



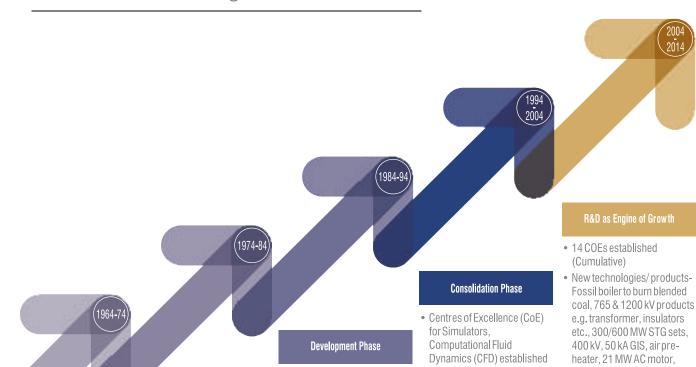


50 Years of Engineering Excellence (1964-2014)

ANNUAL REPORT 2 0 1 3 - 1 4

BHEL's Engineering & Technology Journey

Absorption/Localisation/Development of New Technologies/Products



Laying Foundation for Technology, Skills & Knowledge

- Technical Collaborations in Power Plant equipment to build base
- Focus on skill development and training in power sector technologies
- BHEL files 1st Patent-Building of Intellectual Property (IP) Capital
- Established Corporate R&D Division to generate knowwhy, enhance indigenisation pace, new technologies/ products

Creating Organisation for

Engineering & Technology

- Engineering Development Centres with Product Engineering, Field Engineering Services & Research & Product Development (RPD)
- Welding Research Institute (WRI) established
- Focus on adaptation of designs to local requirements

- Specialised Institutes e.g. CTI, PCRI, CET and ASSCP Laboratories set up to build Infrastructure and develop competencies
- System Engineering matured to deliver customer specific solutions
- Newtechnologies/products-Simulators, CFBC, Locomotives, etc.
- 2x10 MW Pithead, Bubbling Fludised Bed Combustion (BFBC), Washery rejects based power plant
- National HVDC project
- Entry into Solar PV
- New technologies/products-Pulverised Fludised Bed Gasification (PFBG) 6.2 MW IGCC Pilot Plant, 32 kV GIS Pro-control based Boiler & TG integral Controls, Two cylinder ST, Radial fans, Controllers for ESP, FACTS devices, Controlled Shunt Reactor (CSR), Phase Shifting Transformer (PST), STATCOM, Deaerator upto 1000 MW, Bowl Mill, PADO, etc.
- Remote Controlled Power Station
- Solar PV panels/batteries for Satellites

- New technologies/ products-Fossil boiler to burn blended coal, 765 & 1200 kV products e.g. transformer, insulators etc., 300/600 MW STG sets, 400 kV, 50 kA GIS, air preheater, 21 MW AC motor, permanent magnet based machines, power conditioning unit, indigenous valves, condensers, LP Heaters for supercritical range, STATCOM, IGBT based AC locos, single cylinder ST, etc.
- Technology absorption supercritical sets up to 800 MW
- IP Capital grew to 2170 nos.
- R&D spend enhanced to 2.5% of turnover
- New technologies development in 'Mission Mode' launched as part of Strategic Plan 2012-17 - Adv Ultra Super Critical (AUSC), Integrated Gasification Combined Cycle (IGCC), renewables, water, 765 kV GIS, HVDC, etc.
- Design automation and product optimisation through Knowledge Based Engineering (KBE)



CONTENTS

2 Annual Review

- 2 Letter to Shareholders
- 6 Leadership at BHEL
- 10 Year at a Glance

12 Corporate Profile

- 12 About BHEL
- 16 World of BHEL
- 18 Recognition of Excellence

20 Directors' Report

- 27 Management Discussion & Analysis
 - 28 Business Profile (Profile and Performance of Business Segments)
 - 55 Financial Performance
- 72 Brief Resume of Directors
- **76** Sustainable Development
- 83 Business Responsibility Report
- 89 Innovation

(R&D and Technological Achievements)

94 Corporate Governance

131 Annual Accounts

- 132 Annual Accounts Standalone
- 181 Subsidiary Company: BHEL-EML
- 213 Consolidated Financial Statements

250 Additional Information

- 251 Ten Years Financials
- 253 Value Addition Statement
- 254 Performance Annual Plan
- 254 Contribution to Exchequer
- 254 Enterprise Value
- 255 BHEL in India
- 256 Product Profile
- 266 Glossary

268 Notice



Letter to Shareholders



Dear Shareholders

It is a privilege to present the 50th Annual Report of your company celebrating the Golden Jubilee year of its momentous journey. BHEL has been successful in evincing a consistent performance in recent years while navigating through a strenuous business environment characterised by gradual slowdown in economic growth, fewer project finalisations and growing business complexities. Today, when many of our industry peers are finding it difficult to defy economic headwinds, your company has developed considerable *Absorptive Strength* as reflected from sustained market leadership, bottom-

e...your company has developed considerable Absorptive Strength as reflected from sustained market leadership, bottom-line performance, commendable project execution and continued focus on innovation...

ANNUAL REVIEW

50 Years of Engineering Excellence

line performance, commendable project execution and continued focus on innovation.

I would like to share some highlights of 2013-14 and provide a few thoughts on both the key focus areas of your Board and the future prospects of your company:

- BHEL has achieved a turnover of ₹ 40,338 Crore and a net profit of ₹ 3,461 Crore during 2013-14 registering a decline of 20% and 48% respectively over the last year, 2012-13. The decline is largely due to unfavourable externalities. However, I am comforted by the resilience of your company as it made a net Profit Margin of 9% which is still higher than many industry peers.
- In a market which has sharply contracted and has become fiercely competitive in recent years, your company further strengthened its leadership position with a market share of 72% in the Indian Power Sector. BHEL secured orders worth ₹ 28,007 Crore from its diversified business segments covering both domestic and international markets including a mega EPC order worth ₹ 7,900 Crore for 3x660 MW Supercritical units from NTPC for North Karanpura project against stiff international competition.
- Our pace of project execution remained healthy.
 During the year, your company synchronised/ commissioned all time high power projects of 13,452 MW which is 30% higher than last year.
- BHEL is committed to its innovation-led growth strategy. During the year, BHEL invested ₹1,114 Crore on R&D - 2.76% of the turnover. Company also filed 434 patents and copyrights, enhancing the company's intellectual capital to 2,589, which are in productive use.
- Your company is focussed on capitalising new business opportunities. MoU with SECI, PGCIL, SJVNL, SSL, and REIL for setting up a 4,000 MW Ultra Mega Solar Power Project at Sambhar, Rajasthan and plan to set up an integrated manufacturing facility for 480 MW

can operate and maintain steam generation in the extreme cases of 100% specified Indian coal as well as 100% specified imported coal.

Solar PV systems (Wafers-Cells-Modules) are significant steps in this direction.

• In view of current coal situation in the country, your company has developed new fuel flexible supercritical boilers which can operate and maintain steam generation in the extreme cases of 100% specified Indian coal as well as 100% specified imported coal. This design will ensure continuous running of the Unit at rated capacity for different types of Indian or imported coal either individually or in combination.

Preparing for Growth

Today, as BHEL celebrates the Golden Jubilee year in its journey of sustained growth and leadership, it is also a celebration of India's spectacular success in achieving self-sufficiency in the indigenous manufacture of heavy electrical equipment. Ironically, this momentous occasion falls during turbulent times. Nevertheless, company is taking prudent strategies with focus on consolidating strengths and value propositions to emerge even more competitive for tapping opportunities in the next phase of economic growth of India.

 As envisaged in Strategic Plan 2012-17, BHEL has taken various initiatives to increase

ANNUAL REVIEW



contribution in power projects, business expansion with more focus on EPC orders and enhancement of cost competitiveness. We are expanding our Power Sector portfolio by adding Flue-Gas Desulphurisation, Water Management System, Air Cooled Condenser and other Balance of Plant (BoP) Systems. Increasing level of indigenisation in Supercritical Technology, development of Advanced Ultra Supercritical power equipment and introduction of state-of-the-art CFBC technology are major strategies in Power Sector.

- Diversification of business has been receiving the focus of Management of BHEL in recent years. Capacity expansion, product development, collaboration with stakeholders, capabilities' consolidation and gaining execution experience are being pursued in various business verticals to enhance share of Industry Segment in turnover-mix.
- Your company is also exploring collaboration opportunities in target countries to grow exports business.
- Scale of operations at BHEL is emerging as key competitive advantage as it creates critical mass in power value chain. Capacity augmentation for power plant equipment manufacturing to 20,000 MW p.a, locomotive manufacturing to 75 numbers p.a, new Manufacturing Units- CSU Jagdishpur, PPPU Thirumayam, PEF Plant at Bhandara and merger of BHPV Vizag are steps undertaken by BHEL to leverage its scale.
- Company is focusing on Innovation to steer future growth by transforming its R&D capabilities in a structured & focused manner. Investments in R&D are intensified to enhance capabilities in Product Development & Engineering with plan to maintain R&D expenditure at plus 2.5% of Turnover.
- BHEL will continue to pursue its key strategy of accelerating project execution with focus on intermediate milestones, delivery cycle reduction and deployment of additional Tools & Plants.

Without resting on the past laurels, your company will continue to build on its strengths through focus on capability enhancement, project execution, cost competitiveness & quality, diversification, engineering & technology and people development as envisaged in BHEL's 6-Point Agenda \$9

- Demographic profile at BHEL is moving in favour of millennial generation resulting in gradual reduction of average age of employees, say from 48.96 yrs in 2006 to 40.84 yrs in 2013. Therefore, People Development strategy of BHEL is focusing on developing each person's competencies in alignment with business plans through implementation of initiatives like leadership development, competency mapping, performance linked pay, mentoring, Skill Development, career planning and succession planning.
- Company works with a mission of providing sustainable business solution to its customers. As decarburising power sector is at the heart of global efforts to make deep cuts in global CO₂ emissions, BHEL is committed to offer fuel efficient and environment friendly technologies and products to its customers. First BHEL make 660 MW Supercritical unit was commissioned for NTPC at Barh and first 800 MW Boiler was synchronised for APPDCL at Krishnapatnam during 2013-14.

50 Years of Engineering Excellence

Sustainability: Entrenched in Our Golden Heritage

Your company has been leveraging technology and innovation for providing products, systems and services to its customers in an environmentally sustainable and socially responsible manner while remaining profitable.

With first order for 500 MW in 1978, 660 MW and 800 MW in 2008 and 700 MW in 2010, we have been progressively introducing environment friendly and fuel efficient technologies for our customers.

While we continue to find innovative ways to reduce our carbon footprint, through world class quality equipment with performance attributes like lower auxiliary power consumption, superior boiler efficiency, better plant heat rate & PLF and finally lower life cycle cost, our consistent focus on social initiatives reiterates our belief in not just being a good corporate citizen; but aspiring to change the world for better.

Retaining Resilience

Without resting on past laurels, your company will continue to build on its strengths through focus on capability enhancement, project execution, cost competitiveness & quality, diversification, engineering & technology and people development as envisaged in BHEL's 6-Point Agenda.

I am grateful to you, our stakeholders – customers for reposing their faith in us, employees whom we recognise as our core asset for their enthusiasm, unstinted devotion, and commitment towards the quest of excellence, our Members on the Board for their wisdom and continuous support; management team for efficiently steering the company's resources and you, our shareholders for your trust and confidence. Various Ministries of Gol particularly the Department of Heavy Industry have been providing valuable guidance and support in our efforts.

I am deeply indebted to the Leaders and employees of yesteryears who have brought us here - 50

ANNUAL REVIEW

years of Engineering Excellence. Today, India is changing. Factors such as rising urbanisation, changing demography, energy security, climate change and inclusive development are transforming India. This new and changing India will have an insatiable appetite for wide range of products & services offered by BHEL. Therefore the Board of your company is confident of realising its vision of becoming a global engineering enterprise providing solutions for a better tomorrow and honouring our Golden Legacy.

I look forward to your unwavering support in this challenging but exciting process of building a vibrant India.

With best wishes,

(B Prasada Rao)
Chairman & Managing Director

New Delhi August 07, 2014

ANNUAL REVIEW



Leadership at BHEL

Board of Directors (As on 14.07.2014)



Sitting from right to left

Ms. Harinder Hira, Part-time Non-official Director

Shri B. Prasada Rao, Chairman & Managing Director

Shri S.K. Bahri, Additional Secretary & Financial Adviser, DIPP

Standing from right to left

Shri R. Krishnan, Director (Human Resource)

Shri W.V.K. Krishna Shankar, Director (Industrial Systems & Products)

Shri Ambuj Sharma, Additional Secretary, DHI

Shri P.K. Bajpai, Director (Finance)

Shri Atul Sobti, Director (Power)

Shri I.P. Singh, Company Secretary

Leadership at BHEL

Management Committee (As on 19.07.2014)



- B. Prasada Rao, CMD
- 2 P. K. Bajpai, Director (Finance)
- R. Krishnan, Director (HR)
- W.V.K. Krishna Shankar, Director (IS&P)
- 5 Atul Sobti, Director (Power)
- 6 A.V. Krishnan, ED (Trichy)
- Jainender Kumar, ED (PMG)
- B. Shankar, ED (HR&CC)
- T.N. Veeraraghavan, ED (Ranipet)
- S.C. Mittal, ED (Finance & CCG)
- 11 K.C. Ramamurthy, ED (EDN)
- (2) A.K. Dave, ED (CMT&IP, MON & MM)

- C.K. Shrikhande, ED (PSNR)
- S. Gopinath, ED (Thirumayam & PC)
- 15 Rajiv Puri, ED (PEM & ISG)
 - S.R. Prasad, ED (Bhopal)
- N. Ravi Chander, ED (HPEP, Hyderabad)
- Anuj Bhatnagar, ED (FQA & Safety)
- 19 Prakash Chand, ED (HEEP, Haridwar)
- 20 Akhil Joshi, ED (TL&JV, M&A)
- 21 Dr. S. Sekar, ED (Corp. R&D)
- 22 S.V.S. Narayana, ED (CFFP, Haridwar)
- Rajeev Srivastava, ED (SSBG)

- V. Venkata Krishnan, ED (PS-Mktg.)
- 25 S.C. Jain, ED (PSWR)
- K. Rajendran, ED (Coordination)
- K.K. Seth, ED (HRDI, NIC & CPG)
- Ramesh Koul, ED (TBG)
- B.S. Vishwanatha, ED (TSG)
- Devendra Raina, ED (IPE & IPM)
- S.N. Maiti, ED (PSTS)
- 32 M.K. Sharma, ED (PE&SD)
- Pradeep Singhal, ED (CSR, HSE & Admn)
- 34 L.K. Rawal, ED (P&D)

- 35 C.V.S.N. Murthy, ED (Renewables & Water Business)
- 660 Amitabh Mathur, ED (PSER)

Permanent Invitees

- S. Raj Sabapathy, GM-I (ROD & CFP)
- 38 R. Raghavan, GM-I (ISG)
- 39 Kamalesh Das, GM-I (CBU)
- D. Bandyopadhyay, GM-I (PSSR)
- 41 J. Sankaran, GM-I (HPVP)
- D. Guin, GM-I (IO)
- 43 M. Khasgiwala, GM-I (Jhansi)
 - 44 K. Purswani, GM-I (CQ)

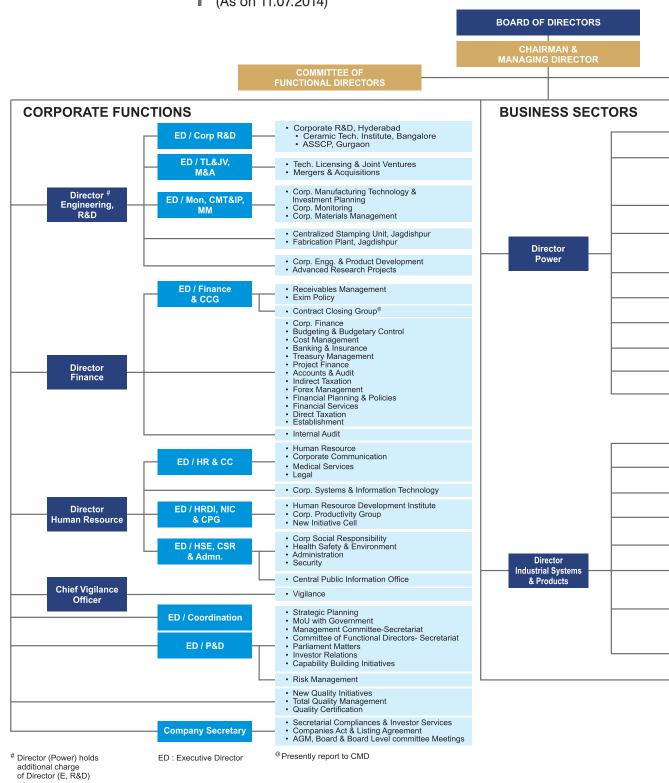
Secretary

45 K.S. Shivaprasad, GM (P&D)



Leadership at BHEL

Corporate Organisational Structure (As on 11.07.2014)



ANNUAL REVIEW



MANAGEMENT COMMITTEE **OPERATIONS** Heavy Electrical Plant, BhopalCentre for Electric Transportation, Bhopal ED / PS-Marketing · Power Sector - Marketing ED / Bhopal ED / PS-PMG · Project Management • Electrical Machine Repair Plant, Mumbai · MSX, SCT & IT Spares & Services Business Group\$ Heavy Equipment Repair Plant, Varanasi R&M Systems Group, Bhopal Transformer Plant, Jhansi ED / PS-SSBG · Heavy Electrical Equipment Plant, • Project Engineering Management Haridwar ED / PS-PEM & ISG ED / HEEP, Haridwar Pollution Control Research Institute, Haridwar · Industrial Systems Group, Bangalore ED / PS-TS · Technical Services ED / CFFP, Haridwar · Central Foundry Forge Plant, Haridwar ED / PS-ER • PS Eastern Region, Kolkata Heavy Power Equipment Plant, ED / HPEP, Hyderabad Hyderabad ED / PS-NR • PS Northern Region, NOIDA High Pressure Boiler Plant, Trichy Seamless Steel Tube Plant, Trichy Welding Research Institute, Trichy • PS Western Region, Nagpur ED / PS-WR • PS Southern Region, Chennai ED / Trichy · Industrial Valves Plant, Goindwal ED / FQA & Safety · Field Quality Assurance & Safety Piping Centre, Chennai ED / Thirumayam · IS - PMG & Contract Closing · Power Plant Piping Unit, Thirumayam Transportation Systems Group · Defence Business ED / BAP, Ranipet Boiler Auxilliary Plant, Ranipet ED / TBG • Transmission Business Group Electronics Division, Bangalore Electronics Systems Division, Bangalore ED / EDN, Bangalore • Industrial Products Business (Elect. & Mech.) ED / IPE & IPM · Captive Power Plant Business ED / Renewables & · Heavy Plates and Vessels Plant, Vizag. · Renewables & Water Business **Water Business** · Regional Operations Division • Component Fabrication Plant, Rudrapur · Electro Porcelains Division, Bangalore · Insulator Plant, Jagdishpur · Project Engg. & Systems Division, ED / PE & SD

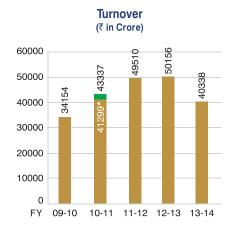
Overseas Business

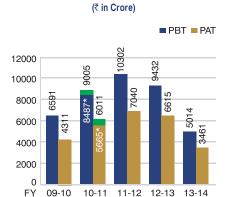
^{\$} Matrix reporting to Director (IS&P) for Industry Sector Business

ANNUAL REVIEW



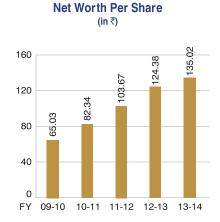
Year at a Glance

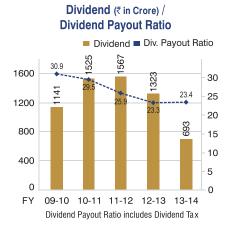


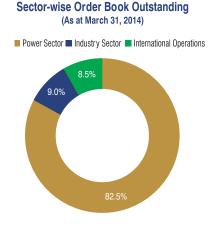


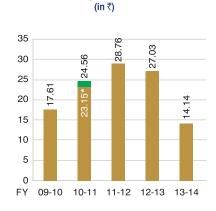
Profit Before Tax / Profit After Tax



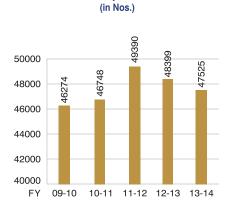




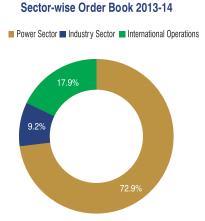




Earnings Per Share



Manpower



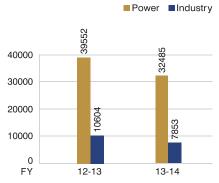
^{*}Excluding one-time impact of change in policy of warranty obligation for earlier years

50 Years of Engineering Excellence

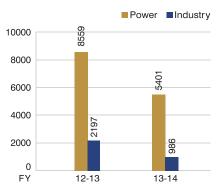
(₹ in Crore)

2013-14	2012-13
40,338	50,156
5,014	9,432
3,461	6,615
2,650	5,071
72,791	70,128
33,047	30,444
105	129
0.01	0.01
135.02	124.38
14.14	27.03
47,525	48,399
	40,338 5,014 3,461 2,650 72,791 33,047 105 0.01 135.02 14.14

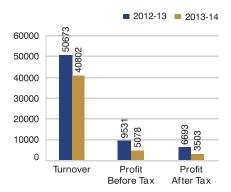
Segment-wise Revenue (₹ in Crore)



Segment-wise Results (₹ in Crore)



Consolidated Financial Performance (₹ in Crore)



13,452 MW

Commissioned / Synchronised





Market Share
72% in Indian
Power Sector

Innovation
434
Patents & copyrights filed





47,525

No. of Employees

5.02

Training Man-days per Employee





CSR & SD Expenditure

1.64%

of Profit After Tax (2012-13)

12,995Vocational Trainees

23,142

Act-Apprentices Trained





18.9%

Procurement from Micro & Small Enterprises



About BHEL

Embarking upon the 50th Golden Year of its journey of engineering excellence, BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing company of its kind in India engaged in the design, engineering, manufacture, construction, testing, commissioning and servicing of a wide range of products and services for the core sectors of the economy, viz. Power, Transmission, Industry, Transportation (Railway), Renewable Energy, Oil & Gas and Defence with over 180 products offerings to meet the needs of these sectors. Establishment of BHEL in 1964 was a breakthrough for upsurge in India's Heavy Electrical Equipment industry. Consistent performance in a highly competitive environment enabled BHEL attain the coveted 'Maharatna' status in 2013.

