



**भारत हेवी इलेक्ट्रिकल्स लिमिटेड**  
**Bharat Heavy Electricals Limited**

No: AA/SCY/AGM55

Date: 03.10.2019

**BSE Limited**

P.J. Towers, Dalal Street,  
MUMBAI – 400001

**National Stock Exchange of India Limited**

Exchange Plaza, C-1, Block G,  
Bandra-Kurla Complex, Bandra (East)  
MUMBAI – 400051

Dear Sirs,

**Sub: Minutes of 55<sup>th</sup> Annual General Meeting of BHEL  
held on 19<sup>th</sup> September, 2019**

Please find enclosed herewith a copy of the Minutes of 55<sup>th</sup> Annual General Meeting of BHEL held on 19<sup>th</sup> September, 2019, for your information and record.

Thanking you,

Yours faithfully,

(Rajeev Kalra)

Company Secretary

shareholderquery@bhel.in

Encl: As above

**BHARAT HEAVY ELECTRICALS LIMITED**  
**NEW DELHI**

**Minutes of the 55<sup>th</sup> Annual General Meeting of Bharat Heavy Electricals Limited held on 'Thursday', 19<sup>th</sup> September, 2019 from 10 AM to 11.15 AM at Manekshaw Centre, Parade Road, Khyber Lines, Delhi Cantt, Delhi**

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**PRESENT**

1. Dr. Nalin Shinghal  
Chairman & Managing Director and Member
2. Shri Amit Varadan  
Part-time Official Director  
(and Representative of the President of India, holding 219,96,50,402 shares i.e. 63.17% of the total paid up share capital of the Company)
3. Shri R. Swaminathan  
Independent Director  
Chairperson- Board Level Audit Committee, Nomination & Remuneration Committee and Stakeholders Relationship Committee
4. Shri Ranjit Rae  
Independent Director
5. Shri Subodh Gupta  
Director (Finance)
6. Shri S. Balakrishnan  
Director (IS&P)
7. Shri Manoj Kumar Varma  
Director (Power)
8. Shri Kamalesh Das  
Director (E, R&D)

Total 1710 Members holding 220,00,06,381 shares, 2 Authorized Representatives representing 5,29,970 shares and 11 Proxies representing 1083 shares were present.

**IN ATTENDANCE**

Shri Rajeev Kalra  
Company Secretary

AUDITORS/ SCRUTINIZER

<b>a) Statutory Auditors</b>		
1)	Shri Gopal Krishan	: M/s Raj Har Gopal & Co.
2)	Shri Sandeep Sandill	: M/s Tiwari & Associates
3)	Shri Rajat Jain & Shri Ritesh Kumar Jain	: M/s Mahesh C. Solanki & Co.
<b>b) Secretarial Auditor</b>		
	Shri K.K. Sachdeva, PCS	: M/s K.K. Sachdeva & Associates
<b>c) Lead Cost Auditors</b>		
	Shri Rakesh Singh	: M/s Shome & Banerjee
<b>d) Scrutinizer</b>		
	Shri Sachin Agarwal, PCS	: M/s Agarwal S. & Associates

Company Secretary welcomed the shareholders, Chairman & Managing Director (CMD), Directors and other dignitaries on the occasion of the 55<sup>th</sup> Annual General Meeting (AGM) of the Company. Thereafter, Company Secretary informed that as per Article 47 of the Articles of Association of Bharat Heavy Electricals Limited (BHEL), Chairman of the Directors shall be entitled to take chair at every general meeting of the Company and requested CMD to take the chair. Dr. Nalin Shinghal, CMD presided over the meeting pursuant to Article 47 of the Articles of Association of the Company.

While welcoming the Members on the occasion of 55<sup>th</sup> AGM of the Company, Chairman introduced all the Directors, sitting on the dais. He also informed that Shri Amit Varadan, Part-time official Director present on the Dias was also representative of the President of India.

The Chairman informed that Shri Desh Deepak Goel, Independent Director has requested for leave of absence due to urgent family engagement. He further informed that Shri Rajesh Sharma, Independent Director has requested leave of absence due to some prior engagement.

