40	1,359.07	1,425.87
- [FINANCE COSTS	894.88		1,073.22	1,072.10	1,179.77
J	OTHER EXPENSES	1,165.53		1,158.10	1,335.07	825.58
K	TOTAL EXPENSES (E)+ (F) + (G) + (H) + (I)+ (J)	6,164.58		5,968.23	5,715.47	5,359.36
L	PROFIT BEFORE TAX AND RATE REGULATED INCOME (D) - (K)	2,921.38		2,760.61		2,304.22
M	RATE REGULATED INCOME ON ACCOUNT OF FINANCE COST	76.78		365.32	396.22	406.83
N	RATE REGULATED INCOME ON ACCOUNT OF OTHERS	746.62		659.53	312.53	107.41
0	TOTAL RATE REGULATED INCOME (M) + (N)	823.40		•		514.24
P	PROFIT BEFORE TAX (L) + (O) INCOME TAX EXPENSES	3,744.78	•	989.87	3,338.35 908.46	2,818.46 693.99
Q R	PROFIT AFTER TAX (P) - (Q)	1,114.23 2,630.55				2,124.47
S	OTHER COMPREHENSIVE INCOME	(12.41)		7.67	•	2,124.47
T	TOTAL COMPREHENSIVE INCOME (R) + (S)	2,618.14		2,803.26		2,124.47
Ū	AUTHORISED SHARE CAPITAL		15,000.00			15,000.00
V	PAID UP EQUITY SHARE CAPITAL		10,259.32			
Ŵ			18,092.50			17,215.72
X	LONG TERM/NON CURRENT BORROWINGS	17,044.63			18,181.08	
Y	OTHER LONG TERM LIABILITY & LONG TERM PROVISIONS	3,910.44	1,688.94		1,829.95	2,224.12
Ž	DEFERRED TAX LIABILITIES	3,610.63		3,664.73	3,277.31	3,040.87
AA	NET TANGIBLE & INTANGIBLE FIXED ASSETS INCLUDING		20,017.98		,	22,695.16
	INVESTMENT PROPERTY	·			•	
AB	CAPITAL WORK-IN-PROGRESS	14,898.11	18,813.96	17,350.13	16,578.71	16,054.72
	INVESTMENTS (NON CURRENT)	2,361.66	2,209.56	2,100.32	1,683.01	1,977.75
AD	OTHER LONG TERM LOANS & ADVANCES AND OTHER NON-	6,428.38	4,418.92	3,424.21	3,645.30	1,978.10
	CURRENT ASSETS					
	REGULATORY DEFERRAL ACCOUNT DEBIT BALANCES	6,492.61		5,630.56		3,860.82
	WORKING CAPITAL		(1,215.28)	355.10	5,241.91	5,155.86
AG	GROSS CAPITAL EMPLOYED $(AA) + (AB) + (AC) + (AD)$	53,780.43	49,914.35	49,837.53	53,049.49	51,722.41
	+ (AE) + (AF)					
	CURRENT MATURITIES OF LONG TERM BORROWINGS	1,605.16		1,678.59	1,757.14	1,665.31
ΑI	PAYABLE TOWARDS BONDS FULLY SERVICED BY	2,017.20	-	-	-	-
	GOVERNMENT OF INDIA	20 24 4 72	20 254 02	26.042.42	20 764 45	20 206 20
	NET WORTH (V)+(W)		28,351.82			
AK	DIVIDEND PAID (INCLUDING INTERIM DIVIDEND)	1000.46	-	2,524.13		553.55
	RATIOS	2018-19	6.050/	2016-17	2015-16	2014-15
	RETURN ON CAPITAL EMPLOYED [(P) + (I) -(M)] / (AG)	8.48%		9.02%	7.5/%	6.94%
	RETURN ON NET WORTH (R) / (AJ) NET PROFIT TO SALE OF ENERGY (R) / (A)	9.00%		10.38% 39.16%	8.16%	7.51%
	(/ , ()	32.50%			33.44%	31.54%
	BOOK VALUE PER SHARE EARNING PER SHARE	29.08 2.57	27.64 2.70	26.26 2.53	26.88 2.19	25.55 1.92
	DIVIDEND PER SHARE (INTERIM+PROPOSED FOR THE YEAR)	1.46		1.80	1.50	0.60
	DEBT EQUITY RATIO [(X)+ (AH)+ (AI)] / (AJ)	0.71	0.65	0.70	0.67	0.00
	CURRENT RATIO	0.71		1.07	2.10	2.08
	OPERATING PERFORMANCE	2018-19		2016-17	2015-16	2014-15
	GENERATION (M.U.)	24,193.00			23,404.00	
	CAPACITY (IN MW) PLANT AVAILABILITY FACTOR (%)	5,551.20 84.97		5,171.20 83.41	5,041.20 81.60	4,961.20 77.30
	MAN POWER (Nos.)	6753	7351	8009	8654	9211

Note:-1 Figures for FY 2014-15 are IGAAP compliant and figures from FY 2015-16 are IND AS compliant.

