



Sustaining Leadership...
Engineering New Growth Avenues



Chairman's Address
49th Annual General Meeting
20th September, 2013

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Ladies and Gentlemen,

On behalf of the Board of Directors, I extend a very warm welcome to all of you to the 49th Annual General Meeting of your company. The report of the Directors and the Audited Accounts for the year ending 31st March 2013, along with the reports of Auditors and comments of the Comptroller and Auditor General have already been circulated to the shareholders, and with your permission, I shall take them as read.

India's economy has grown at an impressive pace over the last two decades as a result of wide-ranging structural reforms to open up the economy and make it more competitive. More recently, activity has slowed, reflecting not only the weak global environment but also the emergence of strains created by the pressure that rapid economic growth has put on energy, natural resources, infrastructure and skills. Resultant bottlenecks have truncated GDP for the year 2012-13 to just 5% against the average of 8% during 2007-12. Prevailing economic and business environment do not give assurance of recovery in economic and business environment in near future.

The year 2012-13 has been a defining one for BHEL as we became a 'Maharatna' company, crossed ₹ 50,000 Crore turnover mark and achieved the highest ever addition of 10,340 MW to India's electricity generation capacity. While navigating through one of the most difficult economic and business environment of our times, every effort is being made to protect the interests of shareholders and enhance their wealth.

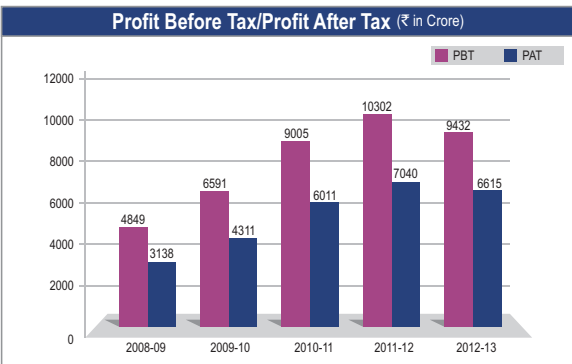
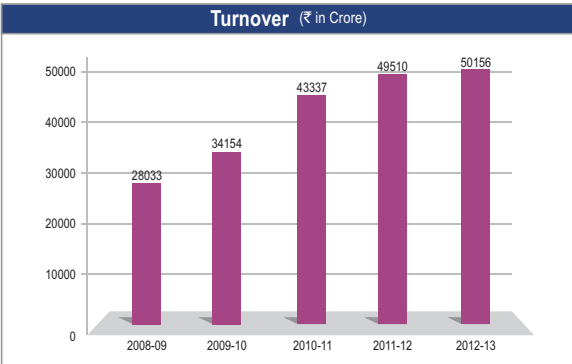
I would like to first present the key highlights of your Company's performance during the year gone by:

Key Performance Indicators

- BHEL achieved the highest ever turnover of ₹ 50,156 Crore during 2012-13 registering a growth of 1% despite adverse business conditions.
- On the back of strong focus on manufacturing efficiencies, your company achieved the Net Profit of ₹ 6,615 Crore, and we were able to maintain the level of previous five years (2007-12) average profit margins of 14% which is one of the highest among peer group companies.
- In recognition of consistent high performance over a longer period of time, your company has been bestowed with the coveted 'Maharatna' status by Govt. of India, resulting in further empowerment of the Board for greater business agility.
- A total of ₹ 31,650 Crore of orders were received by your company, which was an increase of 43% over 2011-12. It included 8 nos. of Turbo Generators (TG), 9 nos. of Boilers (SG) and 7 nos. of Electrostatic Precipitators (ESP) packages for supercritical sets. Interestingly with a market share of 67% in power sector, BHEL continues to maintain its leadership position in Indian market despite rising intensity of competition.
- Various initiatives taken by your company in the recent past for accelerated project execution have started fetching results. We were able to synchronise/commission an all time high 10,340 MW of power plant equipment including 9,328 MW in utility segment.
- Your company successfully commissioned India's first indigenously manufactured subcritical set of 600 MW rating on EPC basis at North Chennai.