BHEL as a part of Pt. Jawaharlal Nehru's vision was bestowed with the onus to make the country self reliant in manufacturing of heavy electrical equipment. This dream has been more than realised and the contribution in nation building endeavour is going to continue likewise. Today, with 20,000 MW per annum capacity for power plant equipment manufacturing, BHEL's mammoth size of operations is evident from its widespread

Power Sector

BHEL is one of the few companies in the world having capability to manufacture entire range of power plant equipment and has proven turnkey abilities for executing power projects from concept-to-commissioning. The Power Sector comprises Thermal, Gas, Hydro and Nuclear power plants.

BHEL:

- Supplies steam turbines, generators, boilers and its auxiliaries upto 800 MW including sets of 660 / 700 / 800 MW based on supercritical technology
- Has facilities to make thermal sets up to 1000 MW unit size
- Supplies hydro turbines and generators up to 250 MW
- Manufactures 220 / 235 / 540 / 550 / 700 MWe nuclear turbine generator sets
- Has proven expertise in plant performance improvement through Renovation, Modernisation and Uprating of variety of power plant equipment
- Special knowhow of residual life assessment, health diagnostics and life extension of plants
- Supplied thermal sets have consistently exceeded national average efficiency parameters.



BHEL's Heavy Electrical Plant, Bhopal

50 Years of Engineering Excellence



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

network of 17 Manufacturing Units, 2 Repair Units, 4 Regional Offices, 8 Service Centres, 8 Overseas Offices, 6 Joint Ventures, 15 Regional Marketing Centres and current project execution at more than 150 project sites across India and abroad. The total installed capacity base of BHEL supplied equipment -138 GW in India speaks volumes about the contribution made by BHEL to Indian power sector. BHEL's 57% share in India's total installed capacity and 65% share in the country's total generation from thermal utility sets (coal based) as of March 31, 2014 stand testimony to this. The company has been earning profits continuously since

1971-72 and paying dividends since 1976-77 which is a reflection of company's commendable performance throughout.

BHEL also has a widespread overseas footprint in 76 countries with cumulative overseas installed capacity of BHEL manufactured power plants nearing 10,000 MW including Malaysia, Oman, Libya, Iraq, the UAE, Bhutan, Egypt and New Zealand.

The high level of quality & reliability of BHEL products and systems is due to adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the



Final rotor assembly area at Heavy Electrical Equipment Plant, Haridwar



world including General Electric Company, Alstom SA, Siemens AG and Mitsubishi Heavy Industries Ltd., together with technologies developed in its own R&D centres. Most of its manufacturing units and other entities have been accredited to Quality Management Systems (ISO9001:2008), Environmental Management Systems (ISO14001:2004) and Occupational Health & Safety Management Systems (OHSAS18001:2007).

BHEL has faced challenges with aplomb throughout all the phases of its illustrious journey. Right from its incorporation in a protected market to facing the pressures of a liberalized economy and the

Industry Sector

BHEL is a leading manufacturer of a variety of Industrial Systems & Products and meets the growing demand for major industries like metallurgical, mining, cement, paper, fertilizers, refineries & petro-chemicals etc. besides Captive/Industrial utilities. Major offerings include:

- Captive Power Plants: Supplies Steam Turbine and Gas Turbine based Captive Power Plants
- Transmission Systems & Products: Execution of EHV & UHV substations ranging from 132 kV to 765 kV & HVDC converter stations up to ±800 kV & Power transformers, Shunt reactors, Vacuum and SF6 switchgear, Gas insulated switchgears, Ceramic insulators, etc.
- Transportation: Manufactures IGBT propulsion equipment (Traction Converter/Auxiliary Converter/ VCU), 25 kV AC locos, diesel electric locos upto 1400 HP, etc.
- Renewables: EPC solutions for grid interactive and standalone PV power plants of applications kW to MW rating, Space Grade Solar Panels and Space Grade Batteries
- Water: Turnkey Solutions for Water Treatment Systems including RO, Effluent Treatment Membrane based Sewage Treatment Plants & Zero Liquid Discharge, etc.
- Industrial Products (Electrical & Mechanical):
 Range of Industrial Products including Oil Rigs,
 Well Head & Xmas Trees, Fabricated Equipments &
 Boiler Feed Pumps, Compressors & AC Machines
- Defence: Supplier of strategic equipment to Indian defence forces including Super Rapid Gun Mount, Integrated Platform Management System for Naval Ships, Thermo pressed components and ATVP equipment etc.

current slowdown in the economic environment, BHEL has evolved with transforming its strategies from product manufacturing to market orientation; business excellence through portfolio restructuring ushering in the realm of sustained growth through diversification. BHEL owes its dexterity to the strong culture of strategic planning initiated in 1970s and today, the company is pursuing its seventh Corporate Planwith focus on capability enhancement, project execution, cost competitiveness & quality, diversification, engineering & technology, and people development.

Diversification in transportation, transmission, water & renewables is the strategy adopted to maintain a balanced portfolio of offerings. The upcoming Ultra Mega Solar Power Project & MEMU coach factory in Rajasthan and integrated manufacturing facility for Solar PV systems in Maharashtra are the green shoots in this direction.



Signing of MoU for Ultra Mega Solar Power Project

International Business

BHEL has a widespread footprint across the globe in 76 countries and has contracted power plant equipment of around 17,000 MW outside India which encompasses a wide range of products and services including thermal, hydro and gas-based turnkey power projects, Substation projects, Rehabilitation projects, Products like Transformers, Compressors, Motors, Valves and Oil field equipment, Electrostatic Precipitators, PV equipment, Insulators, Heat Exchangers, Switchgears, Castings and Forgings, etc.

BHEL's focus on strong After-Sales-Services has also led to orders from various countries including Indonesia, Bhutan, Oman, Libya, Bangladesh, Vietnam & Sri Lanka, to name a few.

Years of

Engineering Excellence



State-of-the-art facility for manufacturing composite hollow insulators up to 800 kV rating, developed by BHEL

This strategy of diversifying and capitalising new business opportunities in addition to expansion of offerings in Power Sector stems from the commitment to innovation led growth which is an indispensable part of BHEL's business model. This is discernible through the new R&D policy aimed at product development and indigenisation. R&D focus of the organisation is quite diverse ranging from advance ultra supercritical thermal power plants to IGCC based Power plants and grid interactive renewable energy systems.

CORPORATE PROFILE

BHEL's greatest strength is its highly skilled and committed workforce of more than 47,000 employees who have been the cornerstone of BHEL's successful journey. Further, the concept of sustainable development is inculcated in the DNA of BHEL which is evident from its mission statement-"providing sustainable business solutions in the fields of energy, industry and infrastructure". BHEL is also engaging with the society pursuing initiatives aimed at Community Development, Health & Hygiene, Education, Environment Protection, Disaster Management and Talent Upgradation/ Skill Development.

The future is filled with both exciting opportunities & gruelling challenges. With the golden legacy of 50 illustrious years on its side, BHEL has embraced this business dynamism by expanding its offerings and enhancing competitiveness seeking to realize its long term vision and stay relevant with the changing times. Creating new business avenues and maximizing the utilization of available infrastructure will be the key to future growth and stakeholders' wealth enhancement.



World of BHEL



Vision

A global engineering enterprise providing solutions for a better tomorrow





Mission

Providing sustainable business solutions in the fields of Energy, Industry & Infrastructure







TRANSPORTATION

OIL & GAS



TRANSMISSION



Pan India

- 17 Manufacturing Units
- 1 Subsidiary
- 6 Joint Ventures
- 8 Service Centres
- 2 Repair Units
- Infrastructure to deal with 150+ project sites

Global Footprints

- First export order for boilers (2x60 MW) from Malaysia, 1971
- Commissioned first 120 MW BTG & sub-station unit on turnkey basis at Tripoli, Libya in 1980
- References in 76 countries
- Offices in 8 countries
- Contracted power plant equipment around 17,000 MW
- Executing 28 projects spread over 20 countries





• Governance • Respect

Loyalty

Commitment

Team Work

The Gentle Giant

- · An Indian Maharatna CPSE
- · One of the largest engineering & manufacturing companies in India serving core sectors of economy-
 - Power

Values

Excellence

Integrity

Innovation

- Industry Transmission / Transportation/ Oil & Gas/ Renewables/ Water/ Defence/Industrial products -Electrical & Mechanical
- · One of the few Major Integrated Power Plant Equipment Manufacturers
- Power Plant Equipment Manufacturing Capacity of 20,000 MW p.a.
- 57% share in India's total installed power generation capacity



RENEWABLES



DEFENCE

WATER

50 Years of Engineering Excellence





- Profit making company since 1971-72
- Consistent dividend paying company since 1976-77
- · First listed its equity shares on stock exchanges in 1992
- Market capitalisation crossed ₹ 100,000 Crore in 2007
- Participative management culture through Joint Committee, Plant Council, Shop Council since 1973
- 55% engineers among all Executives & 5.6% women among 47,525 employees
- 63,420 eye donations pledges under 'Vision to all-BHEL's Call'
- Committed to UN Global Compact
- HPBP Trichy 100% treated trade effluent water used for internal irrigation
- Low lifecycle cost of equipment facilitating development of affordable and environmentally sustainable energy systems



Innovation

- R&D Expenditure >2.5% of Turnover- highest in Indian engineering field
- Filing more than 1 patent/ copyright per day
- Total Intellectual Capital: 2,589
- 14 Centres of Excellence
- Focus on low-carbon path technologies & renewables



Nation Building

- Built India's capability in power plant equipment manufacturing
- Focus on indigenisation with Value Addition more than 40% of Turnover one of the highest in the Indian engineering industry
- 148 GW Installed base of power plant equipment
- · 30000+ AC machines supplied, largest Indian manufacturer
- 85+MW Cumulative shipments of PV cells, modules and systems
- 360 Locos & 377 Diesel Shunters Supplied to Indian Railways & other industries
- 375+ Compressors & 86+ Oil drilling Rigs supplied
- 40+ Oil Rigs Refurbishment & Upgradation completed





Landmarks

- Incorporated as 'Bharat Heavy Electricals Ltd.' in 1964
- Crossed Turnover mark ₹ 50,000 crore in 2012-13
- First commissioning: 500 MW in 1984, 600 & 660 MW in 2013, 800 MW (Sync.) in 2014
- Conferred 'Maharatna' status in 2013
- Celebrating Golden Jubilee in 2014





Recognition of Excellence

Continuing its tradition of winning prestigious national/international awards in diverse arenas, BHEL and its employees won several awards during the year 2013-14. Notable among these include:

Business Excellence & Industry Leadership

 Trophy conferring Maharatna status on BHEL from Hon'ble President of India in recognition of company's consistent high performance



 'NDTV Profit Business Leadership Award 2012' in the Engineering category for 3rd year in succession



- 'AIMA Managing India Award' for being the outstanding PSU of the year by All India Management Association-presented by Hon'ble President of India
- 'Jury Award for Lasting Impact on Indian Economy' by Governance Now

- 'Dainik Bhaskar India Pride Award 2013' for Excellence in Heavy Industries category
- 'DSIJ Award 2013 for the Most Efficient Maharatna PSU' for 5th year in succession
- 'Industry Excellence Award' in Manufacturing & Processing category from Institution of Engineers, India
- '45th EEPC India Award' for the 'Star Performer for 2012-13' in the Product Group of Project Exports
- BHEL won two National Safety Awards in recognition of outstanding safety performance
- 'ICAI National Award for Excellence in Cost Management' for 8th year in succession

Innovation

 'PSE Excellence Award 2013 for R&D, Technology Development and Innovation' in the Maharatna & Navratna CPSEs category by Indian Chamber of Commerce



- 'National Intellectual Property Award 2014' for being top Indian public limited company in patents
- 'Golden Peacock Award 2013 for Innovation Management' in recognition of R&D activities, expenditure & management of innovation
- 'World Intellectual Property Organisation (WIPO) Award for Innovative Enterprises'

50 Years of Engineering Excellence

for BHEL's strong involvement in the use of the Patent system and its achievements in R&D



Leadership

 Sh. P.K. Bajpai, Director (Finance), BHEL awarded the 'Business Today Best CFO of a PSU Award' (Large Companies)



 Sh. B. Prasada Rao, CMD, BHEL honoured with prestigious NITIE 'Lakshya Business Visionary Award 2013' in recognition & appreciation of his exemplary vision & extraordinary leadership



 Sh. R. Krishnan, Director (HR) BHEL was conferred NIT-Trichy's Distinguished Alumnus Award by the former President of India, Dr. A.P.J. Abdul Kalam as part of Golden Jubilee celebrations of the Institute



- Sh. B. Prasada Rao, CMD, BHEL awarded 'IET Outstanding Engineer Award 2013'
- 2 Workmen from BHEL were conferred 'Prime Minister's Shram Awards 2012' during the year
- 15 Workmen from BHEL were conferred 'Vishwakarma Rashtriya Puraskar 2011' during the year



Corporate Social Responsibility

 BHEL awarded for exemplary work in the field of health care services to the underprivileged under its CSR support initiatives by HelpAge India

Directors' Report

DIVIDEND

- 20 Directors' Report
- 27 Annexure-I

Management Discussion & Analysis

72 Annexure-II

Brief Resume of Directors proposed for appointment and re-appointment

76 Annexure-III

Sustainable Development

83 Annexure-IV

Business Responsibility Report

89 Annexure-V

R&D and Technological Achievements

94 Annexure-VI

Corporate Governance

120 Annexure-VII

Conservation of energy, technology absorption and foreign exchange earnings and outgo

122 Annexure-VIII

Statement pursuant to Section 212 of the Companies Act, 1956 relating to Subsidiary Company

123 Annexure-IX

Independent Auditors' Report and C&AG Comment

Directors'

Report

To the Members,

The Directors feel privileged to present the 50th Annual Report on the business and operations of the company and the statement of accounts for the year ended March 31, 2014.

Financial Performance

			Financi	ial Year
Figures (in ₹ Crore except per share data)		2013-14	2012-13	
<u>a)</u>	Tur	nover (Gross)	40338	50156
b)		venue from erations (Net)	38389	47618
c)	1	ner Operational ome	720	807
_d)	Ор	erating expenses	34595	39037
e)	Ор	erating profit	4514	9388
_f)	Add	d : Other income	1616	1122
g)	de	ofit before preciation, finance st & tax expense	6130	10510
_h)	Les	ss: Depreciation	983	953
_i)	Les	ss: Finance costs	133	125
_j)	Pro	ofit before tax	5014	9432
<u>k</u>)	Les	ss: Tax expense	1553	2817
<u>l)</u>	Pro	ofit after Tax	3461	6615
m)	forv	d: Balance brought ward from the vious year	1102	1031
n)	Pro	ofit available for propriation	4563	7646
	i)	Adjustment pursuant to Amalgamation	81	
	ii)	Dividend (including interim dividend)	693	1323
	iii)	Corporate Dividend tax ((incl. on interim dividend)	118	221
	iv) Amount transferred to General Reserve		2500	5000

0)	Balance in Statement of Profit & Loss	1171	1102
p)	Earnings per Share (₹)	14.14	27.03
q)	NAV per share (₹)	135.02	124.38

Despite various issues relating to power projects like fuel linkages, fund constraints, land acquisition etc., BHEL recorded a turnover of ₹ 40338 Crore in the year 2013-14. Net worth of the company has gone up by 8.55 %.

Performance of BHEL for the year 2012-13 has been rated as 'Very Good' in terms of MoU signed with the Government of India. BHEL has been awarded MoU Composite score of '2.49'.

Dividend

The Board has recommended a final dividend of 76 % (₹ 1.52 per share), ₹ 372.04 Crore, for the year 2013-14. An interim dividend of 65.5 % (₹ 1.31 per share), ₹ 320.64 Crore, on share capital of ₹ 489.52 Crore, has already been paid for the year 2013-14. Thus the total dividend (exclusive of dividend tax) for the year 2013-14 is ₹ 692.68 Crore (₹ 2.83 per share) as against ₹ 1323 Crore (₹ 5.41 per share) paid in the previous year.

Provision of ₹ 63.23 Crore has been made for Corporate Dividend Tax on the final dividend proposed. Corporate Dividend Tax of ₹ 54.49 Crore has already been paid on the interim dividend.



CMD, BHEL presenting the Interim Dividend cheque for FY 2013-14 to the then Hon'ble Union Minister of Heavy Industries & Public Enterprises



Orders Received

Despite operating in a subdued but healthy competitive business environment, the company secured orders worth ₹ 28007 Crore during the year. Sector-wise orders booked are as follows:

(₹ in Crore)

	2013-14	2012-13		
Power Sector	20433	25560		
Industry Sector*	5007	4086		
International Operations	2567	2004		
Total Orders Booked	28007	31650		
Order Book outstanding at the end of the year	101500	115100		

^{*}excludes inter sectoral orders

Events Occurring after the Balance Sheet Date

There were no significant events occurring after the Balance sheet date.

Directors' Responsibility Statement

Pursuant to Section 217(2AA) of the Companies Act, 1956, it is hereby confirmed:

- that in the preparation of the annual accounts for the financial year ended 31st March, 2014 the applicable Accounting Standards have been followed along with proper explanation relating to material departures;
- (ii) that the Directors have selected such accounting policies and applied them consistently and made judgments and estimates that were reasonable and prudent so as to give a true and fair view of the state of affairs of the company as at the end of the financial year 2013-14 and of the profit of the company for that period;
- (iii) that the Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act,1956 for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities;

(iv) that the Directors have prepared the annual accounts for the financial year ended 31st March, 2014 on a 'going concern' basis.

Management Discussion and Analysis

A report on Management Discussion and Analysis is placed at **Annexure** – **I.**

Board of Directors

Appointment

Shri Atul Sobti has been appointed as an Additional Director w.e.f. 01.12.2013 to take charge of the office of Director (Power).

Pursuant to DHI letter no. 1(18)/2011-PEXI, dated 31.12.2013, the term of Shri B. Prasada Rao, CMD, has been extended by the President of India for a period of two years w.e.f. 01.01.2014.

Shri S.K. Bahri, Additional Secretary & Financial Adviser, Department of Industrial Policy & Promotion, Ministry of Commerce & Industry has been appointed as Part-time Official Director w.e.f. 31.03.2014.

Ms. Harinder Hira has been appointed as Part-time Non-official Director w.e.f. 08.05.2014.

In accordance with Section 161 of the Companies Act, 2013 and Article 67(iv) of the Articles of Association of the company, Shri Atul Sobti, Shri S.K Bahri and Ms. Harinder Hira shall hold their directorships upto the 50th Annual General Meeting of the company and are eligible for appointment as Directors at the Meeting.

Cessation

Shri Trimbakdas S. Zanwar who was appointed as Part-time Non-Official Director w.e.f. 12.11.2010 ceased to be a Director of the company on completion of his tenure on 11.11.2013.

Shri Atul Saraya, who was appointed as Director (Power) w.e.f. 01.10.2009 ceased to be a Director of the company on attaining the age of superannuation on 30.11.2013.

Ms. Kusumjit Sidhu, IAS, former Additional Secretary & Financial Adviser, Ministry of Commerce & Industry, consequent upon her appointment as Secretary, Department of Public Enterprises, has relinquished her position as Part-time Official Director w.e.f. 01.01.2014.

