



Making in India...since 1964

Chairman's Address

52nd Annual General Meeting

September 22, 2016 | New Delhi



Atul Sobti
Chairman & Managing Director, BHEL

Ladies and Gentlemen,

Good morning and thank you for joining us today.

“...creating an organization that will thrive on its new sources of strength and its unyielding focus on execution.”

“...our team of 42,000 employees continues to work hard to achieve our immediate target of regaining growth.”

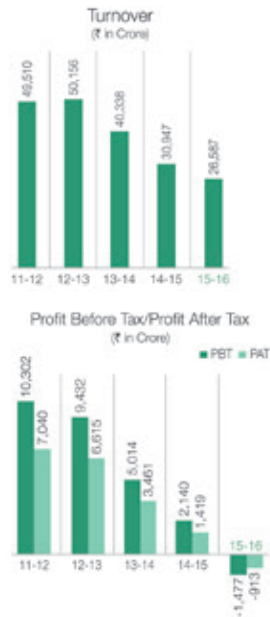
On behalf of the Board of Directors, I take this opportunity of extending a very cordial welcome to you all in the 52nd Annual General Meeting of your company. The Annual Report for the year ended 31st March 2016 has been with you and with your permission, I shall take it as read.

I am extremely humbled today, as I deliver my first address in this meeting as the Chairman and Managing Director of your company, after assuming the office on January 1, 2016. While reflecting on the year gone by, I also intend to give you a glimpse of the future direction of your company, and share with you the steps we are taking in this journey of transforming and creating an organization that will thrive on its new sources of strength and its unyielding focus on execution.

2015-16 was a very challenging year for your company. The volatility in economic and business environment is changing the way we operate and create wealth for our shareholders. However, I assure you that our team of 42,000 employees continues to work hard to achieve our immediate target of regaining growth.



3x660 MW supercritical unit of Lalitpur Super Thermal Power Project (STPP) commissioned by BHEL



The Year That Was

Your company is in the midst of the toughest times it has faced since its inception. The uncertain global economic order caused by weak recovery, volatile commodity prices, slowing trade and, China's growth transition is the 'new normal'. The desired pace of growth continues to elude the domestic industrial sector as it faces continued pressure from subdued capex and capacity underutilization. Power generation equipment industry, in particular, has been facing a tough time for the last few years, accentuated by the ongoing energy transition. However, we are seeing traction from the government to revive stressed projects, bring reforms in DISCOMs and fast track clearances for new projects. However, Capital Goods sector being a long-cycle business, tends to lag the general economy both in downturn and recovery. Additionally, geopolitical disturbances in our target export markets and fluctuating energy prices have also dampened the international business. The overall subdued business environment due to these factors and the current business mix affected the financial performance, with the company registering a turnover of ₹ 26,587 Crore and a net loss of ₹ 913 Crore during the year.

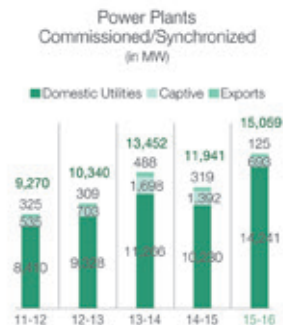
“... seeing traction from the government to revive stressed projects, bring reforms in DISCOMs and fast track clearances for new projects.”

But, *the real strength of an organization lies in discovering opportunities in its challenges.* This is what we believe in, and despite the hurdles, we have achieved some outstanding benchmarks in 2015-16 which reflect your company's strong fundamentals:



4x125 MW Kosti TPS, Sudan commissioned by BHEL on EPC basis

“...unprecedented feat in the execution... commissioning/synchronizing an all-time high 15,059 MW...”



“500 MW Kosti TPS - Sudan's largest... two 220 kV substations in Afghanistan... commissioned by BHEL.”