Hon'ble President of India presenting the trophy conferring Maharatna status for BHEL to CMD, BHEL

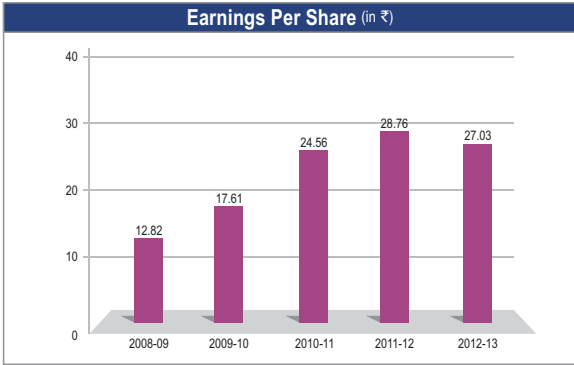


- With the objective of becoming an innovative developer of clean, efficient, reliable and affordable products, systems and technologies, we continue to relentlessly strengthen our technology and innovation capabilities. BHEL spent ₹ 1,252 Crore in R&D during the year. The highest ever 385 patents and copyrights were filed, raising the intellectual capital of BHEL to 2,170.
- Economic Value Addition (EVA) and Earnings Per Share (EPS) for 2012-13 are ₹ 2,657 Crore and ₹ 27.03 respectively.
- A final dividend of 164.5% has been recommended by the Board, in addition to the interim dividend of 106% for the year, making a total of 270.5% for the year. BHEL is maintaining a track record of paying dividends uninterruptedly since 1976-77.

Testimony to our Quality Products

Upholding the tradition of exhibiting cutting edge performance, BHEL Thermal sets (coal based) generated 486 BUs during the year 2012-13 contributing 70% to the country's generation from thermal utility sets.

The average Plant Load Factor (PLF) of coal based sets installed in India came down from 73.3% in 2011-12 to 70.0% in 2012-13 generally due to constraints in fuel supplies. But, plants with equipment manufactured by your company continued to exhibit average PLF of 73.7%, higher than national average by 3.7%. Of these, four units of 200 MW each at NTPC Singrauli, one unit of 250 MW at BSES Dahanu and one unit of 250 MW at NSPCL Bhilai achieved more than 100% PLF. Another 14 Stations registered PLF of over 90% and 21 Stations achieved PLF between 80-90%.



Figures prior to 2011-12 are restated on a post-split on number of shares on like to like basis



CMD, BHEL presenting the Interim Dividend cheque for 2012-13 to Hon'ble Union Minister of Heavy Industries & Public Enterprises



BHEL-built 200 MW (Unit 5) Singrauli STPS clocked uninterrupted operation throughout the year

Further, during the year, BHEL-supplied 195 MW and above coal based sets, which form the backbone of country's power generation, achieved PLF of 77.3% and operating availability of 89.3%.

As a testimony to the company's prowess in manufacturing superior quality equipment, BHEL's 500 MW thermal sets achieved consistent availability of more than 90% for the last six years - one unit of 200 MW at NTPC Singrauli, one unit of 500 MW at Tata Power Trombay and two units of 67.5 MW each at CESC's Southern Generating Station recorded continuous run of 365 days during the year.

Project Execution

During the year 2012-13, your company commissioned/synchronized 10,340 MW of power plants - the highest ever in a single year. This includes commissioning of 9,298 MW in utilities comprising 10 nos. of 500 MW sets, India's first indigenously manufactured subcritical set of 600 MW rating at North Chennai, 703 MW in captive sets, and 309 MW in the overseas market.

Performance of Subsidiaries

1. BHPV

In 2012-13, Bharat Heavy Plate and Vessels Ltd. (BHPV) recorded a profit of ₹ 35 Crore on a turnover of ₹ 240 Crore. The company merged with BHEL with effect from 30th August, 2013 as the 17th manufacturing unit of your company and has been renamed as Heavy Plates and Vessels Plant (HPVP), Vishakhapatnam. This unit has now become the first coast based unit of BHEL and the unit has many inherent strengths. The product profile is unique and the quality is well respected. HPVP's own products like process plant equipment, cryogenics, defence related



BHEL-supplied 500 MW (Unit 5) of Trombay TPS clocked uninterrupted operation throughout the year



2x600 MW North Chennai TPS - India's first indigenously manufactured sub-critical set of 600 MW commissioned on EPC basis



2x363 MW Gas-based Power Plant, OTPC-Palatana

equipment like Compact Heat Exchangers, Nuclear products, etc. will add to the wide product profile of your company. I am sure this will definitely prove to be a proud acquisition for your company.