50 Years of Engineering Excellence

Shri S. Ravi who was appointed as Part-time Non-Official Director w.e.f. 10.03.2011 ceased to be a Director of the company on completion of his tenure on 09.03.2014.

The Board of Directors place on record their deep appreciation for the valuable services rendered as well as advice and guidance provided by Shri Trimbakdas S. Zanwar, Shri Atul Saraya, Ms. Kusumjit Sidhu and Shri S. Ravi during their tenure.

Further, pursuant to Section 152 of the Companies Act, 2013 and Article 67(i) of the Articles of Association of the company, S/shri R. Krishnan and W.V.K Krishna Shankar will retire by rotation at the Annual General Meeting and being eligible, offer themselves for re-appointment.

In compliance with Clause 49(IV)(G)(i) of the Listing Agreement, brief resumes of the Directors proposed for appointment and re-appointment along with the nature of their expertise in specific functional areas and names of companies in which the person also holds directorship along with the membership of the Committees of the Board are given at **Annexure-II** forming part of the Directors' Report.

Sustainable Development

The concept of sustainability is ingrained in the DNA of BHEL which is evident from the mission statement"Providing Sustainable Business solutions in the fields of Energy, Industry & Infrastructure". BHEL is committed to be an environment friendly company in all its areas of activities, products and services and providing a safe & healthy work environment.

The company is putting in efforts to reduce the carbon footprint of its organisational activities and also its customers by adopting sustainable business practices. Various projects and initiatives are being undertaken in the areas of Renewable Energy Generation, Material and Natural Resource Management, Energy Management, Water & Bio-Diversity Management and Carbon Management.

BHEL has always been endeavouring to act as a responsible corporate citizen committed to the welfare of society through inclusive growth aimed at capacity building, empowerment of communities, environment protection and development of backward regions and upliftment of the marginalised & under-privileged sections of the society.

During 2013-14, BHEL spent 1.64% of PAT of the year 2012-13 towards CSR & Sustainability activities. company has supported various social initiatives across the country by undertaking projects in diversified areas like Community Development, Health & Hygiene, Education, Environment Protection, Disaster Management, and Talent up gradation/Skill development. Further details are given in **Annexure-III.**

In line with the requirement of clause 55 of the listing agreement, Business Responsibility Report describing the initiatives taken by the company from an environmental, social and governance perspective as per the suggested format is enclosed at **Annexure-IV**.

R&D and Technological Achievements

BHEL's products and systems are technology intensive and thus, BHEL has adopted R&D and technology development as the central driver for implementing its strategy and fulfilling its endeavour to become a global engineering enterprise. As part of Strategic Plan 2012-17, the company is transforming its R&D and innovation in a structured and focused manner through five pronged approach consisting of Strategic Direction, Portfolio Management, Partnerships & Alliances, Knowledge Management and Enablers to improve the performance of existing products and develop new product for meeting global benchmarks.

The R&D expenditure of the company during 2013-14 was ₹ 1114 Crore which was 2.76% of the turnover as against 2.49% for the previous year. This also includes the expenditure incurred on R&D efforts gone into major modifications / improvements in products/designs against customer requirements which are not covered in R&D projects. Similarly, the IPR capital of the company has grown by 19% as compared to 2012-13, taking the total to 2589.

Further, investments in R&D are being intensified to enhance capabilities in Product Development & Engineering. Company will continue to pursue various projects undertaken in recent years with focus on low-carbon path technologies including faster assimilation of supercritical technology, development of Advanced Ultra Super Critical Technology, IGCC Technology commercialisation, Carbon capture, Solar (PV, Thin Film, CSP), 765/1200 kV Transmission System, GIS up to



765 kV, ±800 kV HVDC system, IGBT based Propulsion Systems for higher rating Locos, EMU, Metro coaches on mission mode. Further details are given in **Annexure-V**.

Official Language Implementation

Continuous efforts were made for propagation and effective implementation of Rajbhasha in the company. All the Units and Divisions have Hindi cells for assistance in fulfilling the Rajbhasha requirements. Quarterly Meetings of Official Language Implementation Committee were conducted on regular basis to monitor and review the progress made in achieving the targets fixed in Annual Programme for 2013-14.

More than 600 non Hindi speaking employees were imparted training under Hindi teaching scheme of Govt. of India. Training for using Unicode Hindi on computer was also imparted to employees of all the Units/Divisions. To motivate employees to work in Hindi 80 Hindi workshops were organized covering more than 2000 employees. In addition, 2 Translation Training Programmes were conducted with the help of Central Translation Bureau, Rajbhasha Vibhag, Ministry of Home Affairs.

Inter Unit Rajbhasha Scheme has been introduced to increase the competition amongst the Units and Divisions in this area. Under the scheme, 12 Units were given award for excellent Rajbhash Implementation. Two executives were awarded for Hindi Book writing under Hindi Book Award Scheme.

All the Units/Divisions of the company, including Corporate Office, celebrated Hindi Divas and

हिंदी दिवस समागह, 2013 विकार विकास वार्तित प्रतिकार कार्तीत कार्यास्य, गीरी पोरं, गो विका

Hindi Diwas Samaroh organised at BHEL on 17th September, 2013

Hindi Week/ Fortnight/Month during which various competitions, Seminars, Cultural Programme and Kavi Sammelan were held.

Twelve wards of employees who obtained B-2 grade or above in Hindi subject at Board level examinations were given awards.

Our company is playing an active role in Town Official Language Implementation Committees constituted in various cities. Many interesting competitions, seminars and programmes are conducted under auspices of these committees. This year 10 Units/Divisions of BHEL were awarded by the TOLICs for various achievements in this area.

Vigilance

The Vigilance organisation of BHEL is headed by a Chief Vigilance Officer (CVO) appointed by the Ministry. Major manufacturing Units / Power Sector Region of BHEL have a vigilance set up headed by a senior vigilance executive reporting to the CVO.

Preventive vigilance has remained the focus area of BHEL Vigilance all through the years. During 2013-14 emphasis was on systemic improvements. Based on system studies carried out, suggestions towards system improvements were rendered for incorporation in the policies / guidelines. Consequently policies / guidelines were revised during the year:

- Purchase Policy
- Reverse Auction Guidelines
- Guidelines for Suspension of Business Dealings with Vendors
- Amendments to 'Vendor Registration Procedures
 SEARP, 2010'.



Shri Arvind K. Kadyan, CVO, BHEL at Heavy Electrical Equipment Plant, Haridwar



Public Awareness is an important corner stone for good governance. An enlightened employee not only can contribute in achieving the organisational goal but also in system improvements. Training programmes were conducted to update employees about company's policies, rules and procedures. 104 such programmes were organized during the year 2013-14 in various BHEL Units and Regions. In addition, interactive sessions were held with line executives representing different functional areas to sensitise them about the risk prone areas.

To create awareness about the procedures of procurement in BHEL, to disseminate the instructions issued by Statutory Authorities and to share the case studies, quarterly e-Newsletter "DISHA" is being published.

The Vigilance Awareness Week was observed from 28th October to 2nd November, 2013 in Corporate Office, Manufacturing Units, Power sector Regions and Project Sites of BHEL. Observance of Vigilance Awareness Week commenced with the PLEDGE of Integrity by the employees.

Interactive sessions/discussions on the theme "Promoting Good Governance-Positive Contribution of Vigilance", were organized at Corporate Office and in Units/Regions. Lectures and interactions with various eminent personalities, expert speakers on relevant topics varying from RTI, Fraud Risk Management to Ethics and Values etc. were also organized across the organisation during Vigilance Awareness Week.

During 2013-14, Vigilance emphasised on procurement through open tender route particularly for high value packages. Tender conditions related to rate contracts were studied and suitable terms and conditions were incorporated to thwart cartelisation by vendors. Further, quality inspections and utilization of BHEL T&Ps in sub-contracted/outsourced works were selected as focus area for enhancing the end quality of products and productivity.

Corporate Vigilance teams inspected 6 Vigilance Units of BHEL. The findings were discussed in interactive sessions with the Unit Managements. It was impressed upon officials to focus on the aspects of estimation and price reasonability while dealing with procurement to remain competitive in the market. The interactive sessions helped

BHEL officials to appreciate the role of Vigilance in promoting a strong, viable and competitive organisation.

BHEL is committed to bring transparency in day to day operations of the company by leveraging technology. The information regarding procurement related matters like status of purchase orders and Contracts, vendor registration along with their current status is hosted on the company web site. In addition, e-tendering route is being promoted for procurement and e-payment system has been implemented to reduce vendor interface.

Safety & Security

Dedicated Safety and Occupational Health Centers are being run in the factory premises taking care of safety and health issues at the work place. Various measures like periodic health and safety awareness campaigns, mock drills in identified hazardous areas once in 6 months, job safety analysis for identified activities, periodic maintenance & testing of material handling equipment, monitoring of quality of food & water etc. are being taken to ensure best possible safe working environment. Most of the manufacturing units and other entities have been accredited to Environmental Management Systems (ISO 14001:2004) and Occupational Health & Safety Management Systems (OHSAS 18001:2007).

The company's security mechanism is sufficient and geared up to provide security to each Plant/Unit. Installation of CCTV's and SOP have been installed in many of the plants. Security audit of major plants is being done by the Intelligence Bureau periodically and the additional requirements, wherever pointed out by them, are immediately complied with by the concerned units. The Management, security staff and the employees of company are sensitised to the security needs of company.

Adequate measures have been taken for Security of computers and software. Department of Electronics, Govt. of India (SRAC) has also carried out audit/review of our software security mechanism and their suggestions have been implemented.

Corporate Governance

As per the requirements of Clause 49 of the Listing Agreement a detailed report on Corporate Governance together with the following is given at



Annexure - VI:

- (i) CEO/CFO Certificate [as per Clause 49(V)] and
- (ii) Certificate from the company's Auditors [as per Clause 49(VII)].

Other Disclosures

Information in accordance with the provisions of Section 217(1)(e) of the Companies Act, 1956 read with Companies (Disclosure of Particulars in the Report of the Board of Directors) Rules, 1988 regarding conservation of energy, technology absorption and foreign exchange earnings and outgo is given at **Annexure-VII**.

As per Notification No. GSR 289(E) dated March 31, 2011 issued by the Ministry of Corporate Affairs, amending the provisions of the Companies (Particulars of Employees) Rules, 1975 issued in terms of Section 217(2A) of the Companies Act, 1956, it is not necessary for Government companies to include the particulars of employees drawing salaries of ₹ 60 lakh or more per annum, employed throughout the financial year or ₹ 5 lakh per month, if employed for part of the financial year. The company being a Government company, the information has not been included as a part of the Directors' Report. However such particulars will be made available to any member on receiving a specific request in this regard during the course of Annual General Meeting.

Statement pursuant to Section 212 of the Companies Act, 1956 relating to Subsidiary Companies is given at **Annexure-VIII**.

Auditors

The Auditors of your company are appointed by the Comptroller and Auditor General of India. The names of auditors appointed for the year 2013-14 are printed separately in the Annual Report.

The detail of cost auditors appointed for the year 2013-14 and Cost Audit details are printed separately in the Annual Report.

The reply to the point referred to in the Auditors' Report and Comments of the Comptroller and Auditor General of India are given at **Annexure** – **IX.**

Acknowledgements

The Board places on record its sincere appreciation towards the company's valued customers in India and abroad and esteemed shareholders for the support and confidence reposed by them in the management of the company and look forward to the continuance of this mutually supportive relationship in future.

The Board also gratefully acknowledges the support and guidance received from various Ministries of the Government of India, particularly the Department of Heavy Industry, in company's operations and developmental plans. The Directors express their grateful thanks also to the Comptroller and Auditor General of India, Chairman and Members of Audit Board, Statutory Auditors, Branch Auditors and Cost Auditors. The company also wishes to place on record its appreciation for the continued co-operation received from all the Technology Collaborators and Suppliers and support provided by the Financial Institutions and bankers. Last but not the least the Board wishes to place on record its deep gratitude to all BHELites whose enthusiasm. team efforts, devotion and sense of belongingness has made this great company proud.

For and on behalf of the Board of Directors of BHARAT HEAVY ELECTRICALS LTD.

B. Prasada Rao Chairman & Managing Director

Place: New Delhi Dated: July 14, 2014

Annexure-I

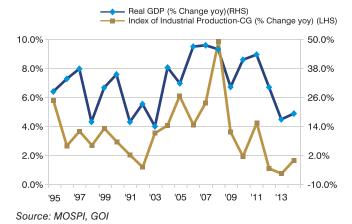
Management Discussion and Analysis

1.1 Economic & Business Overview

The Capital Goods industry being the "mother" of all manufacturing industry is extremely crucial for the development of the country's economy. The capital goods (CG) sector is highly diverse with a large variety of industrial equipment, products, and services, including those used for agriculture, construction, and transportation, as well as production of energy and power generation, building and plant infrastructure, and general manufacturing. It is also considered as a strategic sector and development of domestic capabilities is paramount from a national self-reliance and security perspective. Indian capital goods industry contributes 12% to the total manufacturing activity (which is about 15% of the GDP) in the country.

Demand for capital goods is sensitive to fluctuations of business confidence and correlates with economic swings. The global capital goods industry which is export-driven was severely affected by recession post 2008. Economy of India that is now largely integrated with the world has been affected by global and domestic factors. With almost all major customers of the capital goods sector, such as power, oil and gas, metals and cement operating at subdued capacities, the CG industry is experiencing manufacturing capacity underutilisation, pricing pressure and dwindling order book in recent years.

India's Economic Growth & CG Industry Growth

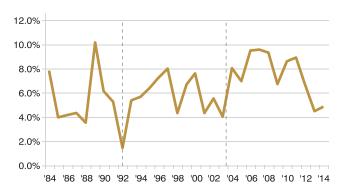


Today, Global economy is expanding at sluggish pace but is running above the post-crisis average.

On the current reckoning, global growth is likely to be in the vicinity of 3½ per cent in 2014, about ½ a percentage point higher than in 2013 as per estimates of RBI. Key industry indicators, such as industrial production and non-residential construction, point to a modest uptick in growth for global capital goods companies during 2014. However, downside risks to growth trajectory arise from ongoing tapering of quantitative easing in the US, continuing deflation concerns and weak balance sheets in the euro area and, inflationary pressures in the emerging market and developing economies. With weakening growth and financial fragilities in China due to rapid credit in recent years, global trade and growth are on the precipice of a large risk.

The outlook for the Indian economy has improved with expected political stability, cautiously positive business sentiments, improved consumer confidence, expectations of a modest recovery in growth and decline in inflation expectations.

Real GDP (% Change yoy)



Source: MOSPI, GOI

The real GDP behaviour over the past three decades reinforces the cyclical behaviour of economic growth in India and this gives reasonable confidence for economic recovery in near-term.

In the long run, underlying trends such as urbanisation, changing demography, energy security, climate change and inclusive development in India and the global movement toward energy-efficient products and processes should help fuel demand for capital goods in India.

Business Profile

Power Sector



1.2 Profile and Performance of Business Segments

1.2.1 Power Sector

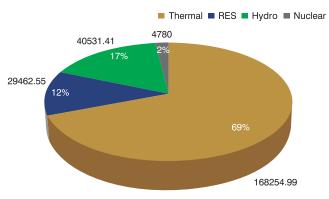
Opportunities

Demand for electricity is driven primarily by economic growth and rising population. Today, economy of India is the tenth-largest in the world in nominal terms and the third-largest by purchasing power parity. It is the world's second fastest-growing major economy just after China, with growth rates averaging 7.5% over the past 10 years and has the potential to become the world's third largest economy (nominal basis) by 2020. In the next two decades, current size of economy of USD five trillion (PPP) is expected to grow four to five times as per various studies and estimates. India is also the second most populous country in the world, with over 1.21 billion people, more than a sixth of the world's population. India is projected to be the world's most populous country by 2025, surpassing China, with population expected to reach 1.6 billion by 2050.

Further, Human Development Index (HDI) is directly correlated to the per capita electricity consumption. At low levels of development, in which India lies at present, even a small increase in electricity use is associated with large increases in HDI. This reinforces the importance of Power for Indian economy as well Human Development in the country.

In order to meet the growing need of electricity demand for consumers as well as for Industries, Government of India has taken various initiatives to augment capacity addition in the country. India's installed capacity base has swelled from a mere 1.3 GW in 1947 to over 243 GW in March 2014 and

Installed Generation Capacity - Fuelwise

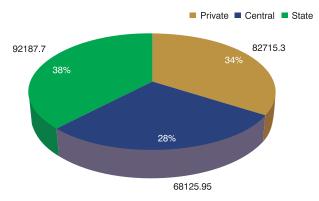


As on 31st March, 2014, Source: Ministry of Power

Years of Engineering Excellence

DIRECTORS' REPORT

Installed Generation Capacity - Utilitywise



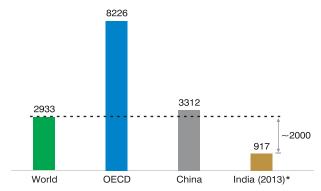
As on 31st March, 2014 Source: Ministry of Power

currently has the fifth largest Power System in the world. Electricity generation is mainly comprised of Thermal (Coal, lignite, natural gas, oil), Hydro, Renewable (wind, solar etc.) and Nuclear source.

The persistent shortages of electricity, both for peak power and for energy indicate the need for improving the performance of the power sector in the country. Reforms for a more efficient and competitive power sector have been under way in India for several years. While there has been some progress in this regard, shortage of power and lack of access continue to be major constraints on India's economic growth which is reflected in low per capita electricity consumption in India vis-à-vis other major economies.

During 11th Plan, country added 54,964 MW to the generation capacity, more than 2.5 times than that of 21,080 MW during 10th Plan. However, India continues to experience shortages in energy with total deficit of 8.7% and peak deficit of 9.0% during 2012-13.

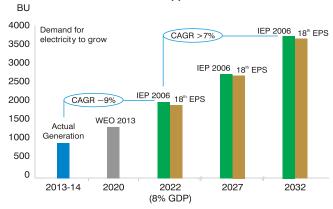
Electricity Consumption per Capita per year (KWh), 2011



Source: IEA Key World Energy Statistics 2013; * CEA 2013

Considering the recent state of power generation status and in order to deliver a sustained economic growth rate of 8.0% upto 2035, various agencies such as CEA, IEA, Planning Commission and others, have estimated that India needs to increase its primary energy supply between three to four times based on current levels translating into a CAGR of approx 7% in electricity generation. This represents a need for substantial augmentation of power generation capacity from current levels.

Indian Power Sector: Opportunities Unlimited

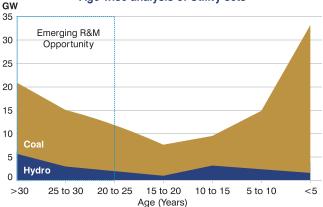


Source & Abbr. - WEO: World Energy Outlook, IEP: Integrated Energy Policy, EPS: Electric Power Survey

A capacity addition of approximately 88,537 MW has been envisaged for the 12th Plan (2012-17). This comprises an estimated 72,340 MW of thermal power, 10,897 MW of hydro power and 5,300 MW of nuclear power. In addition, a grid interactive renewable capacity addition of about 30,000 MW has been envisaged. This comprises wind, small hydro, biomass and solar energy.

Apart from new capacity additions, huge opportunity exists in Renovation & Modernization (R&M) business

Age-wise analysis of Utility sets



Source: Company Analysis



as over 22% of India's coal based power plants are over 25 years old thus necessitating increasing requirement of regular equipment maintenance, lifetime extension and performance upgrades.

Current Business Environment

The power sector is currently at a crucial juncture of its evolution from a dominantly public sector environment to a more competitive sector, with many private producers also playing a significant role in various capacities, and greater reliance on markets, subject to regulation. The policy makers in India have aimed for ensuring energy security for the nation as well as for providing adequate energy of desired quality in various forms in a sustainable manner and at competitive prices.

The performance of the power sector shows many positive features, especially related to the pace of addition to power generation with a specific focus on improving the efficiency and reliability of the plant as well as promoting eco friendly renewable sources of energy. However, in recent times, there are numerous constraints in power sector related to fuel supply, financial health of the State distribution companies, land acquisition, and regulatory clearances which have resulted in finalization of fewer new projects and slowdown in execution of some projects. Issues of gas availability has muted the demand for gas based power plants.

Government of India has recently taken certain steps to propel growth in power sector - such as allocation of coal blocks to PSUs, 'pass through' of variation in coal price, expeditious clearance of projects through intervention of Cabinet Committee on Infrastructure etc. In addition, extension of CEA's advisory to Central/ State Utilities for condition of Phased Manufacturing Programme (PMP) are positive initiatives for BHEL and domestic industry. The above initiatives have already helped the ongoing projects and the benefits to the new projects are expected to be available soon.