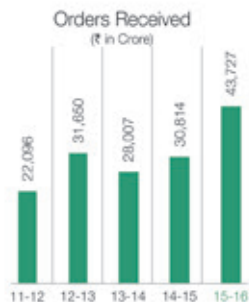
Project Execution

- An unprecedented feat in the execution of projects was achieved by commissioning/synchronizing an all-time high 15,059 MW of power generation equipment, up by 26% from the previous year. With this, the worldwide installed base of power generating equipment supplied by BHEL has exceeded 1,70,000 MW.
- This includes capacity addition by utility projects aggregating to 13,061 MW, up by 23% against the capacity addition target set by the Ministry of Power and 59% more than the achievement of previous year.
- 2,980 MW (including three supercritical sets) was added during 2015-16 under the Power Development Program of Uttar Pradesh State by BHEL, which is a landmark achievement.
- Like in 2014-15, all the hydroelectric power projects that went on stream in India, during 2015-16, totalling 810 MW, were commissioned by BHEL.
- Commissioned the Pole -1 of ± 800 kV, 6000 MW Multi terminal NE-Agra HVDC Project, the largest HVDC transmission project in the world.
- 500 MW Kosti TPS - Sudan's largest thermal power plant, and two 220 kV substations in Afghanistan were commissioned by BHEL.



India's first 1,000 MW Nuclear Set at Kudankulam -1 synchronized by BHEL

“...booked orders worth ₹ 43,727 Crore... highest in the last five years...”



“55% of the total supercritical sets commissioned in the country ... contributed by BHEL.”

Order Booking

- Your company booked orders worth ₹ 43,727 Crore - the highest in the last five years, with 42% growth over 2014-15. With this, the company has orders worth ₹ 1,10,730 Crores for execution in 2016-17 and beyond.
- This includes country's largest-ever order in utility segment- 5x800 MW Yadadri TPS from TSGENCO; first 800 MW supercritical orders from TANGEDCO, i.e., 1x800 MW North Chennai Stage III & 2x800 MW Uppur; three major orders of 765 kV substations under stiff international competitive bidding for the National Green Energy Corridor project; and first commercial order for 400 kV GIS.

Supercritical Portfolio

- BHEL has been at the forefront to install environment-friendly supercritical coal-fired power plants within the country. Orders for 48 Steam Generators (SG) & 41 Turbo-Generators (TG) for supercritical plants have been secured till FY16. Ten SG sets and eight TG sets have been commissioned, out of which four SG & two TG sets are in successful operation for more than one year.
- 55% of the total supercritical sets commissioned in the country during 2015-16 were contributed by BHEL.
- Company's first highest rating 800 MW supercritical set at RPCL Yeramarus and first 700 MW supercritical set at KPCL Bellary have been successfully commissioned.



Valve Hall at ± 800 kV, 6000 MW Multi terminal NE-Agra HVDC Project, the largest HVDC transmission project in the world

“...invested 3.36% of its turnover on R&D ... enhancing its intellectual capital to 3,441 patents and copyrights...”

Innovation led Growth

With strong focus on innovation and creative development, your company invested 3.36% of its turnover on R&D during the year. Your company also filed the highest-ever 477 patents and copyrights in a year, enhancing its intellectual capital to 3,441 patents and copyrights filed, which are in productive use in the company's business.

We are proud of our achievements but are fully aware of the looming challenges. The company is addressing them with its persistent efforts and not only capitalizing on the new opportunities, but also building capability to tackle such challenges. As an organization, we cannot influence most of the external factors but can definitely change what is going on within us. It is time for your company to embrace the new and adapt to the market realities. The new journey has begun.

Creating BHEL of Tomorrow



In this journey of 'creating BHEL of tomorrow', it is our passionate endeavour to transform BHEL into an organization which is '**Responsive, Robust and Rising**' to the needs of its stakeholders. This involves orienting our strategy towards enhancing responsiveness by delayering and being simple; building new sources of strength for a robust future and effective diversification to attain a balanced portfolio for creating a sustainable and rising organization. I firmly believe that this will be the bedrock of our growth in the coming years.



जल जनित # 1
HYDRO GENERATOR # 1

CCB # 1

4x200 MW Koldam Hydroelectric Project (HEP) commissioned by BHEL

“... focusing on Execution, Consolidation and Simplification...”

“...derive this strength from our deep-rooted focus on research & development... focusing on the people development strategy...”

Responsive BHEL!

What we choose to embrace, to be responsive of, is a reflection of our intent. With a view to create a more agile organization, we are focusing on **Execution, Consolidation and Simplification (ECS)** as the first step. In this process, we are identifying the weak links and putting in place an organization structure that is more productive and that enables us to achieve higher operational efficiency. At the same time, we are reviewing and realigning our systems, policies and processes to move towards simplification by eliminating low value added activities. Accelerated execution is one of the most important factors for us to be responsive to customer's needs. Our continual efforts in this direction have resulted in commissioning / synchronization of power projects of more than 10,000 MW per annum for the fourth consecutive year, with this year being the first to cross an all-time high mark of 15,000 MW.