2. BHEL EML

“BHEL Electrical Machines Limited”, Kasargod, was incorporated on 19th January, 2011 with BHEL holding majority stake of 51% and Govt. of Kerala retaining 49%. The company has plans to develop specialised Alternators in various fields. The subsidiary company posted a turnover of ₹ 26.53 Crore during 2012-13. We are leveraging BHEL-EML to make headway in new product areas like Alternators for Traction Applications etc.

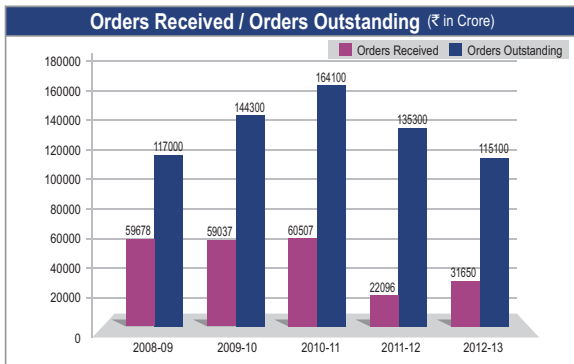
Order Inflows under Unfavourable Externalities

The Indian Power Sector is witnessing slowdown in recent years. Issues of coal linkages, environmental clearances, land acquisition and fund constraints have resulted in non-finalization of new projects especially in the private sector, and slow execution of certain ongoing projects.

In the Power Sector business segment, despite these challenges and intense competitive pressures, your company has maintained its market leadership in the domestic market for utility sets. We have secured orders worth ₹ 25,560 Crore - 82% up from last year in Power Sector. This includes orders for 8 nos. of Turbine Generator (TG) package, 9 nos. of Boilers for Supercritical sets and 7 nos. of standalone ESP Packages for supercritical sets. Nuclear Power Corporation of India Ltd. (NPCIL) has awarded TG package for 2x700 MWe Rajasthan Atomic Power Project (RAPP) Unit-7&8 to BHEL, reinforcing confidence in your company.

In Spares & Services business segment, BHEL secured orders of ₹ 2,885 Crore, which is an increase of 28% yoy. BHEL dominated in the area of ESP and C&I retrofit business and secured orders to the tune of ₹ 499 Crore against stiff international competition.

Our valued customers have appreciated a number of efforts by BHEL, viz. improvements in existing systems, completion of works ahead of schedule in challenging conditions, etc. in the form of appreciation letters, award and accolades. Appreciations were received from many reputed customers like Jindal Power Ltd., Karnataka Power



Contract signing for supply of electro-mechanical package of 720 MW Mangdechhu Hydro Power Project in Bhutan

Corporation Limited, Andhra Pradesh Power Generation Corporation Limited, Rajasthan Rajya Vidyut Utpadan Nigam Limited, Damodar Valley Corporation, MSPGCL, NTPC, TANGEDCO etc. for the excellent support given by BHEL.

In Industry Sector, BHEL secured orders worth ₹ 4500 Crore in Captive Power, Rail Transportation, Power Transmission, Oil & Gas, Renewable Energies and other industrial segments. Major orders were 2 Solar Photo Voltaic (SPV) Power plants of 10 MW each for Unchahar & Talcher from NTPC - the highest rated SPV Power Plant order received by BHEL so far, orders for 319 sets of Electrics for conventional AC EMU/DEMU, 756 nos. of Traction Motors and 252 nos. of Traction Alternators from Indian Railways.