Hydro sector is poised to grow at unprecedented levels considering India's huge potential of 148 GW of which only 40 GW has been realized till date. The Nuclear business is primarily driven by government policies, public perceptions and global dynamics. Govt. of India has proposed developing large scale Nuclear Parks, spread across various locations, with the participation of leading global nuclear

power companies. Various Indian companies including BHEL have contributed in supplying critical equipment in Nuclear Plant.

Offerings

BHEL supplies end-to-end systems, Products and Engineering, Erection & Commissioning services for thermal power plants encompassing steam turbines, generators, boilers and matching auxiliaries up to 1000 MW ratings, including sets of 660/700/800 MW based on supercritical technology. BHEL has proven capabilities for executing thermal power projects on Engineering, Procurement & Construction (EPC) basis and is executing numerous prestigious projects on EPC basis including Supercritical sets of 660/700/800 MW ratings. To make use of lignite reserves available in India, BHEL also supplies circulating fluidized bed combustion (CFBC) boilers for thermal plants. BHEL is one of the few companies worldwide, involved in the development of Integrated Gasification Combined Cycle (IGCC) technology which would usher in clean coal technology.

The company manufactures 220/235/500/540/700 MWe nuclear turbine-generator sets and is geared up to take higher rating nuclear sets. Custom-made conventional Hydro turbines of Kaplan, Francis and Pelton types with matching generators, pump turbines with matching motor generators upto 300 MW are also engineered and manufactured by BHEL.

The company has proven expertise in Plant Performance Improvement through renovation, modernisation and uprating of a variety of power plant equipment, besides specialized know-how of residual life assessment, health diagnostics and life extension of plants.

Achievements during the Year

Order Booking

Power Sector secured orders worth ₹ 20,433 Crore with market share of 72% against previous five years average of 63% despite shrinking market and intense competition reinforcing the leadership of BHEL in Indian Power Sector. It includes orders for 3 nos. of Turbines & Generators (TG) and 5 nos of Steam Generators (SG) for Super-critical sets, making cumulative Super-critical technology orders basket to 27 TG and 32 SG thus reinforcing BHEL's leadership in this segment.

Major Orders booked

Significant utility orders received in the Power sector

THERMAL

Super-critical Ratings

Against International Competitive Bidding

- 3X660 MW NTPC/ North Karanpura (EPC)
- 2X800 MW NTPC/ Darlipalli (SG Pkg)
- 2X800 MW NTPC/ Lara (ESP Pkg)
- 2X800 MW NTPC/ Gadarwara (ESP Pkg)

Sub-critical Ratings

Against International Competitive Bidding

- 2X500 MW NLC/ Neyveli New TPS (SG Pkg)
- 2X500 MW NLC/ Neyveli New TPS (TG Pkg)

Through Negotiation Route (500 MW)

 1X500 MW NBPPL/ Unchahar Stg IV (BTG + Electrics)

HYDRO

Against International Competitive Bidding (326 MW)

- 6x33+1x8 MW PSPCL / Shahpur Khandi HEP (E&M Pkg)
- 2x60 MW UJVNL / Vyasi HEP (E&M Pkg)



Signing of Contract Agreement for 3x660 MW NTPC North Karanpura STPP Stage-I

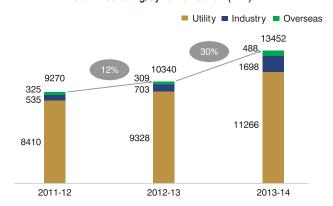
Spares & Service Group booked highest ever orders aggregating to ₹ 3,433 Crore registering a 19% yoy growth which includes ₹ 2,538 Crore for Service after sales and ₹ 895 Crore for Renovation & Maintenance work. BHEL successfully secured the only order for R&M for 1x210 MW MSPGCL Koradi TPS finalized in the country during the year against international competitive bidding (ICB). For the first time, BHEL has offered in-house technology for up-rating of 210 MW LMZ set to 228 MW. Orders received against ICB tender for ESP Retrofit for

NTPC Singrauli STPS & Unchahar STPS totaling to ₹ 443 Crore.

Projects Commissioned

BHEL maintained healthy pace of project execution. Power projects totaling 13,452 MW were commissioned/synchronised during the year-highest ever: inclusive of 11,266 MW utility sets, 1,698 MW captive sets/ industrial sets in the country and 488 MW in overseas markets.

Commissioning/Synchronisation (MW)



Utility Capacity Addition + Synchronisation (MW) (Capacity Addition) 11266 8410 9328 (8563) (9298)

2011-12
Source: Company Analysis

During the year, 28 nos. of Utility sets were commissioned expanding footprint of BHEL to 382 coal based sets (including 78 sets of 490/500/525/600 MW rating), 389 nos. hydro utility sets and 97 gas based sets installed in India showcasing experience and execution capabilities. Capacity addition in hydro utility segment - 641 MW / 9 sets was highest in last 5 years.

2012-13

During the first two years of the 12th Plan, BHEL has already achieved 43% of its target set by MoP.

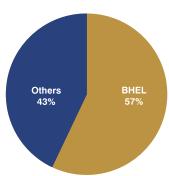
With this, installed capacity of BHEL supplied Utility

2013-14



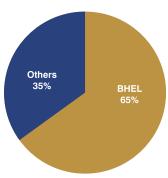
sets in India went up to 1,24,064 MW and company maintained lion's share of 57% in the country's total installed capacity of 2,18,861 MW comprising Coal, Gas, Diesel, Hydro and Nuclear Sets. However, 65% of the total generation of 746 BU from Thermal Utility Sets (Coal based) was contributed by BHEL supplied sets, testifying superior performance of BHEL sets.





*Coal, Gas & CCP, Diesel, Nuclear & Hydro

Generation - Utility** 746 BU (2013-14)



** Coal Source: CEA, Company Analysis

First Time Achievement

- Commissioned BHEL's first Super-critical set of 660 MW rating at NTPC Barh Stage-II
- India's first Indigenous manufactured 800 MW Boiler synchronised at Krishnapatnam (BHEL Scope-Boiler package)
- India's first 1000 MW Nuclear set at Kudankulam-1 synchronised by BHEL (BHEL Scope-TG E&C)

Setting the Benchmarks of early Commissioning

• JPL Raigarh#2 (600 MW) synchronised within

- 683 days from the date of Boiler erection start– a new record
- Indigenously manufactured 600 MW set established in the country (2012-13/1 set, 2013-14/ 9 sets commissioned/synchronised). Four units of 600 MW synchronised within a time span of 5 months
- IPL Amravati #1- PG Test for all the packages (Boiler, TG, Mill & ESP) completed within 13 days
- Capacity addition of Vallur-3, Parbati Stage-III (2 & 3) and Rampur-2 & 3 was achieved on the same day of synchronisation

Utility Sets Commissioned during the year

A total of 28 Sets totaling 8,563 MW were commissioned in domestic market during the year by BHEL.



BHEL's first super-critical set of 660 MW rating commissioned at NTPC Barh Stage-II



India's first indigenously manufactured 800 MW Boiler synchronised at Krishnapatnam

PROJECT	MW	STATE	PROJECT	MW	STATE
COAL : Sets 15/7050 MW					
North Chennai 1	600	Tamil Nadu	Nasik 1	270	Maharashtra
Chhabra 3	250	Rajasthan	Vallur 3	500	Tamil Nadu
Rihand 6	500	Uttar Pradesh	JPL Raigarh 1	600	Chhattisgarh
Shree Singaji 1	600	Madhya Pradesh	Marwa 1	500	Chhattisgarh
Barh STG II 4	660	Bihar	JPL Raigarh 2	600	Chhattisgarh
Satpura 11	250	Madhya Pradesh	Durgapur 8	250	West Bengal
Amravati 2	270	Maharashtra	Avantha Bhandar 1	600	Chhattisgarh
Janjgir Champa 1	600	Chhattisgarh			
GAS : Sets 4/872 MW					
Pragati GT 4	250	Delhi	Pipavav Module 1	351	Gujarat
Rokhia 9	21	Tripura	Pragati STG 2	250	Delhi
HYDRO: Sets 9/641 MW					
Nimoo Bazgo 1	15	Jammu & Kashmir	Parbati Stage III 3	130	Himachal Pradesh
Nimoo Bazgo 2	15	Jammu & Kashmir	Rampur 1	68.67	Himachal Pradesh
Nimoo Bazgo 3	15	Jammu & Kashmir	Rampur 2	68.67	Himachal Pradesh
Parbati Stage III 1	130	Himachal Pradesh	Rampur 3	68.67	Himachal Pradesh
Parbati Stage III 2	130	Himachal Pradesh			

Overseas Sets Commissioned by BHEL during the year: Sets 5/488 MW

PROJECT	MW	PROJECT	MW
Finchaa, Ethiopia 2	12	Namchein Vietnam 2	100
Kosti, Sudan STG 1	125	Kosti, Sudan STG 2	125
Belarus	126		

Performance of Equipment

Power plants with BHEL supplied equipment continue to exhibit benchmark performance in respect of Plant Load Factor (PLF), Operating Availability (OA) and outages.

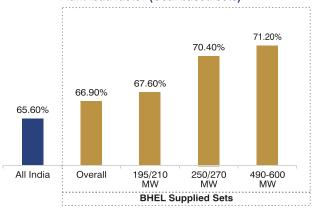
166 BHEL supplied coal based sets achieved PLF of over 70%. Out of these, 36 sets registered PLF

India's first 1000 MW Nuclear set at Kudankulam-1 synchronised by BHEL

of over 90% and 73 sets achieved PLF between 80% - 90%.

175 BHEL coal based sets achieved OA higher than 90%. 173 BHEL supplied coal based sets clocked uninterrupted operation of more than 90 days during the year out of which, 32 sets continuously operated for more than 200 days and 45 sets operated twice

Plant load factor (Coal based sets)



Source: CEA, Company Analysis



continuously for more than 90 days. BHEL supplied Nuclear sets registered an OA of 88.6 % and PLF of 81.5 % in 2013–14. 12 sets clocked uninterrupted operation for more than 90 days.

Thermal Power Plants with BHEL supplied equipments recording-

PLF more than 90%: Budge Budge, Dahanu, Singrauli, Raigarh, Tanda, Amarkantak-Ex, Korba NTPC

PLF 80-90%: Mettur, Vindhyanchal, Ramagundam, Kota, Vijayawada-500, Unchahar, Neyveli MC-II, Tuticorin, Bhilai, Bhatinda, CESC, Dadri, Harduaganj, Simhadri, Rihand, Talchar-NTPC, Vijayawada-210



Korba STPS with BHEL supplied equipment recorded PLF more than 90%

Customer Focus

BHEL reinforced its commitment in providing prompt and efficient service to its customers aimed at facilitating uninterrupted power supply and keeping power plants in good running condition. 141 nos. of sets were overhauled by BHEL during the year, covering both BHEL as well as non-BHEL sets.

Renovation & Modernisation

Dedicated efforts by BHEL towards Renovation, Modernisation & Uprating of following units led achievement of full load at these units post renovation, even after more than 25 years of installation – a testimony to BHEL's product & service excellence.

- Muzaffarpur Unit-1 (110 MW): Unit able to run at 113 MW-Higher than rated capacity even after more than 25 years of installation
- Obra Unit-9 (210 MW): Up-rated to 216 MW

- The first instance of successful modernisation & uprating of any 200 MW class machine in India; BHEL demonstrated running of unit at 221 MW even after 34 years of its installation
- Maneri Bhali HEP Unit-2 (76 MW) of UJVNL and of Shanan-HEP Unit-5, PSPCL (50 MW): Successfully carried out major rehabilitation & repair work
- Bhatinda Unit-3 (110 MW): BHEL exceeded contractual obligations by achieving 88.55% Boiler efficiency against guaranteed 87.5% in PG Test
- BPSCL Bokaro Unit-2: Overhauling of Non-BHEL Russian Boiler

In-situ Repairs

BHEL demonstrated its ability to carry out major repairs in-situ, thus was able to save time & cost of such repairs. Some of the repairs are:

- Machining in Oil Guard portion of the LP Rotor in unit 1 and unit 2 at GGSSTP, Ropar. Similar machining has also been done in 'Generator Rotor' in the hydrogen seal area
- "Rotor blade shroud machining" at Kolaghat TPS, 210 MW (LMW Design)
- Modification/alteration of mill components by all cut machines at Kanti / KBUNL

Residual Life Assessment (RLA) Business

Thrust on providing RLA services to the customers was continued. A total of 6 RLA jobs were completed during the year.

Site	MW	RLA study of
DVC - Mejia 2 & 3	210 MW	Boiler
RINL - Vizag 5	67.5 MW	Turbo Blower of Turbine & Boiler
JSW - Tornagallu 2	130 MW	TG set
TANGEDCO - Mettur TPS 3	210 MW	TG components
MAHAGENCO - Khaperkheda 1	210 MW	Generator

Acknowledgement & Recognition of Excellence

In number of cases, our valued customers have appreciated efforts by BHEL towards achieving the work completion target ahead of schedule in challenging conditions, equipment performance and improvements in existing systems in the area of

Erection/Commissioning as well as SAS activities, in the form of appreciation letters.

Some of the appreciation letters received in various categories are-

Commissioning

- NTECL for successfully achieving full load at Vallur-3 (500 MW)
- NPCIL for successful synchronisation of Kudankulam-1: India's first 1000 MW Nuclear set

Overhauling

- CSPGCL for successful replacement of HP-IP module, along with overhauling of LP Turbine & Generator at DSTPM Korba-1 (250MW)
- OPGCL for successful completion of ESP overhauling ahead of schedule at IB Thermal-2 (210 MW)
- NSPCL for repair & commissioning of 14 MW Generator at PP-II at NSPCL, Bhilai

Others

- JPL for bringing back machine into operation in advance after major overhauling of LP Turbine & Generator at JPL-Raigarh Unit-1 (250MW)
- CSPGCL-HTPS Korba West Unit-1, 210MW: for excellent job of top bar replacement within Annual O/H schedule
- Aravali Power (APCPL) for providing support in attending hydrogen leakage from R-Phase bushing of Generator of Unit-2 at IGSTPP, Jhajjar (500 MW)
- RRVUNL towards successful rectification of Turbine breakdown at Suratgarh-2
- UPRVUNL-successful rectification of High chronic vibration at Anpara-1(500 MW)



Kakrapar Atomic Power Station (440 MW) awarded National Gold Award for Meritorious Performance (2012-13)

DIRECTORS' REPORT

A number of power stations equipped with BHEL supplied sets, received meritorious award under 'National Awards for Meritorious Performance' by Ministry of Power, Govt. of India for meritorious performance under different categories.

 <u>Performance for 2012-13:</u> 11 of 13 Power Stations awarded, are equipped in part or full with BHEL make sets

Award Category	Stations that received the awards for performance for 2012-13						
Gold	Toranagallu TPS (260 MW), Kakrapar Atomic Power Station (440 MW)						
Silver	*Trombay CCPP (180 MW)						
	*Ramagundam TPS (2600 MW)						
	*Nathpa Jhakri (1500 MW) (Hydro)						
Bronze	Dahanu TPS (250 MW), Korba TPS (2600 MW), Pong HEP (396 MW)						
Consolation	*Bhatinda (LM) (920 MW) *Rajasthan Atomic Power Station (1180 MW) *Tarapur Atomic Power Station (1400 MW)						

 Performance for 2011-12: 12 out of 13 Power Stations awarded, are equipped in part or full with BHFL make sets

Award Category	Stations that received the awards for performance for 2011-12
Gold	*Toranagallu TPS (260 MW), Kakrapar Atomic Power Station (440 MW)
Silver	*Trombay CCPP (180 MW) (Gas), Dahanu TPS (500 MW), Pong HEP (396 MW)
Bronze	*Vindhyachal TPS (3260 MW)
	*Ramagundam TPS (2600 MW), Dadri STPS (1820 MW)
Consolation	*Nathpa Jhakri (1500 MW) (Hydro) Bhatinda (LM) (920 MW) *Rajasthan Atomic Power Station (1180 MW) *Tarapur Atomic Power Station (1400 MW)

(*) BHEL+ NON BHEL sets

Preparing for Growth

BHEL has successfully maintained its leadership in Indian Power Sector even in difficult times. Company has continuously revisited and fine-tuned





Nathpa Jhakri Hydro Power Station (1500 MW) awarded National Silver Award for Meritorious Performance (2012-13)

its strategies for sustaining growth. Basic premise for the strategy revolves around increasing contribution, portfolio expansion and enhancing competitiveness for creating more value propositions for customers.

BHEL has always aimed at maximizing value proposition to the customers. Company has augmented its manufacturing capacity to 20,000 MW per annum in order to cater to the nations' requirements of accelerated capacity addition. BHEL has tied up with world leaders like Siemens, GE, Alstom, MHI etc for technology collaboration for various equipments. With the capability to manufacture Turbine-Generator, Boilers and critical auxiliaries upto the range of 1000 MW, BHEL is fully geared up for in-house manufacturing of majority of power equipment ensuring one stop optimal solution for complete power plant.

BHEL's rich and diverse experiences in Indian conditions have enabled company provide practical and optimal solutions to its customers. As a supplier of Boilers with world class performance over the years, BHEL symbolizes expertise in designing equipment suited for wide range of fuel especially with High Ash Indian Coal, layout considerations for operations and maintenance and efficient part load operations etc. In order to further strengthen its competitiveness especially on Project Life Cycle basis, various initiatives such as continuous design optimization, vendor base expansion, assimilation of technology, increased efficiency in manufacturing, project execution, service after sales, uprating and modernizing old power sets are under execution.

Today, company is focusing on enhancement of EPC projects in its thermal (Coal) business mix.

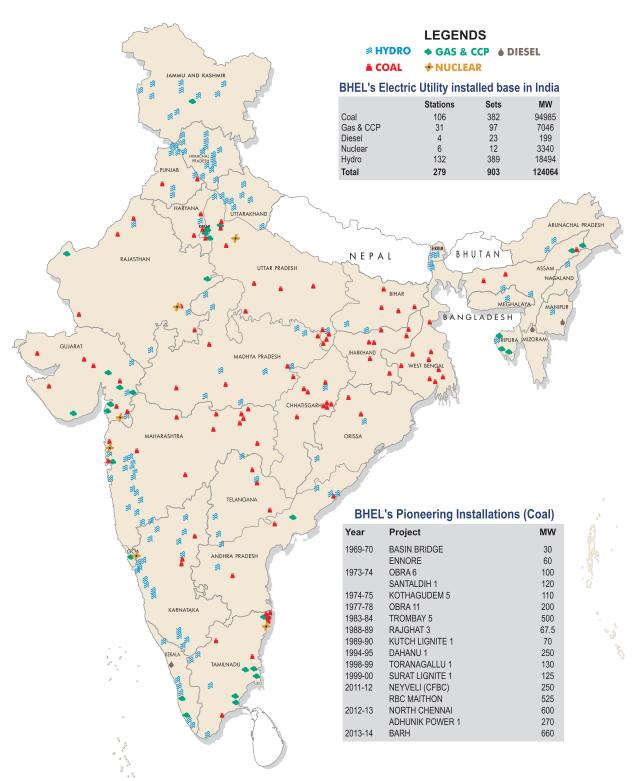
leveraging its expertise and experience in BTG segment, BHEL has strengthened its capabilities in BOP segment such as Transformers, Switchyard, Coal Handling, Ash Handling, Water Treatment, Civil Works etc. Further, BHEL is enlarging its scope of offer with inclusion of new products viz. Flue-Gas Desulfurisation (FGD), Water Management system, Air Cooled Condenser & other BoP systems in its power sector portfolio. Exploration of new business models with partnerships for Power Plant Developers for upcoming UMPPs and debt financing for new projects in partnership with Financial Institutions are also underway.

To further upgrade its technology, company is striving for development of Advance Ultra Supercritical Technology, which is a pioneer project undertaken jointly by BHEL, NTPC, IGCAR and others. Company will also be introducing state-of-the-art CFBC technology suitable for wide range of fuels viz. pet-coke, Lignite & washery-rejects, etc.

In Hydro power sector, BHEL has augmented its capabilities to manufacture upto 300 MW Hydro sets. Developing efficient runner profiles and reducing hydro turbine weights have been instrumental in BHEL's recent successes in the field. To harness emerging opportunities for R&M in Hydro power plants, necessary organisation changes have been put in place. Further, to harness emerging opportunities in Nuclear power, company is working towards increasing its offering in Nuclear Plant with focus on indigenisation and entry into core-nuclear area.

BHEL Make Electric Utility Installations

Coal, Gas, Nuclear, Diesel and Hydro Projects Commissioned as on 31.03.2014





1.2.2 Industry Sector

BHEL is a leading manufacturer of a variety of Industrial Systems & Products. Industry business of the company aims at meeting the growing demand for a number of industries, like metallurgical, mining, cement, paper, fertilizers, refineries & petrochemicals etc. besides captive / industrial utilities. Products and systems supplied by BHEL include Captive Power Plants, Centrifugal Compressors, Oil Rigs, Drive Turbines, Industrial boilers and auxiliaries, Waste Heat Recovery Boilers, Gas Turbines, Pumps, Heat Exchangers, Electrical machines, Valves, Heavy Castings and Forgings, Electrostatic Precipitators, ID/FD Fans, Seamless Steel Tubes, etc.