Robust BHEL!

Your company is looking forward to build new strengths on the rock-solid foundation that we have built in our journey of over half of a century. We derive this strength from our deep-rooted focus on research & development. Standing true to the spirit of innovation-led growth strategy, your company has maintained R&D expenditure at plus 2.5% of the turnover for more than five years in a row. The company has also strengthened its focus on indigenization of



Manufacturing of locomotives in progress at BHEL Jhansi

“...strengthened its focus on indigenization of supercritical technology to enhance its competitiveness.”

“...put in place an organization structure to embrace IT as a strategic tool...”

supercritical technology to enhance its competitiveness. Recent in-house developments include 765 & 1200 kV UHVAC transformer & reactor, IGBT propulsion technology for locomotives and ACEMU, STATCOM for industrial & grid applications, Gas Insulated Substation (GIS) upto 420 kV, Hotel load Converter 2x500 kV for Shatabdi train (Chennai to Coimbatore), Phase Shifting Transformer (PST) and 500/630 KW Power Conditioning Unit (PCU) for solar PV generation.

As digital tools and technologies are profoundly differentiating the way business is being conducted, your company has put in place an organization structure to embrace IT as a strategic tool for opening up fresh stream of opportunities in new as well as traditional business areas.

Most importantly, to fulfil this target of a robust organization, we are focusing on the people development strategy driven by the growing aspirations of the millennial generation of the company. We are gearing up to embrace social technologies for increasing employee engagement and working towards development of employee competencies in line with the business plans through implementation of various learning & development initiatives.



Indian light combat aircraft, 'Tejas' equipped with compact and light-weight heat exchangers developed by BHEL



INS Kolkata, the lead ship of the Kolkata-class guided-missile destroyers of the Indian Navy, equipped with BHEL make 76 mm Super Rapid Gun Mount (SRGM) naval gun

Rising BHEL!

“...creating a balanced portfolio.”

“...augmenting its manufacturing capacity and enhancing EPC capability for large scale solar... plants.”

“...focusing on business opportunities in metro coaches, high speed trains... high HP locomotives.”

What will define us in the new phase of our journey is how well we rise to the impending challenges. Our goal is to create an organization which will convert problems into possibilities and leverage on the new opportunities emerging from 'Make in India'. Thus, our absolute focus is on creating a balanced portfolio of products & services with enhanced focus on non-fossil fuel based power and industry business. To harness emerging opportunities in renewables sector, BHEL is in the process of augmenting its manufacturing capacity and enhancing EPC capability for large scale solar PV based plants. Company is also working towards expansion of its defence portfolio which currently includes Super Rapid Gun Mount (SRGM) & Integrated Platform Management System (IPMS) for naval ships, thermo pressed components, compact heat exchanger for Tejas, turret castings for T72 tanks and other strategic equipment. We continue to strengthen our transmission portfolio and are set to leverage opportunities arising in HVDC business. With the revival of demand from railways, and emerging opportunities from Dedicated Freight Corridor (DFC) and urban metro transportation, company is focusing on business opportunities in metro coaches, high speed trains and equipment for high HP locomotives.

With focus on diversification, company is equally pivoted to maintain its leadership in the power sector. In order to ensure energy security, coal will continue to remain the dominant fuel for



RO membranes of Reversed Osmosis based Demineralisation (RODM) Water Plant commissioned by BHEL at RPCL Yeramarus, Karnataka

“...company is equally pivoted to maintain its leadership in the power sector.”

“BHEL, together with NTPC and IGCAR is developing world's first Advanced Ultra Super Critical (AUSC) technology for higher efficiency thermal power plants...”

power generation in the foreseeable future in view of its abundant domestic reserves and affordability. Towards this, we have focused on enlarging scope of offer and enhancing competitiveness by adding flue-gas desulfurization system, air cooled condenser, water management system and are in the process of expanding offerings for environmental solutions.

BHEL, together with NTPC and IGCAR is developing world's first Advanced Ultra Super Critical (AUSC) technology for higher efficiency thermal power plants, during the next three years. As a result of our concerted efforts, the Government of India has recently approved financial support of ₹ 900 crore (out of the project cost of ₹ 1,554 Crore) for this development. The main power plant equipment will be manufactured with advanced indigenous technologies which no other company in the world has developed so far. This will go a long way in enhancing the engineering & technological capabilities of BHEL.