Your company has achieved yet another landmark by entering into 765 kV transformer business, securing two significant orders: 765 kV auto transformers and shunt reactors along with other transformers from Megha Engineering & Infrastructures Ltd. for upgradation of Western UP Transmission System; 765 kV generator transformers, auto transformers and shunt reactors from BIDCO for the upcoming Lalitpur 3x660 MW TPS. The orders envisage design, manufacturing, testing and supply of total 53 nos. of 765 kV transformers and reactors that would be manufactured at BHEL's state-of-the-art transformer plant at Bhopal. BHEL's foray into 765 kV range transformers has further strengthened the position of your company in EHV segment.

In International Business, the last few years witnessed economic uncertainties and political turmoil, constraining capital investments specially in our target markets. New projects are not forthcoming and planned projects are also being put on hold or on slow execution path. In spite of



Minister of Trade & Industry, Czech Republic, presenting the EEPC Star Performer Award for the Year 2011-12 to BHEL



2x135 MW Circulating Fluidised Bed Combustion Boilers under commissioning at New Caledonia

such challenging trends, BHEL has been able to sustain its exports momentum with a physical export order inflow of ₹ 2,004 Crore from 20 countries in 2012-13, registering an eight fold growth over the previous year.

Sustaining Leadership... Engineering New Growth Avenues

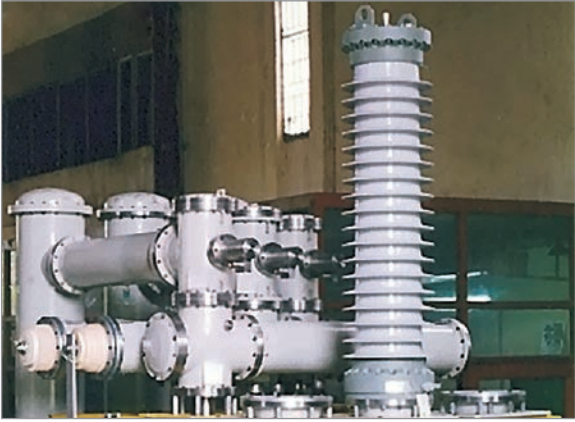
Global Competitiveness Report 2012-13 ranks India 59th amongst 144 world economies in the Global Competitiveness Index, down three places from last year. India continues to be penalized in the ranking for its largely insufficient and ill-adapted

transport, ICT, and energy infrastructure. In today's globalised economy, innovation and R&D are the source of competitiveness for a nation. However, India's economy predominantly continues to concentrate on absorption of existing technology rather than development of new products based on R&D or innovation at the global knowledge frontier.

As per a recent EEPC study, the import-export gap in engineering goods is overly negative at USD 17 billion (2012-13) despite the fact that engineering items are among the largest contributors to India's total export basket. These large imports of engineering goods are exerting pressure on the country's economy. It indicates that India has not been able to completely exploit its multitude of advantages in terms of engineering skills, a burgeoning domestic market, an established raw material base and availability of a large pool of skilled labour, which has resulted in poor industry competitiveness. We must lower the manufacturing and engineering trade deficit through development of products and systems with 'India identity' by promoting economy-wide transfer and diffusion of domestic and internationally available technologies.

Your company is doing it by adopting innovation and R&D as the key source of competitiveness for sustaining half a century of leadership in Indian market and building 'India' brand.

In alignment with the above strategy, BHEL places strong emphasis on innovation and creative development. Your company has adopted a new R&D Policy to transform R&D and innovation in a structured and focussed manner aimed not only at improving the performance and efficiency of the existing products, but also developing new products using state-of-the-art technologies and