During the year, Industry Sector of BHEL secured orders worth ₹ 5,473 Crore as compared to ₹ 4,500 Crore during 2012-13 for a wide variety of products & systems in Captive Power, Rail Transportation, Power Transmission, Oil & Gas, Defence, Renewable Energy & Water Business and other industrial sectors.

Highest ever synchronisation of 1698 MW was achieved comprising 1682 MW CPP projects and 16 MW of Solar PV projects during the year.

1.2.2.1 Captive Power Projects

Growth Prospects

The power generation entities in India can be divided into two broad categories: Generation Utilities and Generation Non-Utilities or Captive Power Plants (CPPs). The central government, state government, or private investors own the generation utilities. On the other hand, industries principally commission the CPPs. Electricity Act 2003 defines CPPs as '... a power plant set up by any person to generate electricity primarily for his own use and includes a power plant set up by any co-operative society or association of persons for generating electricity primarily for use of members of such cooperative society or association...'.

The Electricity Act 2003 encouraged captive power generation in India and further provisions in the Act took captive power to competitive market by opening the market for players to invest in captive power generation. Open access allows captive generators to sell surplus power to any buyer no matter what the location.

As per Central Electricity Authority, Installed capacity of captive power plants increased from 21,468 MW in 2005-06, 34,444 MW in 2010-11 and 39,375 MW in 2011-12. This was driven by industrial and commercial demand. Industrial consumers who are suffering from inadequate power supply and high tariff rate find captive generation as the best alternative for meeting their demand. Coal-based generation dominates captive power generation also and constitutes around 57% of the captive capacity. Another reason for higher capacity of coalbased captive generation is the cost of generating electricity from coal, which is cheaper than diesel and naphtha. In recent times, cogeneration and waste heat recovery are emerging options for CPPs, as companies get the Clean Development Mechanism (CDM) benefits under this system in

Business Environment

addition to achieving energy efficiency.

In recent years, CPP business has not been offering encouraging business opportunities to various value chain partners which are largely affected by subdued Indian economic growth. Industry has also witnessed unexpected downward trend of power tariffs. Non availability of Coal linkage and Gas discouraged fresh captive capacity additions.

Offerings

- Steam Turbine based Captive Power Plants
 - STG/Boilers/BTG/EPC: Unit rating up to 200 MW
 - Non Reheat up to 120 MW unit rating
 - Reheat up to 200 MW unit rating
- Gas Turbine based Captive Power Plants
 - o GTG/HRSG/EPC: Fr-5 (26 MW) to Fr-9E (126 MW)
 - Open, Cogen & Combined Cycle

Achievements during the Year

Orders Received

- Order from RUPPL, Hazira (4X93.1 MW) and Dahej (3X90.3 MW) STG Sets against international competition from Siemens, Skoda, GE and Man-Turbo.
- Order for 3XFr6B GTG Sets for BPCL, Kochi
- Order for first single cylinder 150 MW steam turbine suitable for Air Cooled Condenser

operation from M/s. Gammon India for Nagai Power Pvt. Ltd.

Project Commissioned

- First time Fr 6FA Gas Turbine synchronised with unique DLN2.6 combustion system at Kribhco Hazira, 72 MW
- FACOR Power Ltd, Unit -2, 50 MW
- Grasim Industries Ltd. Harihar, 20 MW
- Thyssen Krupp-Anrak Aluminium Unit-1, 74.6 MW
- Grasim Industries Ltd. Vilayat Unit-1, 32 MW
- Maruti Suzuki India Ltd. Manesar 5, 20 MW
- Hindalco Industries Ltd Mahan Aluminium Unit 2 & 3, 300 MW
- Sail IISCO-Power & Blowing Station- Unit -1, 18 MW
- The India Cement Ltd., 50 MW
- OPG Energy Gumudipondi Unit-2, 80 MW
- JSW Bellary, 76 MW
- SAIL IISCO-Power & Blowing Station- Unit -2, 18 MW
- SuryaDev Alloys & Power Pvt. Ltd. Unit-2, 80 MW
- MRPL GTG-2 (Fr6B), 30 MW
- Reliance Industries Ltd, Dahej (Unit-I), 38.7 MW
- Thyssen Krupp-Anrak Aluminium Unit-2, 74.6 MW
- Tamil Nadu Newsprint & Paper Ltd., 40 MW
- Grasim Industries Ltd. Vilayat Unit-2, 32 MW
- IOCL Barauni, 20 MW
- RINL, VSP- 6.3MTPA Expansion, 67.5 MW
- Lokmangal Mauli Industries Ltd., 30 MW
- Hindalco Industries Ltd Aditya Aluminium Unit– 3 & 4,300 MW
- Grasim industry Ltd., Vilayat Unit -3, 32 MW
- MRPL STG-2, 28.5 MW
- · Sterlite Industries Unit 2, 80 MW
- SAIL IISCO-Power & Blowing Station- Unit-3, 18 MW



Unit – 2 & 3 of HINDALCO Industries Ltd. - Mahan Aluminium (300 MW) commissioned by BHEL



Preparing for Growth

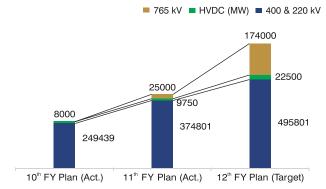
BHEL has taken various strategic initiatives to sustain and grow in present adverse market conditions. Company is focussing on EPC/BTG jobs for coal based thermal projects, securing CFBC boiler orders with new design developed in-house, forging long-term service agreements (LTSA) and exploring opportunities in MSW, CBM and Coal washery rejects based power plants.

1.2.2.2 Transmission Products & Systems

Growth Prospects

Indian Transmission Sector is expected to grow in tandem with the generation capacity addition, both in terms of Line length and Transformation capacity additions. As per 12th Five Year Plan of India, an addition of 2,70,000 MVA of substation capacity and 12,750 MW of HVDC systems are estimated to be added.





Source: CEA

In order to carry higher MW per Right-of Way (ROW), the focus would be on higher voltage levels like 765 kV, 1200 kV in UHVAC and ±800 kV UHVDC. Last five years have seen highest growth in 765 kV class segment compared to other kV class. From a meagre 4500 MVA in 2010-11, the 765 kV class voltage segment has grown to 83000 MVA as on Mar 2014. Interstate Transmission system will continue to get strengthened during the plan period. From 34,000 MVA it is expected to grow up to 65,550 MW by the end of 2017.

Business Environment

Technological developments for transmission lines with thrust on UHVAC, UHVDC and GIS are in vogue to reduce land requirement and transmission losses.

The transmission equipment market has been hit adversely due to slowdown in the Indian market. The excess domestic capacities in the Power Transformers segment have resulted in demand lagging behind the manufacturing capacities leading to intense competition and pricing pressures. The imports from countries like China and South Korea especially in 765 kV class have further added to competitive pressures. The demand for electrical equipment is expected to improve in the medium term with more and more generation, transmission and distribution projects taking off once the uncertainties in the market are addressed.

Offerings

BHEL has significant presence in the field of power transmission in India with a wide range of transmission systems and products in its portfolio. The products manufactured by BHEL include Power transformers, Instrument transformers, Dry type transformers, Shunt reactors, Vacuum and SF6 switchgear, Gas insulated switchgears, Ceramic insulators, etc. Major critical hardware such as capacitor banks, circuit breakers, control and protection equipment and thyristor valves are in its manufacturing range.

BHEL has indigenously developed and commercialised Gas Insulated Switchgear (GIS) up to 145 kV and transformers and shunt reactors up to 765 kV. The company has also developed & supplied 1200 kV CVT and 1200 kV transformers for the first 1200 kV test station in the country. BHEL has additionally developed & tested 420 kN disc insulators for 1200 kV transmission lines and now has a range of disc insulators for EHV and UV AC/ DC applications up to 1200 kV AC and ±800 kV DC, solid core insulators up to 400 kV and hollow porcelain insulators up to 765 kV AC.

BHEL has indigenously developed & executed schemes using FACTS devices like Fixed Series Compensation for 400 kV lines and Controlled Shunt Reactor (CSR) for dynamic reactive power management of long 400 kV transmission lines. For controlling power flow in 400 kV systems, BHEL has developed Phase Shifting Transformer indigenously. With its strong engineering base, the company offers complete EPC solutions for EHV & UHV Substations/ Switchyard (AIS & GIS type ranging from 132 kV to 765 kV); HVDC multi-terminal converter stations up to ±800 kV; and Flexible AC Transmission Systems (FACTS) solutions to its customers.

Achievements during the Year Order Receipts

- Highest value orders for substations received from different customers include:
 - 400 kV substations with associated transmission lines for MPPTCL, Jabalpur. The scope of works include construction of 2 nos. 400 kV green field substations at Balaghat & Badnavar along with 15 km of 400 kV transmission lines and extensions of 3 nos. existing 400 kV substations at Bhopal, Nagda & Chhegaon
 - Turnkey establishment of 400/230/110 kV Anikadavu and 400/110 kV Thappagundu substation of TANTRANSCO
 - Extensions of 400 kV substations at Karaikudi, Pugalur, Kalavinthapattu, Abhishekapatty, Durgapur, Maithon, Biharshariff & Purnea for PGCIL
- Major Orders received for transmission products include:
 - Transformers of various ratings from APTRANSCO, NTPC, UPRVUNL Anpara, CSPGCL Korba, RRVPNL, MPPTCL and PSTCL
 - 765 kV Shunt Reactors from BIDCO
 - Vacuum Circuit Breaker (VCB) from Rajasthan Discoms, CSPTCL, PVVNL
 - Busducts from NTPC
- Orders from NTPC of MV Switchgear for Nabinagar, Kudgi, Vindhyachal and Gadarwara projects for 1592 nos. including first order for supplies to 660 MW and 800 MW Supercritical sets.
- Order from Toshiba JSW Power Systems Pvt. Ltd. for 5 MVA 23.5 kV dry type excitation transformer for NTPC Meja project.



Order from Toshiba JSW Power Systems Pvt. Ltd. for 5 MVA 23.5 kV dry type excitation transformer received for NTPC Meja Project

Project Commissioned

UHV Segment

Constructed and successfully commissioned 765/400 kV substation 6 months ahead of schedule at Raichur in Karnataka, the Southern end of 765 kV Raichur-Sholapur transmission link of PGCIL. With the commissioning of 765 kV Raichur-Sholapur transmission link, the Southern Grid is now synchronised with the N-E-W Grid thus forming the synchronously operated National Grid thereby fulfilling the ambition of One Nation - One Grid-One Frequency.



Constructed and successfully commissioned 765/400 kV substation 6 months ahead of schedule at Raichur in Karnataka

EHV Segment

- Successfully commissioned 220 kV Switchyard for 1x250 MW Unit 8 of Durgapur Projects Power Station for DPL. As part of this switchyard project, BHEL has also carried out the diversion of 132 kV and 220 kV Transmission Lines of DVC, WBSETCL & DPL with minimal shutdown time of four days.
- Successfully completed the works of Diversion of 400 kV Jhatikra- Bamnauli D/C and 400 kV Ballabhgarh- Bamnauli D/C Transmission Lines for the upcoming 750 MW Pragati-II CCPP of PPCL at Bamnauli in Delhi. For this, BHEL had to replace the existing Quad-Bersimis overhead conductor with 12 runs of 400 kV 2x2500 Sq. mm XLPE copper cable having route length 850m per circuit. This is the largest cross section 400 kV XLPE cable installed for the first time in India and is an engineering landmark set by BHEL.



HVDC

For ±800 kV, 6000 MW, Multi-terminal HVDC NE Agra project, 6 nos. 400 kV Class HVDC Converter transformers have been manufactured & successfully tested at BHEL Bhopal works and dispatched to Agra and Bishwanath Chariali terminals.



400 kV Class HVDC Converter Transformer under test at BHEL, Bhopal for ±800 kV, 6000 MW, multi-terminal HVDC NE Agra project

GIS

BHEL has expanded its EPC presence in the field of GIS substations backed by in-house engineering & integration expertise. BHEL has executed numerous GIS substations from distribution level to EHV Transmission level (33kV - 400kV) all across the Indian geography. During this year following GIS switchyards/ substations have been commissioned:

- 400 kV GIS switchyard for 4x130 MW Parbati HEP Stage-III of NHPC
- 66 kV GIS Substation consisting of 42 Circuit Breaker bays at Dahej Refinery of ONGC Petro-additions Limited as a part of turnkey contract for 195 MW CCPP
- 400 kV GIS switchyard for 6 x 68.67 MW Rampur HEP of SJVNL

Preparing for Growth

BHEL has augmented its facilities for manufacturing UHVDC equipments viz. Converter Transformers, Thyristor valves, Filter Capacitors, etc. BHEL, along with its consortium partner, is presently executing ±800 kV, 6000 MW North-East Agra HVDC project with the converter capacity of 8,000 MW, the highest ever built. The company is also geared up to implement forthcoming HVDC projects.

From products perspective, BHEL has developed and supplied first 1200 kV Power Transformer in the country which has been commissioned at POWERGRID's Bina substation in Jan 2012. BHEL is well positioned to capture both HVDC and HVAC market.

BHEL has successfully completed the development of 400 kV GIS and is ready to address the forthcoming GIS requirements.

BHEL has developed and installed Phase Shifting Transformer for APGENCO's Kothagudem Thermal Power Station. BHEL has also developed and supplied 400 kV Control Shunt Reactor, Fixed series compensation schemes for transmission utilities & small rating STATCOMs for Industry applications and is ready to address forthcoming requirements.

Key capacity & capability developments at BHEL during the year, which enhanced competitiveness of BHEL in transmission business segment include:

 New state-of-the-art facility for thyristor valve at EDN, Bangalore, and capacitors at Bhopal; BHEL is now fully geared up for assembly and testing of Thyristor Valve Modules for HVDC and FACTS applications



New state-of-the-art facility for Capacitors at Bhopal

- Successful development of IP and SP Busducts for 660 MW Super critical power plants
- New design developed for 2 nos. of 7.6 MVA, 11 kV special purpose rectifier transformers for cold rolling mill of SAIL, Bokaro
- 355 MVA, 400 kV 3ph GT (new rating) for SKS Power developed
- Manufacturing Unit at Jhansi developed capability for manufacturing 400 kV transformers

Years of Engineering Excellence

DIRECTORS' REPORT

 Manufacturing and testing facilities for converter transformers at Bhopal enhanced to address emerging opportunities in 800 kV HVDC transmission sector.

1.2.2.3 Transportation

Growth Prospects

Indian Railways (IR) is the third largest railway network in the world. India presently suffers from a severe and chronic under-investment in railway infrastructure. Today, transport has evolved out of its traditional garb of a 'derived demand' to be recognised as the 'harbinger of growth'. It is increasingly realized that there is an urgent need to enhance capacity and modernize Indian Railways to meet country's social and economic aspirations in the 21st Century.

'Vision 2020' of Indian Railways envisages augmentation of infrastructure with investment of around ₹ 14 trillion in next 10 years. This includes requirement of over 9000 Locos and investment of ₹ 4 trillion on manufacturing/ procurement of Diesel Locos, Electric Locos, passenger coaches EMU/ DEMUs/MEMUs, etc. and establishment of high speed corridors under public-private partnership mode. This will involve technology upgradation from conventional DC drives to IGBT based AC drives in both Diesel and Electric Loco, and from corton steel coaches to stainless steel coaches with IGBT drives for AC EMUs, MEMUs and DEMUs. Rail, Coach Factory at Kanchrapara, Diesel Locomotive Factory at Marhowra, Electric Locomotive Factory at Madhepura and Rail Wheel Factory at Chhapra, new production units are also planned to be set up.

Mass Rapid Transit System (MRTS) is emerging as a key focus area of policy makers in India due to rising urbanisation. Indian cities lag behind their global counterparts with only Delhi having metro of considerable length (100+ km) and Kolkata having only 28 km. Monorail transit system is being constructed at some places in India. Currently, around 225 Kms of metro line is operational, 636 Kms is under construction and 20 Kms of Mono Rail is under operation. 12 Cities with track length of 620 Kms are in the planning stage.

Business Environment

Indian Railways has invited Request for Quotation (RFQ) and qualified parties to participate in Request For Proposal (RFP) for setting up new manufacturing facilities for Electric and Diesel Locomotives at Madhepura and Marhowra respectively on PPP basis.

Substantial part of funding for Dedicated Freight Corridor (DFC) has been tied up with Govt. of Japan for Western Corridor and with World Bank for Eastern Corridor. Procurement of land has almost been completed. Large stretches of track have been awarded to various infrastructure companies. Completion of DFC is expected by 2017. There is an emerging scope for substations for electrification and signalling in addition to supply of locomotives.

Offerings

BHEL's involvement in the transportation sector has been marked with rapid growth. Today, BHEL supplied & installed IGBT propulsion equipment (Traction Converter/Auxiliary Converter/VCU) account for more than 50% of IGBT based locomotives in operation by Indian Railways. And over 70% of Indian Railways is equipped with traction equipment built by BHEL. During the year 2013-14, BHEL manufactured and supplied one rake comprising 9 AC EMU coaches to Indian Railways proving the ability to supply complete AC EMU rakes fitted with electrics to Indian Railways. The product and system range includes:

Traction Machines

- AC traction motors (up to 1150 kW) for all locos & EMUs
- DC traction motors (up to 630 kW) for all ranges of locos & EMUs
- AC traction alternators (up to 3860 kW) for all ranges of DE locos & DEMU's
- · DC traction generators up to 2000 kW
- Motor generator sets (up to 25 kW) for all type of requirements
- Auxiliary generators and exciters (up to 50 kW) for all type of requirements

Transportation Systems

- Traction systems
- Urban transportation systems
- AC electric locomotives (up to 5000 HP, 25 kV AC)
- AC-DC dual voltage electric locomotives (up to 5000 HP, 25 kV AC, 1500 V DC)
- Diesel-electric shunting locomotives (Upto 1400 HP)
- · Battery powered locomotive
- OHE recording-cum-test car



- Eddy current clutch for radiator fan
- DC blower motors (up to 50 kW) for dynamic braking system
- · Traction Grade Gears and Pinions
- Traction Transformers for ACEMU and Electric Locos
- AC EMU Coaches
- Dynamic track stabilizers
 - Well wagon
 - Rail cum Road vehicle
- Utility vehicle
- · Ballast cleaning machines

Traction Drive System

Traction Drive system comprising traction converter, auxiliary converter and Vehicle Control Electronics for 6000 HP GTO/IGBT based AC Locomotives; 1600 HP AC Electrical Multiple Unit (EMUs); and 1600 HP Diesel Electrical Multiple Units(DEMUs)

Achievements during the Year

- Largest quantity orders in a single year received for Transformers (85 nos.), IGBT Converter (33 Sets), DEMU Electrics (54 Sets)
- Complete state-of-the-art IGBT based propulsion system developed for ACEMU's
- Readiness with design for manufacture of WAG-9 locomotive with IGBT based three phase drive propulsion system at Jhansi unit
- 39 sets 5400 KVA 1 phase Transformers and 55 nos. HS Traction Motors have been supplied before contractual delivery
- Appreciation Letter received from customer for supply of 1 No. 700 HP DESL to Malabar Cements Ltd. 2 months ahead of scheduled delivery



WAG-9 locomotive with IGBT based three phase drive propulsion system

Preparing for Growth

To meet requirements emerging out of technology upgradation by Railways, BHEL has entered into Business Sharing Agreement (BSA) with Strukton, Netherlands for joint development of IGBT drives. BHEL has successfully executed an order for 50 sets of IGBT based propulsion equipment for Electric Locos. Prototype of IGBT based propulsion equipment for

AC EMUs has been developed and is currently under integrated system testing at CET, Bhopal.

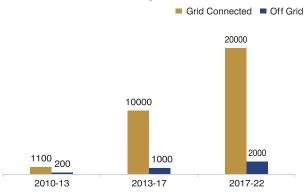
BHEL has entered into an MoU with IR for setting up of MEMU coach factory at Bhilwara. Company has established itself as another supplier of EMU coaches to IR with supply of prototype ACEMU rake of 9 coaches against IR's developmental order. BHEL will also be participating in proposed new manufacturing facilities of IR in association with global OEMs.

1.2.2.4 Renewable Energy

Growth Prospects

National Action Plan on Climate Change (NAPCC) of India unveiled in 2008 envisages meeting 15% of country's power requirements from renewable sources by 2020. Jawaharlal Nehru National Solar Mission (JNNSM), one of the eight key missions identified under NAPCC has set an ambitious target of adding 20 GW of grid connected & 2 GW of offgrid capacity by 2022 in three phases by creating favourable conditions for solar manufacturing capability. Mission also aims at reducing the cost

National Solar Mission Cumulative Target-(MW) SPV market to grow at 35-40%



Source: MNRE

50 Years of Engineering Excellence

of solar power generation in the country through long term policy, large scale deployment goals, aggressive R&D and domestic production of critical raw materials, components and products.