The Chairman informed the Members that Shri R. Swaminathan, Chairperson of the Nomination & Remuneration Committee, Stakeholders Relationship Committee and Board Level Audit Committee of BHEL was present at the AGM.

The Chairman informed the Members that Shri Gopal Krishan of M/s Raj Har Gopal & Co., Shri Sandeep Sandill of M/s Tiwari & Associates and Shri Rajat Jain & Shri Ritesh Kumar Jain of M/s Mahesh C. Solanki & Co., Statutory Auditors as well as Shri Rakesh Singh of M/s Shome & Banerjee, Lead Cost Auditors of the Company were present at the meeting. He further informed that Shri K.K. Sachdeva, Practicing Company Secretary of M/s K.K. Sachdeva & Associates, Secretarial Auditor of the Company and Shri Sachin Agarwal, Practicing Company Secretary of M/s Agarwal S. & Associates who has been

appointed as Scrutinizer for e-voting & polling process for the 55<sup>th</sup> AGM were also present at the meeting.

The Chairman stated that pursuant to Section 170 of the Companies Act, 2013, the Register of Directors & KMPs and their shareholding and pursuant to Section 189, the Register of Contracts or Arrangements in which Directors are interested have been placed on the table and were available for inspection by any person attending the meeting. Further, Chairman stated that the Auditors' Report and Secretarial Audit Report were also available for inspection. Based upon information received from Company Secretary, he declared that quorum was available as per Section 103 of the Companies Act, 2013 and as such the meeting was in order.

The Chairman requested the Members to maintain peace and decorum till the conclusion of the meeting. He further requested the Members to avoid making any defamatory remarks about the Company or any matter relating to any individual employee of the Company and informed that personal grievances would also not be entertained in this meeting, as it was not the appropriate forum to discuss such issues. He also requested the Members to restrict their questions only to the business as mentioned in the Notice of the 55<sup>th</sup> AGM.

The Chairman then delivered his speech (reproduced at **Annexure-I**).

Thereafter, Chairman informed the Members that the Annual Report 2018-19 containing Notice of 55<sup>th</sup> AGM together with Explanatory Statement, Directors' Report and Annual Financial Statements of the Company for the Financial Year ended 31<sup>st</sup> March, 2019 have already been sent to all the Members by post or by e-mail and as such, he sought permission of the Members to take the aforesaid documents as read. The Members present agreed to the same.

The Chairman also informed that the Auditors' Report and Report of Comptroller & Auditor General of India (C&AG) comprising 'NIL' comments have also been sent to the shareholders. Company Secretary read the observations in the Secretarial Auditor's Report and Management's Reply thereon.

The Chairman further informed the Members that in pursuance of Section 108 of the Companies Act, 2013 and the prescribed Rules thereto and Regulation 44 of the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015, the Company had provided remote e-voting facility through M/s Karvy Fintech Private Limited to the Members to cast their vote by electronic means. He stated that the remote e-voting commenced at 9 AM on 15<sup>th</sup> September, 2019 and ended at 5 PM on 18<sup>th</sup> September, 2019. He explained that arrangements have been made to conduct a poll on the items of the agenda in order to provide facility to Members/ Proxies present at the AGM to vote by way of polling who could not exercise their vote through remote e-voting process.

Thereafter, Company Secretary explained the procedure for poll on the agenda items of the AGM to the shareholders. He then read the resolutions nos. 1 to 11

of the business to be transacted for the AGM along with relevant resolutions. Chairman explained the objective and implications of the resolutions to be put to vote at the meeting. Subsequently, Chairman requested Director (Finance) to preside over the meeting for item no. 12. Shri Subodh Gupta, Director (Finance) took the chair with the consent of members present. Company Secretary read the resolution for item no. 12 and Shri Subodh Gupta, Chairman explained its objective & implication. Thereafter, Dr. Nalin Shinghal resumed the chair.