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

Note:-3 Previous periods figures have been regrouped/rearranged wherever considered necessary.

Note:-4 Generation excludes deemed generation of Chutak and Nimoo Bazgo Power Stations.

REFERENCE INFORMATION

Registered & Corporate Office

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

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

Fax: +91 129 2278018 Website: www.nhpcindia.com CIN: L40101HR1975GOI032564

Company Secretary

Shri Vijay Gupta

Statutory Auditors

M/s Arora Vohra & Co.

Chartered Accountants, Chaitanya Complex, Prem Bhawan, Residency Road, Jammu Tawi - 180001 Jammu & Kashmir

M/s DSP & Associates

Chartered Accountants, 783, Desh Bandhu Gupta Road, Near Faiz Road, Karol Bagh, New Delhi – 110005

M/s Lodha & Co.

Chartered Accountants, 14, Government Place East, Kolkata - 700069

Cost Auditors

M/s Chandra Wadhwa & Co.

1305 & 1306, Vijaya Building, Barakhamba Road, New Delhi - 110001

M/s Balwinder & Associates

F-125, Phase VIII-B, Indl. Area, Sector 74, Mohali, Punjab - 160071

M/s Sanjay Gupta & Associates

C4E/135, Janak Puri, New Delhi - 110058

M/s K.L. Jaisingh & Co.

J-7, Sector-XI, Jaisingh House, Noida, Uttar Pradesh - 201301

M/s K. G. Goyal & Associates

289, Mahaveer Nagar-II, Maharani Farms, Durgapura, Jaipur, Rajasthan - 302018

M/s R.J. Goel & Co.

1011, Pearls Best Heights-II, C-9, Netaji Subhash Place, Pitampura, Delhi - 110034

M/s DGM & Associates

64, B.B.Ganguly Street, 2nd Floor, Kolkata, West Bengal – 700012

M/s Niran & Co.

Mohit Kali Apartment, Block-A, Flat-2D, 161, Sabarnapara Road, PO - Barisha, Kolkata, West Bengal - 700008

Secretarial Auditor

M/s Agarwal S. & Associates

Company Secretaries D-427, 2nd Floor, Palam Extn., Ramphal Chowk, Sector-7, Dwarka, New Delhi – 110075

Internal Auditor

State Bank of India

Shri Dipankar Chakraborty, Chief General Manager (Finance)

Bankers

Indian Overseas Bank
ICICI Bank Limited
Jammu & Kashmir Bank Limited
Bank of India

Axis Bank HDFC Bank IndusInd Bank Bank of Baroda Deutsche Bank

Central Bank of India Kotak Mahindra Bank

IDBI Bank Yes Bank IDFC Bank

RBL Bank

Punjab National Bank

Canara Bank

AU Small Finance Bank



Registrar & Share Transfer Agent

For Equity Shares & Tax Free Bonds:

M/s Karvy Fintech Private Limited (Formerly Karvy Computershare Private Limited) Karvy Selenium Tower B, Plot 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-110 020

Ph: 011-26387320

Email: investor.services@rcmcdelhi.com

Chief Investor Relations Officer

Shri Anuj Kapoor, General Manager (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', 'V2' and 'W' 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

9% P Series Bonds, 9.25% O Series Bonds. Tax Free Bonds NHPC 2013 (8.18% 1A series, 8.43% 1B series, 8.54% 2A series, 8.79% 2B series, 8.67% 3A series and 8.92% 3B series), 8.49% S1 Series Bonds, 8.54% S2 Series Bonds. 8.50% T Series Bonds, 6.84% V Series Bonds, 7.52% V2 Series Bonds, 6.91% W1 Series Bonds, 7.35% W2 series Bonds, 8.65%

X series Bonds and 8.12% GOI

Fully Serviced

Bonds

Bonds

IDBI Trusteeship Services Ltd.

