



भारत हेवी इलेक्ट्रिकल्स लिमिटेड Bharat Heavy Electricals Limited



अध्यक्ष का सम्बोधन Chairman's Address

September 19, 2019 | New Delhi

55 वीं वार्षिक आम बैठक th Annual General Meeting

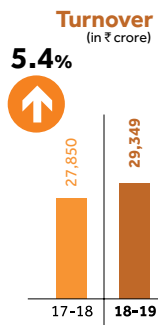


Dr. Nalin Shinghal
Chairman & Managing Director, BHEL

Ladies and Gentlemen,

नमस्कार !

*.... your company
has registered
profitable growth ...
while continuing to
contribute to nation-
building endeavors.*



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

It is an honour and a privilege for me to present the 55th Annual Report to our valued shareholders. The Annual Report for the year ending 31st 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 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

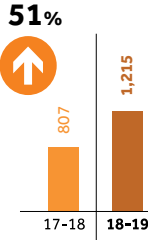
Some key highlights of your company's performance in the year are:

- Your company recorded a turnover of ₹29,349 Crore, compared to ₹27,850 Crore in the year before, achieving an increase of 5.4%.



Hon'ble Prime Minister, Sh. Narendra Modi being briefed about Panki TPS by the then CMD, BHEL in the presence of the then Hon'ble Governor, and Hon'ble Chief Minister of Uttar Pradesh

Profit After Tax (in ₹ crore)



.... leader in the domestic emission control equipment market more than 40% market share....

- We achieved Profit Before Tax of ₹2,058 Crore, compared to ₹1,585 Crore in the year before, registering an increase of 30%.
- Profit After Tax stood at ₹1,215 Crore, compared to ₹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 ₹23,859 Crore during 2018-19 in the face of subdued business environment and increased competitive intensity. This includes orders worth ₹15,490 Crores in the Power segment, ₹7,016 Crores in the Industry segment and ₹1,353 Crores in the Overseas segment. The company ended the year with a total order book of about ₹1,09,000 Crores.
- 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.

Unit 1 of Kaiga (Nuclear Power) Generating Station, equipped with BHEL sets, established a world record for longest continuous operation for 962 days



BHEL is the only Indian company to be associated with all the three stages of India's nuclear power programme

- 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

...government's vision of India as a \$5 Trillion economy presenting new growth opportunities

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.

Making Locomotives More Energy Efficient - BHEL make 5000 HP WAG-7 electric locomotive with regenerative braking system developed by BHEL



*urban infrastructure...
smart cities, waste-
to-energy, water
management
... to chart out new
areas of growth*

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.



800 MW Kothagudam Supercritical Thermal Power Project on EPC basis - commissioned in a record time of 46 months

Foundations for Growth

...expeditious completion of projects ... for prompt realisation of outstanding dues & cost & time effective execution

.... keep the company aligned with the increasingly stringent quality requirements ... Quality First movement is being taken up.

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



Foraying into Water Solutions - BHEL has successfully completed the installation of purification system of Telibandha lake in Raipur

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

*...upgrading product
profile to harness new
opportunities...
emission control
systems... digital
technologies
optimisation of ... fuel
and water*

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.



BHEL - a proud contributor to India's space programme

*2.5 % of its turnover
on R&D... highest in
the Indian engineering
field*

*558 patents and
copyrights during the
year...
Total Intellectual
capital of 4561
patents & copyrights*

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



Creep testing of advanced materials for AUSC power plant applications in progress at Corp. R&D - BHEL Hyderabad

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 24th 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.

... the world's most efficient Advanced Ultra Supercritical technology (AUSC) for coal fired power plants ... to set up a 1x800 MW technology demonstration power plant....

- 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 Industries to establish solar charging stations along the Delhi-Chandigarh highway, work on which has already begun 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.

5 MW Solar Photovoltaic power plant with in-house developed Passive Solar Tracker system at BHEL Haridwar



Governance & Sustainable Development

.... carbon footprint avoidance of nearly 26,499 Metric Tonnes of Carbon Dioxide – equivalent.... compared to 15,454 MT in the previous year.

...88 BHEL employees... 20 out of the total 28 Vishwakarma Rashtriya Puraskars for 2017-18.

As a committed corporate citizen, your company undertook 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 27.5MW 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 2017-18. Other major awards include the Dun & Bradstreet Corporate Award 2018 in the 'Engineering Projects/Capital Goods' category, ICAI National Award for Excellence



BHEL has a human capital base of ~35,000 employees

*we will continue to
grow and contribute
towards building a
'New India'.*

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.

जय हिन्द !

New Delhi
September 19, 2019

Yours sincerely,



(Dr. Nalin Shinghal)
Chairman & Managing Director

Guiding us all the way...



Hon'ble Union Minister for HI&PE, Sh. Arvind Sawant, inaugurating Solar powered Electric Vehicle (EV) Charging Stations setup by BHEL on Delhi-Chandigarh Highway under DHI's FAME-I India scheme



Hon'ble MoS for HI&PE & Parliamentary Affairs, Sh. Arjun Ram Meghwal, at BHEL Corporate Office in New Delhi



Dr. A. R. Sihag, Secretary (HI) at BHEL's stall at xEV Localisation Conference & Exhibition at New Delhi



Leadership at BHEL : Board of Directors

Standing from left to right

Shri Rajesh Sharma
Independent Director

Shri Kamalesh Das
Director (Engineering, R&D)

Shri Manoj Kumar Varma
Director (Power)

Shri Subodh Gupta
Director (Finance)

Shri Ranjit Rae
Independent Director

Shri S. Balakrishnan
Director (Industrial Systems & Products)

Sitting from left to right

Shri D. Bandyopadhyay
Director (Human Resources)

Shri Amit Varadan
Joint Secretary, DHI : Part-time Official Director

Dr. Nalin Shinghal
Chairman & Managing Director

Shri R. Swaminathan
Independent Director

Shri Desh Deepak Goel
Independent Director



भारत हेवी इलेक्ट्रिकल्स लिमिटेड

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Corporate Identity Number : L74899DL1964GOI004281



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