145 kV Gas Insulated Switchgear developed in-house by BHEL

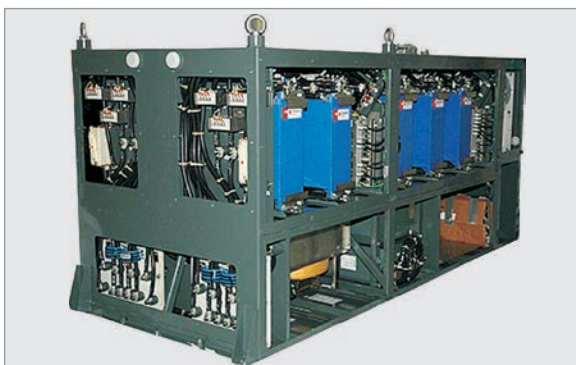
processes, relevant to the needs of the country to remain current both in terms of technology and features vis-à-vis global benchmarks. The company has identified 15 Mission Projects and 131 Technology Plans which are cascaded into more than 1500 development initiatives, with leaders and timelines defined. The company invested ₹ 1,252 Crore on R&D during the year, which is 2.5% of total turnover and 4.4% more than the previous year. This is the highest R&D spend by an Indian company in engineering and manufacturing segment. Further, in-house developed products and services clocked a turnover of ₹ 9,643 Crore, which is approx. 19% of the total turnover of the company. BHEL's efforts for encouraging innovation have resulted in raising BHEL's IPR capital tally to 2170 nos. with the highest ever IPRs (385 nos.) filed during the year.

In recent years, your company has indigenously developed, manufactured and tested 333 MVA, 1200 kV Class Ultra High Voltage Transformer for efficient bulk energy transmission systems and first 765 kV, 80 MVA single phase Shunt Reactor. Further, in response to competition, we were quick



2x660 MW Barh Supercritical Power Project under execution by BHEL

to offer 250/270/300/525/600 MW Subcritical and 660/700/800 MW Supercritical Sets to our customers. Your company successfully developed and type tested IGBT based 3-phase drive propulsion systems for Electric Loco, ACEMU and DEMU. IGBT Drive system for Electric Loco has already been installed in the 6000 HP Electric Loco. Continually striving to improve the economies of solar PV systems, BHEL has developed its largest size 300-Watt PV Module using 156-mm Size Multi



Traction Cubicle developed for IGBT based propulsion system for AC EMUs

Crystalline Silicon Solar Cells resulting in increase in production throughput. As part of its initiative to increase its portfolio of clean coal technologies, BHEL is developing Integrated Gasification Combined Cycle (IGCC) technology. Under the aegis of the National Mission on Clean Coal Technology, your company in association with IGCAR and NTPC is developing Advanced Ultra Supercritical Technology. In addition to these, your company has already developed Steam Generators for 700 MWe Nuclear power plants.

With a strong innovation ecosystem in place, your company is enhancing its competitiveness on global platform for sustaining leadership and engineering new growth avenues with the objective of fulfilling its responsibilities as a global engineering and manufacturing enterprise of India.

Positioning for the Future

We are at a critical juncture in our history as we endeavour to sustain growth momentum and engineer new growth avenues. We are proud of the



The foundation stone for BHEL's Power Equipment Fabrication Plant at Bhandara was laid by Hon'ble Chief Minister of Maharashtra. The ceremony was presided over by Hon'ble Union Minister for Agriculture & Food Processing in the presence of Hon'ble Union Minister for Heavy Industries & Public Enterprises; CMD, BHEL and other dignitaries

work your company has done to augment manufacturing capacity, enhance pace of project execution, strengthen engineering and technology capabilities, and people development in recent years.

Turning now to the future, as envisaged in Strategic Plan 2012-17 we are well positioned to steer the company towards becoming "A Global Engineering Enterprise". Major components of our strategy are expanding our offerings in Power Sector by enlarging EPC capability, enhancing share of our business in a power plant, focus on industry business, and expansion of spares & services business.

Given the high demand-supply deficit and current impasse in Indian power sector, power sector will continue to offer maximum growth opportunities in future for the company. Nevertheless, we want to diversify the portfolio of growth opportunities by augmenting capabilities in Transmission, Transportation, Defence, Water, Solar and Nuclear businesses to reduce the risk of uncertainties in power sector.

As intensity of competition is increasing, your



*Thyristor Valve modules under Di-electric testing for ± 800 kV,
6000 MW NE-Agra HVDC Project*

company is focusing on improving its cost competitiveness by making supply chain agile and accelerating project execution through sustained focus on vendor base expansion, scaling up procurement through technology initiatives, advanced manufacturing action, global sourcing, integrated operations improvement initiatives and indigenization of supercritical technology etc. In addition, as the employees of your company are getting younger, BHEL will have another lever of cost competitiveness in its favour.