Asian Building, Ground Floor 17, R. Kamani Marg Ballard Estate Mumbai- 400 001 Ph.: +91 22 40807000

Email:itsl@idbitrustee.com

8.70% R1,
8.85% R2,
8.78% R3,
SBICAP Trustee Company Ltd.
Apeejay House, 6th Floor,
3, Dinshaw Wachha Road, Church Gate,

8.24% U and Mumbai – 400 020

8.17% U1 Series Ph · +91 22 4302

Ph.: +91 22 43025553/55/66 Email: helpdesk@sbicaptrustee.com

LETTER TO SHAREHOLDERS



Dear Members,

It is my pleasure and honor to have an opportunity to communicate with you for the second time as Chairman & Managing Director of your Company. Power sector to a great extent is an enabler of growth for any economy of the world and our country is not different. Ours is one of the fastest growing economy in the world and this creates immense opportunities for us to grow, expand and multiply.

Nature has bequeathed our country with hydropower potential of more than 148 GW, yet we have developed only about 45 GW of large hydro capacity. Thus, there is lot of scope for development of hydroelectric power. Hydroelectric power plays a critical role in the overall energy mix and Govt. of India has announced measures for promoting hydroelectric power. These measures shall provide impetus to the development of hydropower sector and NHPC, being the premier organization of the country for development of hydroelectric power is committed to tap and utilize the available hydroelectric power potential.

The year 2018-19 has been an eventful and notable year for your Company on operational, financial as well as business expansion fronts. Our Power Stations have set a new milestone by achieving highest ever annual generation of 24,193 Million Units (MUs) with PAF of 84.97%. The previous record was of 23,404 MUs during financial year 2015-16. This is a reflection of efficient operation as well as efforts of our operations and maintenance teams. Installed capacity of your Company stands at 7,071 MW on consolidated basis and 5,551 MW on standalone basis, which includes 50 MW each of solar and wind power.

On financial front, total income of Company increased to ₹ 9,085.96 crore registering a growth of 9% over the total

income in financial year 2017-18. Total comprehensive income, Net Profit After Tax (PAT) and other comprehensive income were ₹ 2,618 crore, ₹ 2,630 crore and ₹ (12) crore respectively. Sales from operations during financial year 2018-19 were ₹ 8,161.18 crore whereas realization, including liquidation of outstanding amount of previous years and surcharge were ₹ 6,498.70 crore.

New venture of your Company i.e. Power Trading has also started yielding results. During the financial year 2018-19, the Company has earned revenue of ₹ 13 crore approximately from power trading business.

On business expansion front, investment expenditure for pre-investment activities and various clearances of Dibang Multipurpose Project (2,880 MW) in the state of Arunachal Pradesh has been approved by the Cabinet Committee on Economic Affairs (CCEA) on the recommendations of Project Investment Board (PIB). The project is having all statutory clearances except Forest Clearance (Stage-II) for seeking investment sanction from Govt. of India. Further, our bid for Lanco Teesta Hydro Power Limited (LTHPL), developer of Teesta-VI HE Project (500 MW) in Sikkim, for an amount of ₹ 897.50 Crores under Corporate Insolvency Resolution Process was approved by National Company Law Tribunal (NCLT). CCEA has already approved the proposal for taking over of Lanco Teesta Hydro Power Limited (LTHPL). Company has received in-principle approval for setting-up of one Solar Park of 100 MW capacity in Odisha from Ministry of New and Renewable Energy, Government of India. NHPC was also appointed as 'Aggregator' under Pilot Scheme-II by Ministry of Power for procurement of aggregated power of 2,500 MW for three years.



The Company has also inked Memorandum of Understanding (MoU) with:

- Jammu and Kashmir State Power Development Corporation Limited (JKSPDC) and Government of Jammu & Kashmir (GoJK) for implementation of Ratle HE Project (850 MW) in the state of Jammu & Kashmir through a Joint Venture Company;
- BHEL for joint bidding in consultancy and hydro-electric projects;
- NLC India Limited for trading of power.

NHPC is proud to get the opportunity to work for the Indian army. The Company has signed a MoU with Indian Army in April, 2019 for undertaking construction of semi underground bunkers and fully underground caverns at different locations in India. The expertise of our company in undertaking construction at rough and difficult terrains is appreciated by one and all.