Ministry of New and Renewable Energy, GOI has also been working on a scale-up plan of solar power generation of 1,00,000 MW to be realized by 2030. This plan is against 20,000 MW capacity originally planned under JNNSM, which was to be realized by 2021-22. Additionally, opportunities in Solar Thermal sector is also expected to pick up in 2014-15.

Business Environment

The cumulative PV installations have grown from 38 MW in 2010 to about 2640 MW in 2014. The EPC price for setting up of Solar PV plant has seen a decline due to competition and fall in prices of Solar PV module & BOS items, leading to drop in power tariff. Also, solar energy is expected to reach grid parity in next 3-4 years. Commissioning schedules have shortened from earlier 12 months to 6 months with requirement of long term comprehensive O&M of 10 to 25 years.

In the manufacturing sector the capacity utilization of solar PV cells and modules was low due to imports clubbed with low cost financing. However it is expected to improve with some of the large manufacturers gearing up to meet the DCR requirement as announced by MNRE.

Solar thermal sector failed to take off in a large way due to non-availability of accurate DNI data, higher land requirement, and higher capital & operational expenditure. So far only 50 MW out of 470 MW projects of JNNSM Phase-I have been commissioned. Directions for this sector are expected to be set during implementation of Phase-II of JNNSM.

Offerings

BHEL offers EPC solutions from concept to commissioning for grid interactive and standalone PV applications ranging from KW to MW size plants which include supply of PV Module & Balance of System (BOS), Civil, E&C and O&M. Additionally BHEL manufactures Space Grade Solar Panels and Space Grade Batteries in association with ISRO. All satellites launched by ISRO are equipped with BHEL manufactured solar panels and batteries. BHEL also offers complete EPC solution for CSP systems wherein it has a working arrangement with M/s Abengoa, Spain.

Achievements during the Year

Order Receipts

- Highest order booking of 24 MW for Solar Photovoltaic Power Plants including highest rating of 15 MW for NTPC, Singrauli
- Order for first of its kind 25 kW Solar Power Plant on platform shelter at Gurgaon Railway Station from RITES

Project Commissioned

 10 MW Solar power plant commissioned both at NTPC Talcher and Unchahar



10 MW Solar Power Plant commissioned at NTPC Talcher

- 5 MW grid interactive solar power plant commissioned at BHEL BAP, Ranipet. The power generated is utilized for in-house consumption. This is one of the largest Solar power plants setup in BHEL units
- 25 kW Rooftop Solar Power Plant using platform shelter at Gurgaon Railway Station, for RITES,



25 kW Roof-top Solar Power Plant using platform shelter at Gurgaon Railway Station commissioned for RITES



commissioned within the contractual schedule of 4 months

Preparing for Growth:

BHEL is ramping up PV Cell and module production capacity to address the domestic market demand and supply to Ultra Mega Solar Power Projects. Key strategy adopted by the company includes:

- Proposal for establishment of 480 MW green field solar manufacturing facilities for wafer, cell and module
- Continuous improvement of Cell and Module efficiency through in-house R&D efforts
- MoU signed among BHEL, SECI, SSL, POWERGRID, SJVN and REIL for formation of Joint Venture Company for setting up of 4,000 MW Ultra Mega Solar Power Project at Sambhar (Rajasthan)
- MoU with Abengoa, Spain for joint EPC bidding for solar thermal projects

1.2.2.5 Water Management

Growth Prospects

Water sector is perceived to have high potential business opportunities in India primarily due to rise in population levels, rapid increase in urbanization and the emergence of new industries. India's National Water Policy 2012 focuses on water recycling and reuse, water audits of industries and Zero Liquid discharge (ZLD). This bodes well for growth of water treatment business and desalination industry in coastal regions of India. Industries such as power and chemicals have also started resorting to desalination process to fulfil their water needs.

Business Environment

Water treatment business is a highly competitive business segment. Many new players are making their foray, conventional technology is preferred, however market is tending toward membrane based technologies owing to their advantages like less footprint area, low chemical consumption and less O&M requirements. EPC/BOP/Plant Water System is a preferred project model for Power plants. Industries prefer Independent water package with O&M requirement while municipalities go for projects through BOO/BOOT mostly with conventional Technologies and long-term O&M.

Offerings

BHEL has geared up to offer turnkey solutions for following Systems: RO based sea water desalination plant, UF-RO-EDI based DM Plant, Effluent Treatment Plant, Membrane based Sewage Treatment Plants (STP), Zero Liquid Discharge (ZLD) for industries and complete Plant Water System for Power Plant.

During 2013-14, BHEL received first order of Water Treatment System in Petrochemical Sector for 96 MLD Raw Water Treatment Plant (Membrane Filtration based) from OPAL.



BHEL offers turnkey solutions for RO based sea water desalination

Preparing for Growth

BHEL is gearing itself to address water treatment business as a comprehensive solution for industry involving membrane based solutions along with other connected systems. With a view to enhance its presence in Membrane based water treatment business, BHEL has a long term Manufacturing Associate Agreement (MAA) with GE India Industrial Pvt. Ltd., a world leader in membrane business.

1.2.2.6 Industrial Products

Oil Rigs, Well Head & Xmas Trees, Fabricated Equipments & Boiler Feed Pumps, Compressors & AC Machines, etc.

Growth Prospects

The oil and gas sector is fairly well developed in India, and is poised to contribute a large share to India's energy basket over the next 15-20 years. The Government of India has taken various strategic initiatives in recent past such as New Exploration Licensing Policy (NELP); acquisition of Oil and



Gas assets abroad; developing strategic storage facilities at identified locations; exploring alternate sources of Energy, including Coal Bed Methane, gas hydrates, etc; and improving the recovery of oil and gas from existing fields as part of its Hydrocarbon Vision 2025.

Demand for petroleum products is projected to increase at an annual rate of 4.7 per cent during the Twelfth Five Year Plan. During the plan period, 1,38,974 kilometres of 2D seismic and 82,488 square km of 3D seismic are likely to be acquired by ONGC, OIL and private/JV companies. Also 1,310 exploratory wells are likely to be drilled during the plan period. These exploratory efforts are likely to result in hydrocarbon reserve accretion of about 727 million metric tonnes of oil and oil equivalent gas in the country.

Therefore, Oil & Gas industry in India holds promising growth opportunities for various value chain partners.

Business Environment

Demand for new oil rigs is expected to come from ONGC in near future. Oil India also intends to go for procurement of Well Head X-mas Trees through rate contract. Production of HT Motors in India has gone down by more than 20% during 2013-14 due to lack of demand and continuing economic slowdown. Demand from the Power sector, which forms a large part of the market for HT motors has been subdued due to various issues plaguing the sector.

Offerings

Oil Rigs: BHEL is in the field of design, manufacture and service of various types of onshore rigs since 1975. BHEL has the capability to manufacture onshore deep drilling rigs up to a depth of 9,000 meters, Mobile rigs up to a depth of 3,000 meters and Workover rigs up to a well- depth of 6,100 meters. Besides complete rig package, BHEL also supplies onshore drilling rig equipment like drawworks, rotary-table, travelling block, swivel, mast & sub-structure, mud systems and rig electrics to leading oil and natural gas exploration companies of India.

Well heads & X-Mas Tree Valves: Well heads & X-Mas Tree Valves up to 10,000 psi rating for onshore as well as offshore applications are also supplied by the company to ONGC, Oil India Ltd. and private drilling companies.

Mechanical Packages & fabricated equipment such as **Columns:** Thickness up to 120 mm, **Vessels:** Thickness up to 120 mm, **Reactors:** Thickness up to 120 mm, **Mounded Bullets:** Thickness up to 120 mm, **Cryo storage tanks:** 165 m3 (Vertical) & 90 m3 (Horizontal), **Heat Exchangers:** Up to 450mm TS, Oxygen & Nitrogen Plant and BFP (Boiler Feed water Pump) with drive Motor/ Steam turbine for power plants up to 800 MW.

Centrifugal Compressors: BHEL possesses expertise to design, manufacture and service various types of Centrifugal Compressors as per API 617, flow up to 3,00,000 m3/hr & pressure up to 350 bar for application in Fertilizers, Refineries, Petro-chemicals, Pipelines, Gas processing, Steel industries, etc. BHEL has the capability to produce Centrifugal Compressors to handle all types of process gases.

Industrial Products (Electrical) include AC squirrel cage, Slipring, synchronous motors (for safe and hazardous areas, including variable speed applications) and industrial alternators.

Range: Voltage - AC-415V to 13800 V; Frequency-50 Hz & 60 Hz; Enclosures - SPDP, TETV, TEFC, CACA, CACW & Duct ventilated

AC machines for safe area applications:

- Squirrel cage induction motors-150 KW- 21000 KW
- Slip ring induction motors- 150 KW-10000 KW
- Synchronous motors- 1000 KW-20000 KW
- Vertical slow speed synchronous motors– 4000 KW to 250000 KW

AC machines for hazardous area applications:

- Flameproof squirrel cage induction motors – 150 KW to 1500 KW
- Non sparking squirrel cage & synchronous motors - 150-21000 KW
- Increased safety squirrel cage & synchronous motors-150 to 4000 KW
- Pressurized motors
 - 150 KW to 21000 KW (Sq cage & Synchronous)

Industrial Alternators: 3000 kVA - 25000 kVA

Achievements during the Year Major Orders Received

 36 nos. 3.5 MW to 4.3 MW vertical induction motors for Phase 2 & 3 of Mulwad Lift Irrigation Scheme in Karnataka, through M/s.



- Flowmore Ltd. and M/s Megha Engineering & Infrastructure Ltd. respectively
- 3 nos. Centrifugal Compressors for FCC Wet Gas, DHDT Recycle Gas and VGO Recycle Gas from M/s Kochi Refinery Limited
- 1 no. DCU Wet Gas Compressor from M/s CPCL through M/s EIL
- 2 Nos. BFP Drive Turbines and 1 No. Process Pump Turbine from M/s ISGEC for BPCL, Kochi
- 6 Nos. BFP Drive Turbines from Alstom for NTPC Nabinagar
- Turbo blower orders from RINL, Vizag (1 no.) and NMDC (3 nos.)
- Oil Rig Equipment such as Independent Rotary Drive (IRD), Alternator, Mud Handling system, under structure and Super elevation from M/s ONGC & M/s OIL
- Well Head and Xmas Trees from M/s ONGC/ OIL/SELAN

Other Significant Developments

 For the first time in the country, BHEL has successfully manufactured, tested and supplied new generation AC-AC Variable Frequency Drive (VFD) 2000 HP Rig in association with technology partner National Oilwell Varco (NOV), USA



2000 HP AC-AC VFD Oil Rig for ONGC

- Successfully designed, manufactured & tested 6 MW, 6.6 kV, 1500 RPM vertical cage Induction Motor for critical application in Nuclear Reactor of NPCIL KAPP-3&4 and RAPP-7&8
- Successfully developed India's largest rating 20.5 MW, 11 kV, 1500 RPM motor for Boiler Feed Pump application



20.5 MW 11 kV 4 POLE, 1500 RPM Motor developed for Boiler Feed Pump application

- The company is also developing 15 M (15,000 psi) Well Head to meet growing demand for Well Head & Xmas Trees from Oil sector E&P companies
- Two numbers of Turbo Blowers with Drive Turbines were commissioned at SAIL Burnpur & Rourkela Plants
- With state-of-the-art Cross Piercing Elongation (CPE) process of manufacture of Seamless Steel Tubes, BHEL can now supply longer length tubes (up to 22 meters length) with shorter delivery cycle time catering to wide range of applications

Preparing for Growth

BHEL is focussing on enhancing competitiveness by reducing delivery Cycle time, most competitive prices and focus on continual quality improvement.

1.2.2.7 **Defence**

Growth Prospects

The Indian Defence sector is growing at an accelerated rate with the country now ranked as the 10th largest investor in defence globally. India established itself as the World's largest arms importer in 2011 with 70% of its defence procurement

50 Years of Engineering Excellence

coming from foreign companies. In recent years, Government of India has taken various policy initiatives to encourage Indian industry to develop and manufacture defence requirements. As a result, private sector participation has seen significant growth in India's indigenous defence production. Ministry of Defence (MoD) also implemented procurement policy with focus on indigenisation. This includes preferred categorization order with preference to buy & make (Indian); 30% buy (Indian) category to be achieved on overall cost in the core components; opportunity for BSA for maintenance and transfer of technology; offset provision for "buy (global)" & "buy & make" with ToT for acquisitions exceeding ₹ 300 Crore.

Offerings

BHEL has emerged as a reliable supplier of strategic equipment and services to the Indian defence and paramilitary forces for over 20 years. BHEL has a large infrastructure including dedicated engineering and manufacturing facilities at many locations to manufacture various types of equipment and provide complete services to meet the Indian defence requirement. Major products being manufactured by BHEL includes Super Rapid Gun Mount, Integrated Platform Management System for Naval Ships, Turret Casting for T72 Tanks, Thermo pressed components and ATVP equipment, etc.

Achievements during the Year

 Order for 5 nos. 76/62 Super Rapid Gun Mount (SRGM) received from Pipavav Defence and Offshore Engineering Company Ltd (PDOECL)



Super Rapid Gun Mount (SRGM)

DIRECTORS' REPORT

- A Maiden achievement with successful commissioning of first ship set P15A Auxiliary Control System for the Indian Navy
- MoU signed between BHEL and PDOECL for co-operation in mutual business interest

Preparing for Growth

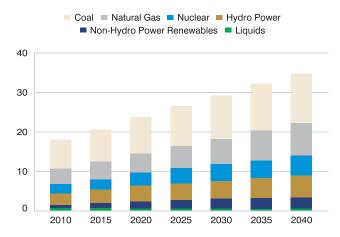
BHEL is focussing on product development and collaboration with Defence PSUs & global OEMs for capitalising the emerging opportunities in Indian defence sector. Company has been nominated as production agency for 127 mm Medium Calibre Gun & 30 mm Naval Gun.



I.2.3 International Operations

Macro opportunities

Energy is a crucial input for attaining economic and social objectives. Developing countries are undergoing major transformation with improving living standards, urbanization, increasing income levels leading to higher household and industrial electricity consumption and wider penetration of electronics, appliances and other modern conveniences. The global energy demand is continuously increasing. As per U.S. Energy Information Administration's (EIA) International Energy Outlook 2013, worldwide electricity use is projected to increase by 90 percent from 2010 to 2040, with developing countries accounting for the overwhelming majority of this increase.



World net electricity generation by energy source, 2010-2040 (Trillion kilo watt hours)
Source: International Energy Outlook (IEO), 2013

Non-OECD OECD

World total energy consumption, 1990-2040 (quadrillion Btu) Source: International Energy Outlook (IEO), 2013 (U.S. Energy Information Administration)



More than 85 percent of the increase in global energy demand from 2010 to 2040 occurs among the non-OECD (Organisation for Economic Cooperation and Development) nations, driven by strong economic growth and expanding populations. It will be developing countries that drive demand, with developing Asia accounting for most of the global increase. China and India continue to lead both world economic growth and energy demand growth. Since 1990, energy consumption in both countries as a share of total world energy use has increased significantly; together, they accounted for about 10 percent of total world energy consumption in 1990 and nearly 24 percent in 2010.

Revival of the global economy and easing of political and civil unrest in the Middle East & North Africa (MENA) region will open new avenues for BHEL in the coming years, especially in the Gulf Region which has been the most successful market for BHEL in the last few years. Countries like Oman, Libva, Yemen and Iraq will continue to add power capacity to meet growing electricity demand. Similarly, a lot of potential exists in power starved African continent which offers good opportunity for company to enhance its footprints in this region. South East Asia, Indonesia and Vietnam offer good potential as power supply has not been at par with the speed of economic growth and industrialization in these countries. SAARC region is expected to offer promising opportunities with significant growth potential in countries like Bhutan, Nepal and Bangladesh. BHEL is also targeting countries like Russia, Kazakhstan, Belarus, and Tajikistan that form a part of the Commonwealth of Independent States (CIS) and also hold promising investment avenues.

Business Environment

Global economy in the year 2013-14 remained slow-moving. Even after five years of the worldwide financial meltdown, a climate of austerity and capex fatigue still prevails. Old constraints such as unfinished financial sector reforms, impaired monetary policy, corporate debt overhang in some Euro area economies, high government debt & related fiscal and financial risks in many other advanced economies still persist. Power demand in the MENA region is expected to continue growing by 7% annually in the coming decade but the continuing political and civil unrest is adversely affecting the

business prospects at present. Geopolitical risks have also resurfaced in recent months in countries like Egypt and Ukraine.

Though the current economic environment is uncertain, focused efforts have helped BHEL in consistently enhancing its global footprints. Under such trying circumstances and against all odds, the company achieved 28 percent increase in orders over previous year. Overall, BHEL secured orders for power plant equipment totalling to 1700 MW along with orders for other products and services from 21 countries across the world.

Our experience in exports

BHEL has been the flag bearer of Indian engineering enterprises across the globe for over four decades. The company has references in 76 countries and has contracted power plant equipment around 17000 MW outside India. Continuing its focus on globalization, BHEL has achieved consistent growth in its exports.

These references encompass almost the entire range of BHEL products and services, covering thermal, hydro and gas-based turnkey power projects, substation projects, rehabilitation projects, besides a wide variety of products like Transformers, Compressors, Motors, Valves and Oil field equipment, Electrostatic Precipitators, Photovoltaic equipment, Insulators, Heat Exchangers, Switchgears, Castings and Forgings, etc.

The cumulative capacity of power plants with BHEL supplied equipments stands at 10,088 MW in overseas market. Some of the major successes achieved by BHEL have been in Gas-based power projects in Oman, Libya, Malaysia, UAE, Saudi Arabia, Iraq, Bangladesh, Sri Lanka, China, Kazakhstan, Belarus, Yemen; Thermal power projects in Cyprus, Malta, Libya, Egypt, Indonesia, Thailand, Malaysia, Sudan, Syria, Ethiopia, Vietnam, Senegal, New Caledonia; Hydro power plants in Bhutan, New Zealand, Malaysia, Azerbaijan, Nepal, Taiwan, Tajikistan, Vietnam, Rwanda, Thailand, Afghanistan, Democratic Republic of Congo and Substation projects & equipment in various countries. Execution of these projects has provided BHEL the experience of working with worldrenowned consulting organisation and inspection agencies.



Global Footprints of BHEL





AFRICA

ALGERIA BURUNDI DR CONGO **EGYPT ETHIOPIA GHANA** KENYA LIBYA MALAWI **MAURITIUS NIGERIA RWANDA SENEGAL** SOUTH AFRICA SUDAN **SWAZILAND TANZANIA** UGANDA ZAMBIA

ZIMBABWE

ASIA

AFGHANISTAN BANGLADESH BHUTAN CHINA HONG KONG **INDONESIA IRAN IRAQ JAPAN JORDAN** KAZAKHSTAN **KUWAIT** LAOS **MALAYSIA MYANMAR NEPAL** OMAN **PHILIPPINES** SAUDI ARABIA

SINGAPORE

SRI LANKA SYRIA TAJIKISTAN TAIWAN

THAILAND UAE VIETNAM

YEMEN

EUROPE

AZERBAIJAN BELARUS BULGARIA CYPRUS FRANCE FINLAND GEORGIA GERMANY GREECE ITALY IRELAND MALTA POLAND ROMANIA RUSSIA SWEDEN SWITZERLAND

TURKEY UKRAINE

JK

NORTH AMERICA

CANADA

TRINIDAD AND TOBAGO USA

USA

OCEANIA

AUSTRALIA NEW ZEALAND NEW CALEDONIA

SAMOA

SOUTH AMERICA

SURINAME

Achievements during the year Order Receipts during 2013-14

During the year BHEL secured following prestigious orders:

 Maiden Overseas Order for Oil Rigs-Indonesia- Secured the maiden order for supply of 3 nos 1500 HP Oil Rig to Indonesia. This is BHEL's first overseas foray for Oil Rigs against stiff competition from major global players including Chinese and European competitors

 New product in existing market - Bangladesh-BHEL secured a breakthrough order for

50 Years of Engineering Excellence

Long Term Service Agreement (LTSA) for 2x120 MW Siddhirganj Gas based Power Plant in Bangladesh. This is BHEL's first LTSA order in overseas market

- Largest order for Capital Spares from Middle East – UAE - BHEL has been trusted with the order of capital spares for Al Ghail Power Project. This is BHEL's largest order for export of Capital Spares from Middle East
- Zambia, Uganda & Kazakhstan- New product in existing market - For the first time, an order for motors was secured from Zambia. BHEL has also secured the maiden order for the supply of brushless exciter from Uganda and Kazakhstan
- Repeat orders Repeat orders received for Wellheads from Oman and motors from Kenya. Similarly, satisfied with the earlier performance, Metso Automation, USA has placed a repeat order for supply of Control Equipment on BHEL for the 3rd consecutive year
- After-sales-service—BHEL remains committed to offer quality and prompt after sales service to its customers. Orders have been received from different parts of the world for spares & after sales services, including Bangladesh, Bhutan, France, Indonesia, Iran, Iraq, Kazakhstan, Kuwait, Nepal, New Caledonia, Nigeria, Oman, Sri Lanka, UAE, USA and Yemen

Customer Appreciation

BHEL received appreciation from its various overseas customers, most notable being from RUE Grodnoenergo, Belarus for outstanding performance and operations of BHEL equipment, Druk



4x125 MW Unit 3 & 4, Kosti Thermal Power Plant executed in Sudan

DIRECTORS' REPORT

Green Power Corporation, Bhutan for early execution & successful project completion and Pamir Energy, Tajikistan for exceptional equipment quality.