We are working towards developing lower rating sets with supercritical parameters providing alternatives to the Utilities to take advantage of this eco-friendly and fuel efficient technology. Further, to expand our nuclear energy portfolio, efforts to increase scope by offering products beyond conventional island in nuclear business are under way. Considering the ageing of Indian power plants, we have constituted R&M Systems Group (RMSG) to address emerging opportunities in Renovation and Modernisation.

As we are operating in a highly integrated global business environment, your company has been exploring various avenues of collaboration with business partners for mutual growth. The benefits of our efforts over the last few years to expand the industry business have never been more apparent. Our MOU with Indian Railways for setting up a greenfield Mainline Electrical Multiple Unit (MEMU) Coach factory in Rajasthan is one such step in this direction.

Our well entrenched culture of innovation is our core strength. To uphold our reputation for excellence in our core capability, we will continue to upgrade existing products to contemporary levels and develop new products through continuous in-



BHEL's Grid Interactive Solar Power Plant - commissioned a total of 1.9 MWp SPV plants at various islands of Lakshadweep

house efforts as well as through acquisition of new technologies.

Solutions for a Better Tomorrow

Worldwide, there is an increasing realization that societal challenges arising out of poverty, environmental degradation and climate change pose an unprecedented threat to the future sustainability of business. Your company, in agreement with this concern, evinced its commitment towards environment in all its activities, products and services by providing safe and healthy working environment to all stakeholders. BHEL continued with environment improvement projects including tree-plantation, water harvesting, installation of effluent treatment plants, energy & resource conservation projects, utilization of renewable energy sources, and noise level reduction systems to mention a few. Further, as commitment towards sustainable development, BHEL is establishing a 5 MWp grid-interactive SPV power plant at its Ranipet Unit. Energy audit was completed in twenty projects during the year.

Your company strongly feels it has a higher responsibility in making its customers achieve

sustainability. This, we do by facilitating our customers manage their environmental and social impacts throughout the entire operational lifecycle of the power plants by offering them state-of-the-art engineering and technology inputs for reducing greenhouse gas emissions, water consumption, lesser auxiliary power consumption and best heat rates resulting in fuel savings.

Analysis of thermal power plant performance reports from Central Electricity Authority (CEA), India and North American Electric Reliability Corporation (NERC), USA explicitly indicates superior performance of BHEL thermal sets in terms of Plant Load factor, Operating Availability, and Forced & Planned Outages. This ultimately leads to the most optimal utilization of fossil fuels in such power plants.

Continuing with its commitment to optimum utilization of natural resources, your company has developed dynamic classifier system to improve combustion efficiency of boiler and reduction of NO_x emission. Supplementing its efforts to reduce greenhouse gas emissions, the company has geared up for the manufacture and supply of state-of-the-art pollution control equipment called Flue Gas Desulphurisation (FGD) system for removal of Sulphur Dioxide (SO₂) from flue gas.

BHEL undertook socio-economic and community development programs 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. Your company financially supported 100 brilliant girl children to pursue higher education up to Post-graduation level under program titled



BHEL financially supported 100 girls, to pursue higher education up to Post-graduation level under 'Udayan Shalini' program

'Udayan Shalini'. The company has joined hands with the Govt. of India's 'Project Udaan' for enhancing the employability of the youth of J&K.

BHEL's company-wide campaign titled 'Vision to All - BHEL's Call' resulted in more than 51,000 pledges from employees and their families for donation of their eyes. The company has also ventured into yet another noble cause for organ donation. As part of social commitment, 6,139 Apprentices were trained in the company and 8390 students/trainees from various professional institutions underwent vocational training.



"Vision to All - BHEL's Call" - Director (HR), inaugurating "Eye Donation Awareness Programme"



BHEL employees contributed one-day's salary for Uttarakhand flood victims. On behalf of BHEL employees, a cheque of ₹6.38 Crore was handed over to Hon'ble Union Minister for Heavy Industries and Public Enterprises by CMD, BHEL, in the presence of Secretary, DHI

Corporate Governance

Your company has established a sound framework of Corporate Governance which underlines commitment to quality of governance, transparency disclosures, consistent stakeholders' value enhancement and corporate social responsibility. BHEL endeavours to transcend much beyond the regulatory framework and basic requirements of Corporate Governance, focusing consistently on building confidence of its various stakeholders. The company has developed a framework for ensuring transparency, disclosure and fairness to all, especially minority shareholders.