Governance & Sustainable Development

Your company believes in conducting business in a manner that complies with the philosophy of Corporate Governance, exemplifies each of our core values and positions us to deliver consistent stakeholders' value enhancement, favourable outcomes to our customers, opportunities to our employees, making the suppliers our partners in progress and enriching the society. Recognising these principles and philosophy of values and



Shri Anant Geete, Hon'ble Union Minister for HI&PE addressing BHEL employees at Corporate Office, New Delhi

“...8.08 million units of energy were generated through in-house solar power installations in 2015-16.”

“In line with the Hon'ble Prime Minister's vision for skill development, BHEL trained more than 11,000 vocational trainees and ... 7,000 Act apprentices ...”

their practice, your company's excellence and the achievements of its employees won many recognitions during the year. Major ones include the 'CBIP Award 2015' for Best Power Equipment Manufacturing Organisation by Central Board of Irrigation and Power and 'Top PSU Award 2015' from Dun & Bradstreet, India.

BHEL believes in sustainable development with focus on its economic, ecological and social tenets. Major thrust areas include efficient energy management, use of cleaner technologies, addressing the issue of social development and inclusive growth through focus on capacity building, development of backward regions and, up-liftment of the marginalised & under-privileged sections of the society.

Around 8.08 million units of energy were generated through in-house solar power installations in 2015-16. An in-house green coverage of 4.7 million sq. metres and plantation of more than 3 million trees till date is a testimony of company's commitment towards greener environment. In line with the Hon'ble Prime Minister's vision for skill development, BHEL trained more than 11,000 vocational trainees and more than 7,000 Act apprentices in 2015-16. BHEL is also providing support for installation of 25 clusters comprising 276 bio-digester toilets on the banks of river Ganga near Haridwar and Rishikesh including safe and clean drinking water facility at each location.

Leadership at BHEL

Board of Directors*



Sitting from right to left

Shri Keshav N. Desiraju, Part-time Non-official Director
Shri Rajesh Kumar Singh, Joint Secretary, DHI
Shri Atul Sobti, Chairman & Managing Director
Dr. Subhash Chandra Pandey, Additional Secretary & Financial Adviser, DIPP
Shri A.N. Roy, Part-time Non-official Director

Standing from right to left

Shri S. Biswas, Director (Engineering, R&D)
Ms. Harinder Hira, Part-time Non-official Director
Shri T. Chockalingam, Director (Finance)
Shri R. Swaminathan, Part-time Non-official Director
Shri Rajesh Kishore, Part-time Non-official Director
Shri D. Bandyopadhyay, Director (Human Resources)
Shri Akhil Joshi, Director (Power)
Shri Amitabh Mathur, Director (Industrial Systems & Products)

*- as on 10.08.2016

Partners in Our Journey

These are challenging times, but I am sure that our best years lie ahead. BHEL has the **‘strategy, structure, and staff’** to ensure that, in both good and tough times, we make steady progress. We will not leave any stone unturned in our quest to unlock the potential and take your company to greater heights. We will continue to put unwavering emphasis on creating customer value and bolster our inherent strengths to enhance shareholder value.

Finally, I would like to express my sincere gratitude to all our stakeholders: business partners including customers and vendors for reposing their faith in us, employees for their persistent commitment, members of the Board for their wisdom, members of the Management Committee for efficiently utilizing the company's resources, and you, our shareholders, for evincing trust in our ability to steer forward BHEL in these challenging times. Various ministries of Government of India, particularly the Department of Heavy Industry, have been providing valuable guidance and support in our efforts. I am confident that we will continue to receive this support in the future.

I see a challenging, yet exciting journey ahead for us—one of new beginnings, new opportunities and new horizons.

With best wishes,

New Delhi
September 22, 2016


Atul Sobti
Chairman & Managing Director



Shri Girish Shankar, Secretary (HI) during BHEL's performance review meeting at BHEL Corporate Office, New Delhi

“BHEL has the ‘strategy, structure, and staff’ to ensure... steady progress.”

India's first season-wise tiltable Canal Top Solar PV plant
commissioned by BHEL at Bhimavaram, Andhra Pradesh



Bharat Heavy Electricals Limited

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

www.bhel.com

Corporate Identity Number : L74899DL1964GOI004281