Major overseas projects executed

During the year 2013-14, BHEL successfully commissioned power plants with capacity of 653 MW in overseas markets. Major projects executed during the year are:

•	Sudan	_	4 X 125 MW Unit 3&4,
			Kosti Thermal Power
			Plant

Belarus – 126 MW Grodno-II, Gas Turbine based Cogeneration Power Plant

Ethiopia – 2 X 12.5 MW Unit 2,
 Fincha Sugar Factory

Vietnam – 2 X 100 MW Unit 2,
 Nam Chien Hydro Project

 New Caledonia – 2 X 135 MW Unit 1, Koniambo Nickel SAS

(Boilers)

 Indonesia – 2 X 30 MW Unit 2, PT MSW CFBC Boiler

Project.

 Iran – Hydrogen Recycle Compressor for Tabriz

Refinery

BHEL is currently executing 28 projects spread over 20 countries across the world for around 7000 MW of power plant equipment.



126 MW Grodno-II, Gas Turbine based Cogeneration Power Plant executed in Belarus

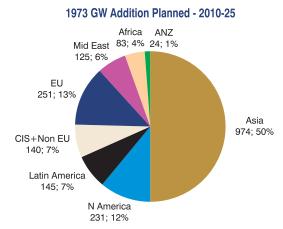




2x100 MW Unit 2 of Nam Chien Hydro Project executed in Vietnam

Preparing for Growth

Geographical diversification is one of the strategic thrust areas for BHEL and thus, adequate focus is being given to enhancing International Business. Towards this objective, detailed action plan is in place to achieve quantum jump in overseas business with identification of the target markets for fueling business growth. With focused efforts in line with the Strategic Plan, BHEL has established its references in 76 countries across all inhabited continents of the world. Efforts continue to strengthen BHEL's presence in these markets and expand the company's reach to newer destinations.



Planned power generation capacity addition worldwide, 2010-25 Source: Platts World Electric Power Plant Database

As per Platts, 1973 GW power capacity addition is planned worldwide through 2010-2025. India & China are the major countries adding to their capacity. The addressable markets for BHEL add up to a considerable 165 GW based on the current overseas footprint and presents a huge opportunity.

The company has been successful in meeting the requirements of international markets in terms of complexity of work as well as technology, quality and other requirements. BHEL also possesses the requisite flexibility to interface and complement other international companies for large projects, and has exhibited adaptability by manufacturing and supplying intermediate products. The company has initiated several measures to fuel further growth to achieve its Strategic Plan objective of multi-fold increase in overseas business. Major initiatives include:

- Identification and perusal of opportunities for strengthening its manufacturing and equipment servicing through formation of Joint ventures with local market players.
- Leveraging opportunities provided by energy security considerations by synergizing strengths with oil & gas sector companies of India.
- BHEL is continuously striving to include financing along with its proposals and offer a comprehensive solution to its customers. Efforts are being made to attain project financing vide Line of Credit through Govt. of India, project recourse financing, NEIA scheme etc.
- Forging opportunity-specific and marketspecific alliances to strengthen BHEL's role as an EPC Contractor in the International market.

In line with the above, MoUs have been signed with the Government of Buryatia, Russia for construction of 240 MW Ulan Ude Thermal Power Station − 2 and Ministry of Power, Malawi for installation of 2 to 4 MW Solar PV Power Plants on EPC basis. Also, MoU was signed with Power Plant EPC Ltd. for relocation of 2x21 MW Power Plant to Mozambique. ●

1.3 Financial Performance of the Company

1.3.1 Standalone Financial Results

1.3.1.1 Balance Sheet

Share Capital

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Authorised Share capital	2000	2000
Issued, subscribed & Paid up Share Capital	490	490

During the year 2013-14, GOI's share got reduced from 67.72% to 63.06% consequent to sale of 4.66% of BHEL's total paid up equity share capital through block deal to LIC.

Reserves & Surplus

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Capital Reserve	37	3
General Reserve	31350	28850
Surplus of Profit & Loss	1171	1102
	32558	29955

Capital reserve has increased by ₹ 34 Crore consequent to merger of BHPV, an erstwhile subsidiary of the company. A sum of ₹ 2500 Crore has been transferred to General Reserve out of profit for the year 2013-14.

Borrowings

(₹ in Crore)

	F.Y. 2013-14			F.Y. 2012-13		
	Long term	Short term	Total	Long term	Short term	Total
Unsecured Loans- Financial lease obligation	105	0	105	129	0	129
Secured Loan- Rupee export packing credit	0	2550	2550	0	1286	1286
	105	2550	2655	129	1286	1415

Borrowings have increased due to export credit availed for effective cash management.

Other Long Term / Current Liabilities

(₹ in Crore)

	F.	Y. 2013-14	4	F.Y. 2012-13			
	Other Long Term Lia- bilities	Current Lia- bilities	Total	Other Long Term Lia- bilities	Current Lia- bilities	Total	
Trade payables (Incl. Acceptances)	765	8719	9484	756	9675	10431	
Deposits from customers & others	75	538	613	74	481	555	
Advances Received from customers & others	5760	8902	14662	4960	11261	16221	
Other payables/ liabilities	-	2004	2004	-	2120	2120	
	6600	20163	26763	5790	23537	29327	

The reduction in other long term liabilities is mainly due to lower level of operation and reduced advances from customers.

Provisions

(₹ in Crore)

	F.Y. 2013-14			F.Y. 2012-13		
	Long term	Short term	Total	Long term	Short term	Total
Provision for employee benefits	2438	570	3008	2185	488	2673
Provision for contractual obligation	4693	944	5637	3614	1376	4990
Proposed Dividend (Incl. Div. tax)	-	435	435	-	941	941
Other Provisions	365	881	1246	145	193	338
	7496	2830	10326	5944	2998	8942

Increase is mainly due to provisions created for contractual obligation and others in line with the applicable accounting standards.



Fixed Assets

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Gross Block	12050	10783
Less: Depreciation/ amortisation	7360	6328
Less: Lease Adjustment Account	(3)	(3)
Net Block	4693	4458
Capital Work-in-Progress	622	1134
Intangible assets under development	20	38
	5335	5630

Increase in gross block by ₹ 1267 Crore is mainly due to Indigenisation, capability building in specific areas and customer project related capital investment.

Non Current Investments

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Long Term Trade		
Investments	420	429

Change in Non-Current Investments is due to cancellation of ₹ 34 Crore investment in erstwhile BHPV consequent to merger and additional equity contributed by the Company to NBPPL ₹ 25 Crore during the year.

Deferred Tax Assets (Net)

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Deferred Tax Assets (Net)	1969	1551

The net increase in Deferred Tax Assets is mainly on account of items which are in the nature of timing difference inclusive of first time DTA creation in respect of erstwhile BHPV Ltd.

Loans & Advances

(₹ in Crore)

	F.Y. 2013-14			F.Y. 2012-13		
	Long Short term Total		Long term	Short term	Total	
Loans & Advances	1167	2024	3191	905	2029	2934

Increase in long term advances is mainly due to operational requirement.

Inventories

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Inventories	9798	11764

Reduction in inventory is in line with the level of operations.

Receivables

(₹ in Crore)

	F.Y. 2013-14		F.Y. 2012-13			
	Long term	Trade receiva- bles	Total	Long term	Trade receiva- bles	Total
Trade Receivables (Net)	11881	28072	39953	10654	29234	39888

Despite various financial issues in power sector, there is marginal increase of 0.16% over last year.

Cash and bank balances

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Cash & bank balances	11873	7732

The cash and bank balances at the end of 2013-14 would be ₹9323 Crore net of short term borrowings as against ₹ 6446 Crore at the end of 2012-13.

Other Current Assets

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Other Current Assets	253	200

Other current assets represent Interest accrued on banks deposits and investments.

1.3.1.2 Statement of Profit & Loss

Revenue from Operations

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Gross Turnover	40338	50156
Less : Excise Duty	1342	1904
Less : Service Tax	607	635
Revenue from operations (Net)	38389	47618

In the year 2013-14, Power segment and Industry segment contributed 80% and 20% respectively for the total revenue of the company as against 79% and 21% last year.

Other Operational Income

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Export Incentive	27	24
Scrap Sales	285	283
Others	408	500
	720	807

Decrease in other operational income is in line with the level of operations.

Other Income

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Exchange variation (net)	659	143
Interest Income	631	605
Others	326	374
	1616	1122

Increase in other income is mainly due to exchange variation gain (net) during the year.

Cost of Material consumption, Erection & Engineering Expenses

(₹ in Crore)

		(,
	F.Y. 2013-14	F.Y. 2012-13
Cost of consumption of raw material & components	17138	23044
Consumption of stores & spares	569	584
Erection & Engineering Expenses	4392	4271
	22099	27899

Material consumption as percentage of net turnover after adjustment of accretion/decretion to WIP & FG is 59.67% as against 59.13% in 2012-13.

Employee Benefits Expense

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Employee Benefits		
Expense	5934	5753

There is normal increase of 3% in Employee benefits expenses.

Finance Costs

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Interest and other borrowing costs	133	125

The interest cost represents the interest component of the lease rentals on assets taken on finance lease and interest on short term borrowings during the year.

Other Expenses of Manufacturing, Administration, Selling & Distribution

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Other expenses of Manufacturing, Administration, Selling &		
Distribution	3309	3777

Reduction in other expenses is in line with the level of operations.

Provisions (Net)

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Provisions (Net)	2259	1566

Increase is mainly due to provisions created for contractual obligation and others in line with the applicable accounting standards.

Depreciation

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Depreciation	983	953



Increase in depreciation by ₹ 30 Crore is on account of increase in gross block.

Tax Expense

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Income Tax-Current Year	1900	3042
- Earlier Years	11	(220)
Deferred tax charge/ (credit)	(357)	(4)
Tax Expenses (Net)	1554	2818

The decrease in tax expense (Net) is in line with change in profit for the year.

Profit after Tax

(₹ in Crore)

	F.Y. 2013-14	F.Y. 2012-13
Profit after Tax	3461	6615

1.3.2 Financial Review of Subsidiary Company

BHEL Electrical Machines Ltd.

A subsidiary Company has been incorporated on 19th January 2011 as "BHEL Electrical Machines Ltd", with BHEL holding the majority stake of 51% with an equity investment of ₹ 5.36 Crore and Govt. of Kerala retaining 49%. In 2013-14 , BHEL EML recorded a loss of ₹ 1.06 Crore on a turnover of ₹37.03 Crore.

(₹ in Crore)

	1	
Particulars	F.Y. 2013-14	F.Y. 2012-13
BHEL's Investment in Equity	5.36	5.36
Turnover	37.03	26.53
Profit after Tax	(1.06)	(0.55)

1.3.3 Financial Review of Joint Venture Companies

BHEL-GE Gas Turbine Services Pvt. Ltd. (BGGTS)

BGGTS is a Joint Venture Company of BHEL & GE USA, formed to take up repair & servicing of GE

designed Gas Turbines. The financial highlights of the company are as under:

(₹ in Crore)

Particulars	F.Y. 2013-14	F.Y. 2012-13
BHEL's Investment in Equity	2.38	2.38
Orders booked during the year	576.05	489.20
Turnover	782.62	813.78
Profit after tax	75.75	81.70
Net Worth	193.59	157.38

During the year BGGTS has paid interim dividend at 510% and proposed final dividend at 200% on the equity share capital of ₹ 4.76 Crore.

NTPC - BHEL Power Projects Pvt. Ltd. (NBPPPL)

BHEL along with NTPC Ltd. has promoted a joint venture company "NTPC BHEL Power Projects Private Limited" for carrying out EPC contracts for Power Plants and other Infrastructure Projects in India and abroad. The JVC has acquired land in Mannavaram, AP and is in the process of implementing Phase-I of the investment for carrying out EPC and manufacture of Balance of Plant (BoP) equipment for power plants. The BoP manufacturing facility at Mannavaram is expected to be commissioned in 2014-15. NBPPL has an ongoing technology collaboration agreement with M/S DMW, USA for manufacture and supply of Coal Handling Plants. The JVC has received an EPC contract for 1×500MW Feroze Gandhi Unchahar Thermal Power Project from NTPC on Aug 5th, 2013. The JVC is also executing orders for Balance of Plant equipment assigned to it. The Financial highlights are as under:

(₹ in Crore)

Particulars	F.Y. 2013-14*	F.Y. 2012-13
BHEL's Investment in Equity	50.00	25.00
Turnover	85.41	116.25
Profit after tax	10.30	5.66

^{*}Based on provisional figures

Raichur Power Corporation Ltd.

BHEL has promoted a joint venture company with

Karnataka Power Corporation Limited (KPCL) for setting up of a 2x800 MW Supercritical Thermal Power Plant at Yeramarus, Raichur, Karnataka and 1x800 MW Supercritical Thermal Power Plant at Edlapur, Raichur, Karnataka on build, own and operate basis. The JVC was incorporated on April 15, 2009 under the name of "Raichur Power Corporation Limited". The initial authorized and paid up equity of the JVC was ₹ 10 Crore subscribed to equally by KPCL and BHEL. Pursuant to financial closure in November 2011 and induction of IFCl as the third equity partner, a change in equity structure has been agreed and the final equity holding would be KPCL 50%, BHEL 26% and IFCl 24%.

The JVC has received MOEF clearance for the 2x800 MW Yeramarus project and execution of 2x800 MW Yeramarus project is in advanced stages. It is expected that the unit will achieve synchronisation during 2014-15. The LOA for 1x800 MW Edlapur project valuing ₹ 3600 Crore has also been settled and Notice to Proceed would be issued after MOEF clearance.

(₹ in Crore)

Particulars	F.Y. 2013-14*	F.Y. 2012-13
BHEL's Investment in Equity	331.52	331.52
Net Block	40.13	38.43
Capital Work in Progress (Including advances for capital expenditure)	6530.69	3859.69

^{*}Based on provisional figures

Dada Dhuniwale Khandwa Power Limited

BHEL has promoted a joint venture company with Madhya Pradesh Power Generating Company Ltd (MPPGCL) for setting up of a 2x800 MW Supercritical Thermal Power Plant at Khandwa, Madhya Pradesh on build, own and operate basis. The JVC was incorporated on February 25, 2010 under the name of "Dada Dhuniwale Khandwa Power Ltd". The initial authorized and paid up equity of the JVC was ₹ 5 Crore subscribed to equally by MPPGCL and BHEL. At present the paid up equity capital is ₹ 45 Crore, with BHEL and MPPGCL each having subscribed to ₹ 22.5 Crore, to enable JVC to meet land acquisition expenses. Inspite of best possible efforts, the coal linkage or allocation of coal block for the JVC could not materialize. Considering that

coal linkage is not expected to be available in near future, the JV Board has put on hold the project development activities.

(₹ in Crore)

Particulars	F.Y. 2013-14*	F.Y. 2012-13
BHEL's Investment in		
Equity	22.50	22.50
Net Block	0.03	0.02
Capital Work in		
Progress	1.68	1.63

^{*}Based on provisional figures

Latur Power Company Ltd.

BHEL has promoted a Joint venture company with Maharashtra State Power Generation Company Ltd. (Mahagenco) for setting up a 2x660 MW Thermal power plant or 1500 MW gas based Combined Cycle Power Plant (CCPP) in Latur, Maharashtra. The JVC was incorporated on April 6, 2011 under the name of "Latur Power Company Ltd". The present paid up equity of the JVC is ₹ 5 Crore, subscribed to equally by both the partners.

The JVC has reviewed the viability of various fuel options to set up a coal based or gas based project. Due to non availability of coal linkage and domestic gas also not being available till 2015, the JV partners were considering the option of setting up a Solar PV Plant. However, Mahagenco has not agreed to sourcing of PV Modules from BHEL on nomination basis. Since Mahagenco is not agreeable to buying out BHEL's shares, voluntary winding up of the JVC by mutual consent is under consideration.

Power Plant Performance Improvement Ltd.

The Joint Venture Company, Powerplant Performance Improvement Ltd. (PPIL), has been promoted by BHEL with Siemens, Germany for plant performance improvement of old fossil fuel power plants.

Since sufficient business to ensure viability of the company has not been forthcoming, the promoter partners have mutually agreed to gradually wind up the company. PPIL is in the process of settlement of outstanding issues, collection of withheld payments and closing of two pending contracts.

1.3.4 Consolidated Financial Statement

Consolidated Financial Statements have been



prepared in accordance with Accounting Standard-21 on "Consolidated Financial Statements" and Accounting Standard - 27 on "Financial Reporting of Interest in Joint Ventures."

A brief summary of the results on financial performance in line with the above AS are as under:

(₹ in Crore)

	,
2013-14	2012-13
oss	
40802	50673
5078	9531
3503	6693
33157	30533
14	16
4	5
16072	13002
25996	28197
75243	71753
7658	7134
6	6
1976	1556
13208	11646
52395	51411
75243	71753
	7658 13208 52395

1.4 Capital Investment

Having already built the capability to deliver 20000 MW per year, this year the focus of Capital Investment has been on the Productivity Enhancement, Indigenisation & Capability Building in specific areas including R&D in line with perspective of Strategic Plan 2017. The total capital expenditure of ₹ 544 Crore mainly covered the following areas:

 To manufacture High Pressure & Critical Piping for power plant applications, a dedicated 'Power Plant Piping Unit' was established at Thirumayam, Tamil Nadu. The plant, which will also cater to oil and gas sector, was dedicated to the nation by Hon'ble Prime Minister of India on 2nd Aug, 2013, as the 16th Manufacturing unit of BHEL.



'Power Plant Piping Unit' established at Thirumayam, to manufacture High Pressure & Critical Piping for power plant applications

- As commitment towards green initiatives, to harness renewable energy, BHEL has established a 5 MWp Grid Interactive Solar Photo Voltaic (PV) Power Plant at Boiler Auxiliaries Plant (BAP) at Ranipet for its captive needs. The plant has successfully demonstrated use of in-house developed PV Modules of Higher Ratings (280Wp) & Inverters along with Single Axis Solar Tracker system
- Supplementing our efforts in preserving environment and to reduce emission of greenhouse gases, BHEL has converted Diesel Oil operated furnaces to Natural Gas at its Central Foundry Forge Plant (CFFP) at Haridwar



Diesel Oil operated furnaces converted to Natural Gas at CFFP, Haridwar to reduce emission of greenhouse gases

 Seamless Steel Tube Plant (SSTP) at Trichy modernized, significantly enhancing

50 Years of Engineering Excellence

manufacturing capacity to 86,500 MT per annum from 40,000 MT per annum and improving yield by 40% over the existing process by adopting state-of-the-art Cross Roll Piercing and Elongation process. Apart from capacity enhancement, the plant will also manufacture tubes being imported hitherto. Further capability enhancement is underway to manufacture tubes of higher grade alloy steel

 Manufacturing and testing facilities for ±800 kV HVDC Transmission Systems established at Electronics Division (EDN) at Bangalore, which is the highest DC Bulk transmission voltage in the country



State-of-the-art facility for Thyristor Valves at EDN, Bangalore

 Key facilities for manufacturing and testing of state-of-the-art Metso DNA CR family of Electronic Modules for Control & Instrumentation Platform for Power Plant & Industry sector applications established at Electronics Division (EDN) Bangalore, providing latest technical features such as



Integrated testing of the traction platform for the state-of-the-art IGBT based propulsion systems for AC EMUs at EDN, Bangalore

- Foundation Fieldbus, Profibus, Wireless Communication, miniaturized Input / Output modules etc
- Manufacturing & testing facilities for Electronic Modules, Power Electronic Modules & Integrated Testing of the traction platform for the state-of-the-art IGBT based propulsion systems for AC EMUs & 6000 HP AC Locos established at Electronics Division (EDN) Bangalore
- Adding a key R&D infrastructure, Centre of Excellence for Advance Transmission Systems has been established at Corporate R&D, Hyderabad with the capability to simulate large power grids including 1200 kV AC and ±800 kV HVDC required for bulk power transmission. This will facilitate development towards the emerging focus of intelligent, responsive, and adaptable solutions for Substation Automation and Smart grid Applications. With this, BHEL has 14 dedicated Centers of Excellence, building a formidable technology base to serve as a launch-pad for innovative products, systems and services
- To strengthen the delivery system for large sized fabricated assemblies, a dedicated green field 'Power Equipment Fabrication Plant' is under establishment at Bhandara, Maharashtra. The foundation stone was laid on 14th May-2013



Foundation stone for green field 'Power Equipment Fabrication Plant' laid at Bhandara, on 14th May, 2013

1.5 Quality Performance Highlights

BHEL has been awarded a special honour by CII at National Quality Summit in November 2013 held at Bangalore for its long standing commitment to Quality and collaboration with CII.