The Chairman then invited Members to ask their queries, if any, with regard to the agenda items to be transacted at the AGM. The Chairman replied appropriately to the relevant questions raised by the shareholders in the meeting and provided necessary clarifications to the satisfaction of the Members. While answering the queries he mentioned that amidst the continued challenging business environment, BHEL has registered profitable growth in fiscal 2018-19, while continuing to contribute in nation building endeavours. He also replied shareholders' queries with regard to a) steps taken to improve Company's performance; b) diversification measures taken by BHEL; c) vision for BHEL's future; d) working capital management & cash collections and e) dividend payout & buyback etc. Chairman stated that with its rich and diversified talent pool, strong engineering and manufacturing base and technology depth, BHEL is well positioned to make the most of the existing, as well as emerging opportunities. He apprised that in the coming year, the company is focusing on strengthening the foundations for future growth by reviewing and tightening up the execution methodology for expeditious completion of projects, putting in renewed efforts for recovery of long due amounts to improve working capital position and generate funds for future growth, and enhancing BHEL's competitive strength by further improving the quality of its products and systems, among others. Further, BHEL will strengthen its focus on new avenues of growth through diversification in areas such as railway transportation, defence and aerospace, e-mobility, and water business, etc. He informed that such strategic initiatives will further strengthen the base of the company, and set the stage for rapid growth in years to come. He further said that with the continued support of all its stakeholders, BHEL will continue to grow and contribute towards building a 'New India'.

Thereafter, Chairman declared that voting by poll would be open and those shareholders who have not cast their vote electronically, can cast their vote (on all the resolutions for the ordinary and special businesses) on the ballot paper provided to them & also available with the volunteers and drop the same in the ballot boxes after filling the requisite details.

The Chairman invited Shri Sachin Agarwal of M/s Agarwal S. & Associates, Scrutinizer to take over the poll proceeding. After the close of the poll, the ballot boxes were sealed by the Scrutinizer. Chairman stated that the result of e-voting done earlier and physical poll would be communicated to the stock exchanges and the Consolidated Scrutinizer's Report displayed on the Notice Board at BHEL Registered Office, on the website of the Company ([www.bhel.com](http://www.bhel.com)) and on the website of our remote e-voting service provider M/s Karvy Fintech Private Limited ([www.evoting.karvy.com](http://www.evoting.karvy.com)).

Based upon information received from Company Secretary, the Chairman confirmed that the quorum was present throughout the meeting and that the meeting was called, convened, held and conducted as per the provisions of the Act, the Rules and Secretarial Standards made thereunder.

The meeting concluded with a vote of thanks, proposed by Shri S. Balakrishnan, Director (IS&P) to the esteemed shareholders, Directors on the Board, CVO, Auditors, Corporate HR, Administration & Corporate Communication Departments, Company Secretariat, Volunteers, Scrutinizer and the Employees of the Company.

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### **DETAILS OF RESOLUTIONS PASSED**

On the basis of the Consolidated Scrutinizer's Report, the summary of which is mentioned hereunder, the Chairman declared the results of voting on 19<sup>th</sup> September, 2019 that all the resolutions for the ordinary and special businesses as set out in Item nos. 1 to 12 in the Notice of the 55<sup>th</sup> AGM of the Company have been duly passed by the requisite majority. The resolutions for the ordinary and special businesses, duly approved by the Members with requisite majority, are recorded hereunder as part of the proceedings of the 55<sup>th</sup> AGM of the Members held on 19<sup>th</sup> September, 2019.

### **ORDINARY BUSINESS**

#### **Item No. 1: Ordinary Resolution to receive, consider and adopt the Audited Standalone and Consolidated Financial Statements of the Company for the Financial Year ended 31<sup>st</sup> March, 2019 together with the Directors' Report and Auditors' Report thereon**

“RESOLVED THAT the Audited Standalone and Consolidated Financial Statements of the Company for the Financial Year ended 31<sup>st</sup> March, 2019 together with the Directors' Report, Cash Flow Statement, Auditors' Report and comments of the Comptroller & Auditor General of India be and are hereby adopted.”