The status of operational plants, ongoing and new projects of the Company has been provided in detail in the Directors' Report. However, I would like to mention that in addition to existing standalone operational capacity of 5,551 MW, two projects with total capacity of 2,800 MW are under different stages of construction. The Principal Bench of Hon'ble NGT vide order dated July 31, 2019 has upheld the constitution of Expert Committee by MoEF&CC and observed that the project be advanced in public interest. I am hopeful that this will pave the way for restarting the construction works in near future. Further, hydroelectric power project with expected capacity of 5,945 MW are under clearance/ approval stage. Capacity addition of 1,376 MW of hydroelectric power is also anticipated through Subsidiaries and Joint ventures. Further, two power stations of the Company namely Bairasiul (180 MW) and Loktak (105 MW) are under Renovation and Modernization with scheduled completion in financial year 2021-22.

Your Company has taken small but steady steps for increasing the share of renewable energy in its portfolio. To augment its existing portfolio of 100 MW of renewable energy (50 MW each of Wind and Solar power), Company has initiated the process for the development of 10 MW floating solar power project in Kallada, Kerala and 72 MW (+10%) capacity Wind Power Projects in the Palakkad District of Kerala. NHPC in joint venture with Uttar Pradesh New and Renewable Energy Development Agency (UPNEDA) is also in the process of setting up a 32 MW solar power project in Uttar Pradesh. Further, opportunities for development of renewable energy are being explored actively.

During the financial year 2018-19, your company has installed roof-top/ ground mounted solar power panels at its various locations having capacity of 634.7 KWp. Further, your company has also installed 1.00 MWp Solar Power Plant at rooftop of different buildings of NHPC Residential Complex, Faridabad in June, 2019.

Every employee of your Company is committed to maximize its profitability thereby creating and maximizing wealth of shareholders. In this endeavor, the Company has already paid an interim dividend of ₹ 0.71/- per share in March, 2019 and has recommended a final dividend of ₹ 0.75/- per equity share for financial year 2018-19, subject to your approval. On approval, the total dividend payout for the financial year 2018-19 will be more than 5% of net worth and approximately 56% of the profit after tax.

During the financial year 2018-19, the Company had also bought back 21,42,85,714 fully paid equity shares of

₹ 10/- each at a price of ₹ 28/- per equity share in January, 2019. Further, Govt. of India had divested 0.50% of total paid-up share Capital of the company through Bharat 22 ETF in March, 2019. Post-buyback and divestment, the holding of the Government of India in your Company stands reduced at 73.33% of the total paid up capital of the Company.

As a socially responsible entity, your Company has continued to take CSR initiatives that have positive impact on society at large, especially the community in the neighborhood of its operations. Corporate Social Responsibility (CSR) has been an integral part of your Company's business philosophy. During the year, various CSR activities have been undertaken in the field of Health, Sanitation, Drinking Water, Education and Skill development, capacity building, Women Empowerment, Social infrastructure development etc. The expenditure on CSR & SD activities during the financial year 2018-19 was ₹ 17.58 crores. Your Company is committed to fulfill stakeholders' aspiration and contributing to sustainable development of people, planet and the organization.

Management of your Company believes in adhering to highest standards of Corporate Governance in all its operations. Being a listed company, NHPC has been making sincere efforts to comply with the provisions of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, to the extent it is within the ambit of the management of the Company. Your Company also follows the guidelines on Corporate Governance for CPSEs issued by Department of Public Enterprises (DPE), Government of India. During the year 2018-19, your Company has achieved "Excellent" rating for compliance with 'DPE Guidelines on Corporate Governance' under 'Corporate Governance Grading System' prescribed by DPE.

The efforts and practices of your Company have been recognized in form of awards and accolades such as "Best Performing Utility in Hydropower Sector" at CBIP Awards, "TAI tunneling project of the year award" by Tunneling Association of India for execution of tunnels in Kishanganga H.E. Project, "SILVER" level recognition in World Healthy Workplace Award 2018 instituted by Arogya World India Trust in partnership with Public Health Foundation of India and "Second Prize" in Region "A" for outstanding work in the field of Rajbhasha implementation for the year 2017-18 from Ministry of Home Affairs, Government of India.

I take this opportunity to convey my 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 Government of various States for extending support in our endeavors. I convey my sincere appreciation to my esteemed colleague Board members for their continued support. Finally, I must thank all the employees for their continuous and untiring efforts in building a strong, vibrant and responsible organization.