The Corporate Governance Policy of your company rests upon the four pillars of Transparency, Full Disclosure, Independent Monitoring and Fairness to all. To strengthen this, BHEL signed an MoU with Transparency International and has adopted 'Integrity Pact'. Our corporate structure, business procedures and disclosure practices have attained a sound equilibrium with our Corporate Governance Policy resulting in achievement of goals as well as high level of business ethics.

Recognition of Excellence

Continuing its tradition of winning prestigious



*Hon'ble President of India presenting the
National Energy Conservation Award 2012 to CMD, BHEL*

national and international awards, the organization and its employees won several awards during the year 2012-13. Notable among these are India Pride Award for Excellence in Heavy Industries 2012-13; PSE Excellence Award in the R&D, Technology & Innovation; National Energy Conservation Award 2012; AIMA Managing India Award; NDTV Profit Business Leadership Award 2012; DSIJ Award for the Fastest Growing Maharatna PSU; Best PSU in the Electrical & Electronics category by Dun & Bradstreet; Golden Peacock National Training



*CMD, BHEL receiving the CII-ITC Sustainability Award from the
Hon'ble President of India*

Award 2012; 37th ELCINA-EFY Award; Enertia Award 2011; EEPC's Top Export Award; SKOCH



Winners of 'Vishwakarma Rashtriya Puraskar 2010 & National Safety Awards 2010' with Dir. (HR) & Dir. (IS&P)

Digital Inclusion 2012; BT-Star Award 2013 for Excellence in Innovation; Gold Award under the National Awards for e-Governance 2012-13; 7 - 'Prime Minister's Shram Awards' including 1 - Shram Bhushan, 5 - Shram Devi, 1 - Shram Shree and 3 - Vishwakarma Rashtriya Puraskars for innovative suggestions leading to cost reduction, higher productivity, safety and quality of products; 5 - National Safety Awards 2010 and Dainik Bhaskar India Pride Gold Award 2012.

Gratitude to all our Stakeholders

I am grateful to my fellow Directors on the Board and the members of the Management Committee for their support. I would also like to extend special thanks to each and every shareholder of BHEL, whose trust and confidence have been the motivating force in all our endeavours. I thank all our customers and business associates in India and abroad for their unstinted loyalty and steadfast patronage of our products and services. Various ministries of Government of India, particularly the Department of Heavy Industry, have been providing valuable guidance and support in all our

efforts. In fact Department of Heavy Industry has been a great source of strength for policy level interventions, export promotion and taking up issues with State governments and other departments of Govt. of India for growth of the industry. Finally, a word of thanks to more than 48,000 employees of BHEL and their families who are making these successes happen. I am extremely proud of their high level of commitment to the company and their outstanding performance over this period. I have full confidence in their ability to deliver even greater success going forward.

Five years after the global financial crisis, the economy and the industry are still reeling under the crisis of confidence in India as well as in the world. We too are affected by this crisis but we are not allowing the crisis go waste. Your company is building new competitive advantages by experimenting new ideas and methods rapidly, frequently, and economically — not only with products and services but also with business models, processes, and strategies. While we may have to go through some pains in short term, I have absolutely no doubt that your company's inherent technology strength, highly committed manpower, manufacturing prowess and innovation ecosystem will enable us to recapture the growth once Indian economy moves to another growth trajectory in near future.

With these concluding words, I look forward to your unwavering support in our challenging but exciting journey.

Thank you.



New Delhi
September 20, 2013

(B. Prasada Rao)
Chairman & Managing Director

BHEL's Management Team





A Maharatna Company

Bharat Heavy Electricals Limited

Registered Office : BHEL House, Siri Fort, New Delhi - 110049, India.

Website: www.bhel.com



Power



Transmission



Industry



Transportation



NCES



Oil & Gas

*Powering Progress... Brightening Lives
Touching Every Indian Home*