#### **Item No. 2: Ordinary Resolution to declare dividend for the financial year 2018-19**

“RESOLVED THAT a final dividend @ 60% (Rs. 1.20 per share of Rs. 2/- each) on the Paid-up Equity Share Capital of Rs. 696.41 crore [in addition to an interim dividend @ 40% (Rs. 0.80 per Share of Rs. 2/- each) on the Paid-up Equity Share Capital of Rs. 696.41 crores already paid during the year 2018-19] as recommended by the Board of Directors be and is hereby declared out of the profits of the Company for the year 2018-19 and the same (including the effect of rounding off) be paid pursuant to the provisions of the Companies Act, 2013.”

**Item No. 3: Ordinary Resolution to appoint a Director in place of Shri Subodh Gupta (DIN: 08113460), who retires by rotation and being eligible, offers himself for re-appointment**

“RESOLVED THAT Shri Subodh Gupta (DIN: 08113460), who retires by rotation and being eligible, offers himself for re-appointment, be and is hereby re-appointed as Director of the Company.”

**Item No. 4: Ordinary Resolution to appoint a Director in place of Shri S. Balakrishnan (DIN: 07804784), who retires by rotation and being eligible, offers himself for re-appointment**

“RESOLVED THAT Shri S. Balakrishnan (DIN: 07804784), who retires by rotation and being eligible, offers himself for re-appointment, be and is hereby re-appointed as Director of the Company.”

**Item No. 5: Ordinary Resolution to authorize the Board of Directors to fix the remuneration of the Auditors for the year 2019-20**

“RESOLVED THAT pursuant to provisions of Section 139 (5) read with Section 142 of the Companies Act, 2013, the Board of Directors of the Company be and is hereby authorized to fix the remuneration of the Auditors of the Company appointed by the Comptroller & Auditor General of India for the year 2019-20.”

**SPECIAL BUSINESS**

**Item No. 6: Ordinary Resolution for ratification of Remuneration of Cost Auditors for financial year 2019-20**

“RESOLVED THAT pursuant to the provisions of Section 148 and other applicable provisions of the Companies Act, 2013 read with the Companies (Audit and Auditors) Rules, 2014 (including any statutory modification(s) or re-enactment thereof, for the time being in force), the remuneration of the Cost Auditors appointed by the Board of Directors of the Company to conduct the audit of the cost records of the Company for the Financial Year ended on 31<sup>st</sup> March, 2020 as set out in the Statement annexed to the Notice convening this Meeting, be and is hereby ratified by the shareholders of the Company.”

“RESOLVED FURTHER THAT the Board of Directors of the Company be and is hereby authorized to do all such acts, deeds and things as may be necessary, proper or expedient to give effect to this resolution.”

**Item No.7: Special Resolution for appointment of Shri R. Swaminathan (DIN: 01811819) as an Independent Director for second term**

“RESOLVED THAT Shri R. Swaminathan (DIN: 01811819), who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Sections 149 and 161(1) of the Companies Act, 2013 w.e.f. 01.12.2018 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing, from the Director himself pursuant to the provisions of Section 160(1) of the Companies Act, 2013, be and is hereby re-appointed as an Independent Director of the Company for a second term.”

**Item No. 8: Ordinary Resolution for appointment of Shri Manoj Kumar Varma (DIN: 08308714) as Director**

“RESOLVED THAT Shri Manoj Kumar Varma (DIN: 08308714), who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Section 161(1) of the Companies Act, 2013 w.e.f. 19.12.2018 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing, from the Director himself pursuant to the provisions of Section 160(1) of the Companies Act, 2013, be and is hereby appointed as a Director of the Company, liable to retire by rotation.”

**Item No.9: Ordinary Resolution for appointment of Shri Rajesh Sharma (DIN: 01586332) as an Independent Director**

“RESOLVED THAT Shri Rajesh Sharma (DIN: 01586332), who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Sections 149 and 161(1) of the Companies Act, 2013 w.e.f. 20.02.2019 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing, from the Director himself pursuant to the provisions of Section 160(1) of the Companies Act, 2013, be and is hereby appointed as an Independent Director of the Company.”