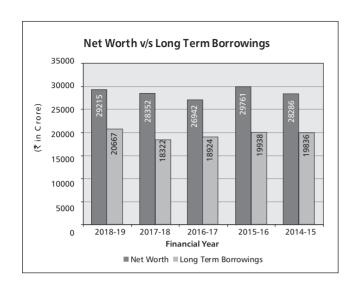
Yours sincerely,

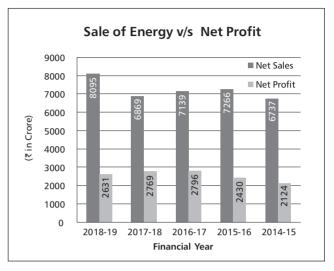
(Balraj Joshi) Chairman and Managing Director DIN 07449990

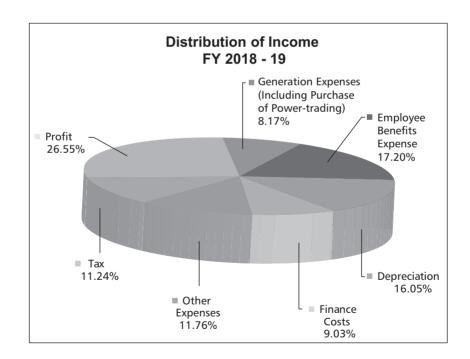
Date: August 2, 2019 **Place:** Faridabad

Thanking you.

NHPC'S PERFORMANCE









DIRECTORS' PROFILE



Shri Balraj Joshi, Chairman and Managing Director

DIN 07449990

Shri Balraj Joshi (59 years) is the Chairman and Managing Director of NHPC and is also the Chairman of Board of Directors of NHDC Limited and Loktak Downstream Hydroelectric Corporation Limited.

Shri Joshi is a Civil Engineering graduate with more than 36 years of extensive experience in the field of hydro power development. He is well versed with all the aspects of hydro power development and holds Post Graduate Qualification in hydro power development and planning from Norwegian Technical Institute. He also holds a PG Diploma in Construction Management from National Institute of Construction Management and

Research (NICMAR), Pune. Shri Joshi commenced his professional life as a Probationary Executive in NHPC in the year 1982 at Salal H.E. Project. After gathering a rich field experience of about 17 years by way of working on the construction of various types of structures in Dulhasti Project, Kurichhu Project (Bhutan) & Bakreshwar Project, he joined Design & Engineering Division in Corporate Office and has led the design work of some of the landmark projects of NHPC like Teesta-V, Teesta Low Dam-III, Teesta Low Dam-IV, Parbati-III & no. of other projects. He has been the team leader for various consultancy assignments in India & abroad, notably Mangdechhu H. E. Project (720 MW), Bhutan & Tamanthi Project (1200 MW), Myanmar. During his long association with NHPC, he has served the organization with notable contributions. Recognising his contribution in development of Hydro Power, Construction Industry Development Council (CIDC) has conferred Industry Doyen award on him. The Indian Water Resources Society (IWRS), Roorkee has conferred upon him the 'Eminent Water Resources Engineer Award' for his contribution in the field of Water Resources Development & Management.

He has laid emphasis on team approach with a clear focus on processes for better results. His process driven approach played a key role in getting a favourable award at the International Court of Arbitration for Kishanganga Project. He strongly believes in employee empowerment and maintains that the key for growth lies in rapid development of technical nous in the work force of the organization.

Shri Balraj Joshi joined the Board of NHPC Limited as Chairman and Managing Director on September 22, 2017.



Shri Ratish Kumar, Director (Projects)

DIN 06852735

Shri Ratish Kumar (58 years) joined the Board of NHPC Limited on January 6, 2016. He graduated from GB Pant University of Agriculture & Technology, Pantnagar (U.P.) in Electrical Engineering and has a diverse experience of more than 36 years in the field of Hydro Power. He is associated with NHPC Limited since October 1982 and climbed up the professional ladder with utmost sense of responsibility, ethics and dedication. He has excellent command in construction & erection of hydro power plants, design & engineering of E&M equipments, Power Potential and Optimization Studies, layout of hydro power projects, preparation of detailed pre-qualification and award of big contracts of hydro projects through ICB or NCB including all other aspects related to hydro generation.

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, Project Monitoring & Support Group 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 commissioning control of many Power Stations of NHPC,