**Item No.10: Ordinary Resolution for appointment of Shri Kamalesh Das (DIN: 08376769) as Director**

“RESOLVED THAT Shri Kamalesh Das (DIN: 08376769), who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Section 161(1) of the Companies Act, 2013 w.e.f. 01.03.2019 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing, from the Director himself pursuant to the provisions of Section 160(1) of the Companies Act, 2013, be and is hereby appointed as a Director of the Company, liable to retire by rotation.”

**Item No.11: Ordinary Resolution for appointment of Shri Amit Varadan (DIN: 08401348) as Director**

“RESOLVED THAT Shri Amit Varadan (DIN: 08401348), who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Section 161(1) of the Companies Act, 2013 w.e.f. 27.03.2019 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing, from the Director himself pursuant to the provisions of Section 160(1) of the Companies Act, 2013, be and is hereby appointed as a Director of the Company.”

**Item No.12: Ordinary Resolution for appointment of Dr. Nalin Shinghal (DIN: 01176857) as Director**

“RESOLVED THAT Dr. Nalin Shinghal (DIN: 01176857), who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Section 161(1) of the Companies Act, 2013 w.e.f. 08.07.2019 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing, from the Director himself pursuant to the provisions of Section 160(1) of the Companies Act, 2013, be and is hereby appointed as a Director of the Company.”

**Result of the Electronic Voting and Poll on the Ordinary and Special Businesses at the 55<sup>th</sup> Annual General Meeting of the Company:**

No. & Resolution	Particulars of Votes cast						
		Electronic Voting		Poll		Voting Result	
		Nos. (A)	%	Nos.(B)	%	Nos.(A)+(B)	%
<b>Ordinary Business</b>							
1. Ordinary Resolution for adoption of Financial Statements of the Company for the Financial year ended 31 <sup>st</sup> March, 2019 together with the Directors' Report and Auditors' Report thereon	Votes cast in FAVOUR	3180555480	100	2716	0	3180558196	100
	Votes cast AGAINST	1860	0	0	0	1860	0
	Abstained Votes	6124823	--	0	--	6124823	--
2. Ordinary Resolution for declaration of Dividend for the financial year 2018-19	Votes cast in FAVOUR	3182430069	100	2716	0	3182432785	100
	Votes cast AGAINST	1781	0	0	0	1781	0
	Abstained Votes	4250313	--	0	--	4250313	--

3. Ordinary Resolution for re-appointment of Shri Subodh Gupta (DIN: 08113460), who retires by rotation	Votes cast in FAVOUR	3070221863	97.88	2716	0	3070224579	97.88
	Votes cast AGAINST	66564610	2.12	0	0	66564610	2.12
	Abstained Votes	37489418	--	0	--	37489418	--
4. Ordinary Resolution for re-appointment of Shri S. Balakrishnan (DIN: 07804784), who retires by rotation	Votes cast in FAVOUR	3063007562	97.65	2716	0	3063010278	97.65
	Votes cast AGAINST	73778909	2.35	0	0	73778909	2.35
	Abstained Votes	37489418	--	0	--	37489418	--
5. Ordinary Resolution to authorize the Board of Directors to fix the remuneration of the Auditors for the year 2019-20	Votes cast in FAVOUR	3172036156	99.67	2716	0	3172038872	99.67
	Votes cast AGAINST	10395694	0.33	0	0	10395694	0.33
	Abstained Votes	4250313	--	0	--	4250313	--
<b>Special Business</b>							
6. Ordinary Resolution for ratification of Remuneration of Cost Auditors for financial year 2019-20	Votes cast in FAVOUR	3182423071	100	2716	0	3182425787	100
	Votes cast AGAINST	8779	0	0	0	8779	0
	Abstained Votes	4250313	--	0	--	4250313	--
7. Special Resolution for appointment of Shri R. Swaminathan (DIN: 01811819) as an Independent Director for second term	Votes cast in FAVOUR	3169656247	99.60	2716	0	3169658963	99.60
	Votes cast AGAINST	12775577	0.40	0	0	12775577	0.40
	Abstained Votes	4250338	--	0	--	4250338	--
8. Ordinary Resolution for appointment of Shri Manoj Kumar Varma (DIN: 08308714) as Director	Votes cast in FAVOUR	3070319143	97.88	2716	0	3070321859	97.88
	Votes cast AGAINST	66467330	2.12	0	0	66467330	2.12
	Abstained Votes	37489418	--	0	--	37489418	--

9. Ordinary Resolution for appointment of Shri Rajesh Sharma (DIN: 01586332) as an Independent Director	Votes cast in FAVOUR	3182419605	100	2716	0	3182422321	100
	Votes cast AGAINST	12216	0	0	0	12216	0
	Abstained Votes	4250342	--	0	--	4250342	--
10. Ordinary Resolution for appointment of Shri Kamalesh Das (DIN: 08376769) as Director	Votes cast in FAVOUR	3070317491	97.88	2716	0	3070320207	97.88
	Votes cast AGAINST	66468982	2.12	0	0	66468982	2.12
	Abstained Votes	37489418	--	0	--	37489418	--
11. Ordinary Resolution for appointment of Shri Amit Varadan (DIN: 08401348) as Director	Votes cast in FAVOUR	3056527970	97.44	2716	0	3056530686	97.44
	Votes cast AGAINST	80258502	2.56	0	0	80258502	2.56
	Abstained Votes	37489418	--	0	--	37489418	--
12. Ordinary Resolution for appointment of Dr. Nalin Shinghal (DIN: 01176857) as Director	Votes cast in FAVOUR	3168154839	99.55	2716	0	3168157555	99.55
	Votes cast AGAINST	14276981	0.45	0	0	14276981	0.45
	Abstained Votes	4250342	--	0	--	4250342	--

*All the above resolutions, which were put to vote, were passed with requisite majority.*

-sd/-  
(Dr. Nalin Shinghal)  
Chairman

Date: 01.10.2019  
Place: New Delhi

**Annexure-I**

**Chairman's Address  
55<sup>th</sup> Annual General Meeting  
19<sup>th</sup> September, 2019**

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Ladies and Gentlemen,

Namaskar!

On behalf of the Board of Directors, I take this opportunity to extend a very warm welcome to all of you in the 55<sup>th</sup> Annual General Meeting of your company.

It is an honour and a privilege for me to present the 55<sup>th</sup> Annual Report to our valued shareholders. The Annual Report for the year ending 31<sup>st</sup> March 2019 is with you, and with your permission, I shall take it as read.

I am glad to share with you that your company has registered profitable growth during 2018-19, while continuing to contribute to the nation-building endeavors. This performance is remarkable in the face of continuous decline in the market for the company's traditional product lines, and the moderate performance of the domestic capital goods industry.

**Key Performance Highlights**

Some key highlights of your company's performance in the year are:

- Your company recorded a turnover of Rs. 29,349 Crore, compared to Rs. 27,850 Crore in the year before, achieving an increase of 5.4%.
- We achieved Profit Before Tax of Rs. 2,058 Crore, compared to Rs. 1,585 Crore in the year before, registering an increase of 30%.
- Profit After Tax stood at Rs. 1,215 Crore, compared to Rs. 807 Crore in the year before, registering an increase of 51%.
- For the year 2018-19, your company is proposing to pay a dividend of 100%, maintaining its impeccable track record of paying dividends uninterruptedly for over four decades.
- Prudent strategies enabled your company to book orders worth Rs. 23,859 Crore during 2018-19 in the face of subdued business environment and increased competitive intensity. This includes orders worth Rs. 15,490 Crore in the Power segment, Rs. 7,016 Crore in the Industry segment and Rs. 1,353 Crore in the Overseas segment. The company ended the year with a total order book of about Rs. 1,09,000 Crore.

- Your company has firmly established itself as a leader in the domestic emission control equipment market for thermal power plants with more than 40% market share, by securing orders for 32 FGD packages and 11 SCR packages.
- 5,903 MW of power plant capacity was commissioned or synchronized by your company including 5,610 MW of utility sets, 168 MW of industrial sets and 125 MW in overseas markets. Additionally, 65 MW of solar photovoltaic plants were also commissioned.
- The worldwide installed base of power generating equipment supplied by your company has exceeded 185 GW. BHEL-built thermal power generating sets generated an all-time high of 610 billion units of electricity, accounting for 60% of the total thermal power generated in the country.
- As a testimony to the quality of our products, BHEL built thermal sets continued to demonstrate operating excellence with an overall operational availability of 85%, with 205 sets registering operational availability above 90%.
- BHEL's nuclear sets registered an operational availability of 74%, with three nuclear sets achieving operational availability above 90%.
- NPCIL's 220 MW Kaiga Unit-1, equipped with BHEL-supplied sets, has created a world record for longest continuous operation for 962 days.

### **Economic & Business Environment**

Global economic growth has remained subdued for the past three years, and this is expected to continue in the near term. In this scenario, Indian economy has become one of the fastest-growing major economies in the world. Indices of major core industries, such as steel, cement and electricity have increased consistently over the last few years. India has become the second largest producer of steel and cement and the third largest producer of electricity in the world. The government's vision of India as a \$5 Trillion economy by 2025 is presenting new growth opportunities to engineering and manufacturing companies like BHEL.

Most segments of India's manufacturing sector, which will be key contributors towards the achievement of this vision, will require capacity expansion as well as continuous and dependable electricity supply.

The government's focus on '24x7 Power for All' is expected to unlock the dormant potential of demand for electricity. Other significant initiatives, such as implementation of emission control norms for thermal power plants, push for augmentation of nuclear power generation capacity, optimization of use of natural resources in power plants, and modernization of transmission and distribution network are providing newer avenues of growth to the industry. For

our existing product lines, which were seeing contraction for the past few years, this holds promise for improved growth.

Your company has already begun to capitalize on some of the opportunities arising out of the investments in transportation infrastructure such as rail track electrification, etc. While building further on these successes, we will also focus on other areas, such as urban metro rail and high speed rail projects. The government's thrust on indigenization of manufacturing in aerospace and defence sector also holds significant growth potential for your company with its past record as a longstanding and dependable defence supplier.

Future investments in core industries like cement, coal, petrochemical and steel, and developments in urban infrastructure such as Smart-cities, Waste-to-Energy, water management, etc. are encouraging developments for us to chart out new areas for growth.

### **Foundations for Growth**

With its rich and diversified talent pool, strong engineering and manufacturing base and technology depth, your company is well positioned to harness the existing as well as emerging opportunities. In the coming year, the company is focusing on consolidation to strengthen foundations for future growth through:

1. Focus on Execution:

Your company will be focusing on reviewing and tightening up of the execution methodology for expeditious completion of projects. This has a twofold objective - on one hand this will help the company to promptly realize the outstanding dues in projects where large proportion of work is done but dues are not realized due to some pending milestones, and on the other hand, it will help the company to formulate a strategy for cost and time efficient execution in the increasingly competitive environment.

2. Working Capital:

Your company is making focused efforts for recovery of long due amounts to improve the working capital position and generate funds for future growth.

3. Quality:

World class quality and ruggedness of products and systems supplied by your company have always been a great source of competitive strength. To keep the company aligned with the increasingly stringent quality requirements of the market, a companywide Quality First movement is being taken up.

4. Investing in People:

BHEL has always believed that its employees are its biggest assets and drivers for further growth of the company. In this direction, the company is taking up a

major HR Excellence initiative for sharpening the skills of its people, and preparing them for the evolving market scenario.

To further improve managerial, behavioral, leadership & technical capabilities of our employees, in alignment with our business priorities, structured programs are conducted in-house as well as at academic institutions of repute.

5. Expansion & Diversification:

BHEL is working on a range of new products/systems for diversification into areas like transportation, defence, E-Vehicles, water business, coal to methanol, etc. to develop new drivers of growth.

Your company is geared to maintain its share in the existing portfolio of power business and is upgrading the product profile to harness new opportunities in emission control equipment/systems, development of digital technologies and optimization of natural resources like fuel and water.

Some of the strategic diversification moves being made by your company include:

- a. Foray into rail-based logistics terminal business.
- b. Manufacturing space grade Li-ion cells indigenously based on technology developed by ISRO.
- c. Scaling up its operations in the solar PV segment.
- d. Partnering with the Indian railways for setting up pilot solar power plant on vacant land of Railways for feeding power to the traction system.

6. Technology Development:

BHEL places strong emphasis on innovation and technology development. The R&D efforts of your company are aimed not only at improving the performance and efficiency of existing products, but also at developing new products using state-of-the-art technologies and processes.

Investing more than 2.5 % of its turnover on R&D during the year, your company filed the highest ever 558 patents and copyrights during the year, enhancing the company's intellectual capital to 4,561 patents and copyrights filed.

Some of the noteworthy technological developments for the year are:

- a. Along with NTPC and IGCAR, BHEL is developing the world's most efficient Advanced Ultra Supercritical technology (AUSC) for coal fired power plants. As you may be aware, BHEL along with NTPC will set up an AUSC based 1x800 MW technology demonstration power plant at NTPC, Sipat, Chhattisgarh. On 24<sup>th</sup> of July this year, we have signed an MoU with NTPC Limited for the same.

With this cleaner and economic source of power from coal, new streams of opportunities are expected to be created for your company.

- b. Significant developments in transportation business for your company during the year include successful in-house development and commercial supply of regenerative braking system for 5000 HP WAG 7 electric locomotives for the first time in the country, and also supply of first in-house manufactured 6000 HP WAG 9H electric locomotives to Indian Railways.
- c. BHEL has indigenously developed various products for the E-Vehicle business.

The company has also received a mandate from Department of Heavy Industry to establish solar charging stations along the Delhi-Chandigarh highway, work on which began in the last quarter of Financial Year 2018-19. I am glad to share with you that the Hon'ble Minister of Heavy Industries & Public Enterprises inaugurated 5 such charging stations recently.

We are confident that such strategic initiatives will further strengthen the base of your company, and set the stage for rapid growth in years to come.

### **Governance & Sustainable Development**

Your company conducts its business with the highest legal, ethical and professional standards for stakeholders' prosperity and growth on a sustainable basis.

As a committed corporate citizen, your company undertook various socio-economic and community development programmes to promote education, improvement of living conditions, health and hygiene in villages and communities located in the vicinity of its manufacturing plants and project sites spread across the country.

Your company is actively involved in the skill development initiatives of the Government of India. During 2018-19, 20775 trainees were trained under various skill development schemes, in addition to 6,022 ITI apprentices in different trades.

Under the Government of India's 'Swachh Bharat' and 'Clean Ganga' initiatives, among other initiatives, BHEL is providing financial support for 25 clusters of bio-digester toilets near the banks of the river Ganga in Haridwar & Rishikesh.

As testimony to its commitment towards the environment, your company has established solar PV stations of capacity totaling 27.5 MW in the premises of its major manufacturing plants. During the year, a carbon footprint avoidance of nearly 26,499 Metric Tonnes of Carbon Dioxide – equivalent was achieved from the energy generated from this capacity, compared to 15,454 MT in the previous year.

The good work done by your company is also being recognized by way of numerous awards and laurels that it is winning. It is matter of pride that 88 BHEL employees have been selected for 20 out of the total 28 Vishwakarma Rashtriya Puraskars for the year 2017. Other major awards include the Dun & Bradstreet Corporate Award 2018 in the 'Engineering Projects/Capital Goods' category, ICAI National Award for Excellence in Cost Management 2017, Safety Innovation Award 2018 from 'The Institution of Engineers', CSR Times Awards 2018 in the 'Livelihood' category, etc.

I would like to express my deep gratitude and appreciation for the continued faith of our esteemed shareholders, customers, business associates, and all others partners in our journey. Engagement and support from each member of the BHEL family, and my fellow directors on the Board remains our source of strength. I would like to thank various ministries of the Government of India, particularly the Department of Heavy Industry, for their continuous guidance and support in our endeavors.

I am confident that with your continued support, we will continue to grow and contribute towards building a 'New India'.

Thank you.  
Jai Hind!

-sd/-  
(Dr. Nalin Shinghal)  
Chairman & Managing Director

New Delhi  
September 19, 2019