Continuing the tradition of achieving excellence, Trichy Unit of BHEL has been awarded "Commendation for Significant Achievement" in 2013-14 under CII EXIM Bank Award Scheme for Business Excellence as per the globally recognised model of European Foundation for Quality Management (EFQM).

Customer Satisfaction Survey was conducted for Power Sector of BHEL by M/S IMRB International, Gurgaon. The overall Customer Satisfaction Index (CSI) of BHEL Power Sector as per survey is 67 out of 100 which showed a 3% jump from last year.

A similar Customer Satisfaction Survey was conducted for Industry Sector of BHEL by M/S TNS, India. The overall Customer Satisfaction Index (CSI) of BHEL Industry Sector as per survey is 65 out of 100.

The 24th BHEL Annual Quality Circle Summit was held at BHEL Bhopal on 17th December 2013. 43 numbers of Quality Circle Teams from 15 divisions of BHEL presented their case studies.

"Sri PN Arumugam Trophy" for Best Circle was won by QC No. 70 of EDN Bangalore.

1.6 Human Resource Management

1.6.1 Industrial Relations

- The Industrial Relations scenario in various Manufacturing Units and Business Sector/ Offices of the Company remained harmonious and peaceful during the year 2013-14. The man days lost were almost negligible during the year
- The thrust on participative culture and communication continued during the year. The apex level bipartite forum, namely "The Joint Committee for BHEL" met twice. There were 70 meetings of the Plant Councils and 486 meetings of the Shop Councils. In addition, frequent meetings were also held with the representatives of Executives and Supervisors of the various Manufacturing Units including the Business Sector/Offices
- The focus of discussions in the various Fora centered on improvement of the overall performance of the company by increasing the productivity of the employees, cost reduction, quality and sequential delivery in order to meet customer commitments

Two days special session of the Joint Committee was organized at Thiruvananthapuram during 30-31 August, 2013. The special session was to familiarize the workers about the targets and challenges being faced by the company and their role and contribution towards meeting these challenges. The leaders of the Central Trade Unions and Union representatives from all the units of BHEL participated very enthusiastically in the meeting. Presentations on various issues concerning the economic and business environment and the challenges before the company were made & deliberated at length. Seven Syndicate Groups were formed during the meeting on different topics of cardinal concern to the company's operations in various spheres and they gave their valuable suggestions and recommendations on the assigned topics

1.6.2 Human Resource Development





Human Resource Development Institute (HRDI)

The Human Resource Development Institute (HRDI) situated in Noida, is the cornerstone of BHEL's learning infrastructure along with the Advanced Technical Education centre at Hyderabad and Human Resources Development Centre (HRDC) at different Units. Consistent with the HRD mission statement "to promote and inculcate a value based culture utilizing the fullest potential of human resources for achieving the BHEL mission", the HRDI through a step by step long term training process and short term need based programs, enables human resources to hone their potential. HRDI has aligned its programmes and initiatives in line with company's six point agenda for dynamic growth and leadership and Strategic Plan 2012-17.

Some of the important programmes include core programmes; strategic need based and functional programmes like Strategic Management Initiative for Leadership Effectiveness (SMILE). Advanced Management Programme (AMP), General Management Programme (GMP), Strategic Management Programme (SMP), Middle Management Programme (MMP), Young Managers Programme (YMP) and Self Starter Programme (SSP). The Training man days per employee was 5.02 in the year 2013-14.

A brief on programmes conducted for various stakeholders is given below:

- Programme for Customers: BHEL organized a programme on "Organizational Development through HR/HRD Initiatives Programme" for our customers from Druk Green Power Corporation Limited (DGPCL) to understand the innovative HR/HRD practices of BHEL
- Workshops on New Technologies and Risk Management: Today, businesses have become more prone to market risks owing to a multitude of factors, both internal and external. For converting these impending threats into opportunities & to create manpower ability in dealing with these new technologies as envisaged in our MoU 2013-14, workshops were planned on new technologies:
 - Conference on Clean Coal and Carbon Capture and Storage Technologies held in Trichy in which experts from International

- Energy Agency and other world renowned institutions also participated
- Workshop on IGBT based propulsion systems at Bangalore in which speakers from Concept (Germany), Infineon Technologies and Bose Research Institute also participated
- Workshops on Risk Management:
 - Two days Inter Organizational Conference on Enterprise Risk Management with participants from 7 Maharatna (GAIL, SAIL, IOCL, NTPC, CIL, ONGC & BHEL) and 4 Navratna (PGCIL, PFC, EIL & Oil India) PSUs
 - Workshop on Risk Management was organized at HRDI covering senior executives (E7 and E8) from all Delhi based divisions followed by similar workshops at EDN Bangalore, Tiruchirapalli, Hyderabad and Power Sector
- People Development Workshops:
 - Workshops held all across BHEL covering 4700 executives with the objectives of sensitizing Reporting officers towards their role in developing their subordinates and empowering them to understand and adopt a style that facilitates their development. This initiative included the entire gamut of reporting officers in the cadre of E4-E7
 - 29 half-day programmes on People Development for Ethical leadership based on the Gandhian Ideology were conducted by Ms Shobhana Radhakrishna, an eminent citizen to the Ministry of Rural Development, Government of India & Mr. Ravi Chopra, Founder Secretary of the Centre for Gandhian Vision and Values. 1630 Executives of all levels at various Units/Divisions of BHEL participated in the programmes
- Knowledge Transfer Workshops: These were devised as a mechanism to capture existing knowledge from the seniors who have superannuated or are due to superannuate & to document their knowledge for the benefit of



future engineers of BHEL. During 2013-14, this initiative was carried forward and the following workshops were conducted at units:

- Ranipet FGD, ESP and New Products covering 195 participants
- Hyderabad Compressors, Pumps and Condenser & Heat Exchangers covering 54 participants
- Functional Workshops: HRDI conducted two workshops for Materials Management at Bhopal covering 94 participants and Finance Workshop at HRDI covering 30 participants
- Competency Programmes: Based on the BHEL Leadership Competency Model and assessment & development of Behavioral Competencies for Senior Executives through Development Centers undertaken during 2011-12 & 2012-13, a gap analysis of the competencies which need to be developed at the organisational level was compiled. All programmes during 2013-14 conducted at HRDI were designed to address these Leadership Competency Gaps
 - Special Organizational Development Programme: Eight workshops titled "Transformational Leadership Programmes" were conducted which covered over 190 executives of E1 & above level at Project Engineering Management, Noida
- Programme for Top Management: In collaboration with NTPC, a Top Management Programme named "Strategic Management Initiative for Leadership Effectiveness (SMILE) Towards Global Strategic Leadership" was held for 13 days at Greater Noida and Washington D.C. by International Management Institute, New Delhi. The Programme was attended by 15 Executive Directors & General Managers from BHEL

1.6.3 Manpower strength

The manpower strength of the company as on 31.03.2014 was 47,525.

1.6.4 Performance and career development

Keeping in line with the changing demographic profile at BHEL, People Development strategy of BHEL is focusing on developing each person's competencies, their performance and potential

in alignment with business plans. Leadership development, competency mapping, performance linked pay, career planning and succession planning initiatives are in various stages of implementation within the company.

1.6.5 Status on Presidential Directives

1.6.5.1 Directives on reservation policy for reserved category persons

Presidential Directives on reservation policy issued by Central Govt. from time to time provide for certain percentages of reservation in direct recruitment as well as promotion in specified posts and for specified reserved category of candidates, i.e SCs, STs, OBCs and Physically Challenged. Besides, the Directives also contain provision of certain concessions and relaxations in direct recruitments, promotions and reservation for housing for specified category of employees. The Presidential Directives on the subject from time to time are being strictly complied with and reservation percentages are ensured through maintenance of Post Based Roster system as prescribed by the Govt. However, there is no direct impact of these guidelines on the financial position of the company.

Activities of the company for welfare and advancement of SCs and STs

The company has been following the Presidential Directives and guidelines issued by the Government of India from time to time regarding reservation for SCs, STs OBCs and PH. During the year 2013-14, various Community Development activities focused on Socio-Economic development of SCs, STs and Backward classes have been carried out in the communities and villages in and around BHEL Units and in locations where company has presence under BHEL Scheme of Corporate Social Responsibility.

Representation of SC/ST employees

The overall representation of SC/ST/OBC employees in total manpower was 19.81%, 6.03% and 26.25% for SCs, STs and OBC respectively as on 01/01/2014. However, the percentages in direct recruitment during the year are 14.97% for SCs, 7.06% for STs and 30.51% for OBCs. This does not include offers issued prior to 01/01/2013, but includes only those who joined after 01/01/2013 till 31/12/2013.

The Annual Statement in the prescribed format showing the representation of SCs, STs and OBCs as on 01/01/2014 and number of appointments made during the preceding calendar year, as furnished to the Government, is given below:

	Represe	No. of appointments made during the calendar year														
		By Direct Recruitment					Ву Б	Promot	ion*	By Deputation/ Absorption						
Groups	Total No. of Employ- ees	SCs	STs	OBCs	Other	Total	SCs	STs	OBCs	Other	Total	SCs	STs	Total	SCs	STs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Group A	14729	2369	975	2838	8547	353	53	25	108	167						
Group B	9761	1660	350	1367	6384	0	0	0	0	0						
Group C	21960	5082	1503	7952	7423	1	0	0	0	1						
Group D (Excl. SW)	874	176	29	301	368	0	0	0	0	0				1		
Group D (SW)	125	113	2	1	9											
Total	47449	9400	2859	12459	22731	354	53	25	108	168	0	0	0	1	0	0

^{*} In BHEL, no appointments are made at induction level by promotion

Manpower strength of Physically Challenged employees as on 01/01/2014

As on 01/01/2014, we have a total of 950 Physically Challenged employees in BHEL. The group wise manpower strength of Physically Challenged employees in the Company as on 01/01/2014 is given below:

Groups	mploy ntation		Direct Recruitment (During the calendar year 2013)								Promotion*							
	(As on 01/01/2014)			4)	No. of Vacancies Reserved			No. of Vacancies Made (appointed)				No. of Vacancies Reserved			No. of Vacancies Made (appointed)			
	Total	VH	нн	ОН	VH	нн	ОН	Total	VH	нн	ОН	VH	нн	ОН	Total	VH	НН	ОН
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Group A	14729	3	17	209	0	6	2	353		2	26							
Group B	9761	12	16	162				0										
Group C	21960	28	38	443				1										
Group D	999	1	5	16				0										
Total	47449	44	76	830	0	6	2	354	0	2	26							

Note: (i) VH stands for Visually Handicapped (persons suffering from blindness or low vision)

- (ii) HH stands for Hearing Handicapped (persons suffering from hearing impairment)
- (iii) OH stands for Orthopaedically Handicapped (persons suffering from locomotor disability or cerebral palsy)

^{*}There is no reservation in Promotion from Group B to A and within Group A. In BHEL within Group C & D, Seniority-cum-merit promotion policy is followed, wherein all employees on completion of prescribed eligibility period in a Grade and subject to attaining satisfactory levels in conduct and performance are promoted to the next higher grade.



1.6.5.2 Safeguard of Women at Workplace

An Act to provide protection against sexual harassment of women at workplace and for the prevention and redressal of complaints of sexual harassment and for matters connected therewith or incidental thereto called "The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Act, 2013", has come into force from 9th December 2013 with notification of rules by Government of India, Ministry of Women and Child Development called "The Sexual Harassment of Women at Workplace (Prevention, Prohibition and Redressal) Rules, 2013".

The provisions of the Act and the rules thereon are being strictly complied with. In accordance with the Act, Internal Complaints Committee has been constituted in all units of BHEL and their constitution and contact details have been hosted on unit's website. 18 Workshops / awareness programmes have been conducted in units. The Annual Report showing details on number of complaints of sexual harassment received during the year 2013-14 and status thereof as on 31.03.2014 is given below:

1	No. of complaints received during the year 2013-14	8
2	Number of complaints disposed off during the year 2013-14	6
3	Number of cases pending for more than ninety days	1
4	Number of workshops or awareness programme against sexual harassment carried out	18
5	Nature of action taken by the employer on recommendations of ICC	
	 Punishment was imposed on the respondent by reducing his pay by one stage for 1 year with cumulative effect. 	Case closed
	 A letter of advice was given to the male employee respondent and request for transfer of aggrieved woman was accepted. She was posted to the dept. she was comfortable in. 	Case closed
	The reporting relationship of the aggrieved woman was changed.	Case closed
	The respondent was transferred to another unit	Case closed

•	The Committee on conducting the inquiry came to the conclusion that no incident of Sexual Harassment had occurred as alleged by the complainant.	Case closed
•	The respondent was watched & it was decided that he needs counselling. The Committee closed the complaint temporarily & decided to take disciplinary action if he repeats his abnormal behaviour in future.	Case is temporarily closed
•	Inspite of many meetings conducted by members of ICC, the Committee could not arrive at any conclusion.	Case is pending

1.7 Right To Information Act, 2005

BHEL is a front-runner in implementing the Right to Information (RTI) Act, 2005 and has embraced the Act in true letter and spirit.

A Central Public Information Officer (CPIO) and a Central Assistant Public Officer (CAPIO) aided by a Senior Executive (Law) at the company level and 17 CPIOs at each of the major administrative units along with 1 CAPIO at Bhopal Unit are functioning as part of the Right to Information Group.

An Appellate Committee is functioning at the Company level to dispose off first appeals filed under the RTI Act.

To assist and facilitate the citizens in obtaining information, detailed guidelines have been placed on BHEL's website, spelling out the procedure for securing access to information and filing of first appeals under the Act.

Instructions have been issued to administrative units to ensure compliance to the mandatory requirements of the Act.

Proactive disclosures have been made on BHEL's website in line with Section 4 (1) (b) of the Act, disseminating various categories of information so that citizens have minimum need to resort to the Act for the purpose of obtaining information.

BHEL is an active member of the Steering Committee on RTI constituted by Standing Conference of Public Enterprises (SCOPE).

The CPIOs and the other stakeholders involved are

sensitised regularly about their obligations under the Act through various trainings and workshops. BHEL participated in Interactive Workshop on "Right to Information Act, 2005 & Key issues in implementation in Central Public Sector Enterprises (CPSEs)" held on 7th March 2014 at Jaipur and organized its Annual workshop on Right to Information Act, 2005 on 12.09.2013 for the benefit of new and existing CPIOs/CAPIOs. The key note address was delivered by Ms. Sushma Singh, Hon'ble Central Information Commissioner.

BHEL received 1334 RTI applications and 297 appeals during the year 2013-2014 which were dealt with as per the provisions of the Act.

1.8 Internal Control System

The company has an in-house Internal Audit Department commensurate with its size of operations. It has Internal Audit Cells located at major manufacturing units, regional offices and at Corporate office of the company which carry out audits as per Annual Audit Programme approved by Board Level Audit Committee. The Internal Audit department checks the adequacy and effectiveness of internal control system through regular audits, system reviews and provides assurance on compliance to the legal, regulatory and internal policies and procedures of the company.

The company has well placed proper and adequate systems of internal control and documented procedures covering all financial and operating functions. Adequate internal control measures are in the form of various codes, manuals and procedures issued by the management covering all critical and important activities viz. Purchase, Material, Stores, Works, Finance, and Personnel, etc. Functioning of Internal audit and Internal control systems are periodically reviewed by the Board Level Audit Committee which is supported by Unit Level Audit Committees and necessary directions are issued wherever required to further strengthen the internal control system keeping in view the dynamic environment in which the company is operating. The company continues its efforts to align all its processes and controls with global best practices.

1.9 Mergers & Acquisitions

BHEL has been actively pursuing inorganic growth route of M&A for achieving its objectives of getting a strong global foothold in target markets, getting

state-of-the-art technology, gaining access to new international markets and diversifying company's product portfolio in high potential growth areas like transportation and transmission.

To strengthen its overseas M&A endeavours, BHEL has renewed its panel of leading global investment banks, consultants and law firms as M&A Advisors for a period of three years with effect from 1st April 2014. The panel comprises Financial Advisors, Accounting & Tax Due Diligence Advisors and Legal Due Diligence Advisors.

Bharat Heavy Plate and Vessels Limited (BHPV) based at Visakhapatnam, Andhra Pradesh, a wholly owned subsidiary of BHEL has been merged with BHEL with effect from 30th Aug 2013. Consequent to the Merger, erstwhile BHPV has become 17th manufacturing unit of BHEL and is now known as "Heavy Plates and Vessels Plant". The merger will pave the way for BHEL in diversifying its product portfolio.

1.10 Opportunities and Threats

The strengthening of Global economic activity during the second half of 2013 augurs well for the world economy in 2014–15 with much of the impetus coming from the advanced economies led by US. In the stressed euro area economies, growth would, by & large, remain weak and fragile as high debt and financial fragmentation still holding back domestic demand. In Japan, fiscal consolidation would result in some growth moderation during 2014-15 while emerging market economies would be continuing to contribute to Global growth despite a subdued performance seen during 2013-14.

In sync with contours of global economy, Global energy scenario too has witnessed major shifts and realignments with Southeast Asia, led by China & India emerging as key players in the global energy system driven by sustained economic & social development, despite some headwinds at present. Therefore, the centre of gravity of energy demand & trade is switching decisively to the emerging economies, particularly China, India and the Middle East, which drive global energy use one-third higher. In this context the issue of large difference in regional energy price calls for renewed focus on energy efficiency to deliver benefits that extend well beyond improvements in competitiveness through interconnected energy market.



Electricity generation would be dominated by coal, accounting for 58% of the growth of Southeast Asia region with Indonesia accounting for 85% of Southeast Asia's steam coal production through 2035. With increasing thrust on renewable, transition to technology intensive efficient & low-carbon energy sector, although difficult, but most urgent imperative to overcome concerns of price and competitiveness.

Today, India has emerged as the 3rd largest economy in the world after the US and China, accounting for close to 6% of the World's GDP in terms of PPP despite subdued growth in economy. The striking aspect of India's growth has been the dynamism of the service sector contributing more than two-third of GDP, while, in contrast, industry has been only one-fifth, contrary to the experience in other emerging market countries.

There is a strong two-way relationship between economic development and energy consumption. Growth of an economy hinges on the availability of sustainable energy in terms of accessibility, affordability and environment compatibility.

India is the world's 7th largest energy producer and the 5th largest energy consumer, accounting for 4.4% of world's total annual energy consumption. At the same time with 917 kWh/year, India has one of the lowest per capita energy consumption levels globally, around 1/3 of the world average.

In order to meet the demand for electricity generation capacity of over 306 GW by 2017 and around 800 GW by 2032, as estimated in the Integrated Energy Policy 2006, India would require a quantum jump in electricity generation capacities in coming years. Coal remains a cheaper option due to its abundance than other sources of energy for harnessing electricity, but policy interventions to improve efficiency, reduce air pollution and mitigate climate change would be critical in determining its longerterm prospects. With this perspective, it is essential to encourage development and use of energy efficient and climate friendly technology based thermal generation such as Adv-Ultra Supercritical, IGCC and carbon capture & sequestration or storage etc. As per World Energy Outlook 2013, in the backdrop of Energy Security challenges, increase in generation from renewable need to be encouraged so as to augment its share above 30% by 2035 in the fuel mix. Government is proactively

encouraging electricity supply companies to adopt the Renewable Purchase Obligation (RPO) scheme to ensure that they obtain a specified portion of their total energy consumption from renewable resources.

The subdued growth of the core industries has remained a drag on industrial production. Policy uncertainties have adversely affected the performance of industry output mainly the output of capital goods and the mining sector. Eight core industries, constituting 38% in Index of Industrial Production, have decelerated by 2.6 per cent in 2013-14, the lowest in almost a decade, due to a decline in crude oil, natural gas production, coal and cement while electricity and cement have posted modest performance due to dampening commercial and industrial activities besides impact of shortage of fuel on overall plant availability.

India's GDP to investment ratio remained between 23-26% of GDP between 1991 and 2004 and peaked at 38% just before the credit crisis. Private Capex formed a huge portion of this at 28%. In 2013, investment to GDP has fallen to 32% with private capex share falling to 22.6%. The GDP growth has resonated close to this capex cycle which is expected to revive soon. Project approvals are likely to gain traction with better investment climate. There has been a boost to fast tracking of projects clearance with the setting up of Project Monitoring Group. Several specific initiatives have been initiated to strengthen industry and in particular the manufacturing sector in the country including National Manufacturing Policy (NMP). implementation of the Delhi Mumbai Industrial Corridor (DMIC) and policy reforms to promote Foreign Direct Investment (FDI) and an e-Biz initiative. All this bodes well for new momentum of growth at BHEL.

1.11 Preparing for Growth

Today, as BHEL celebrates the Golden Jubilee year in its journey of sustained growth and leadership, it is also a celebration of India's spectacular success in achieving self-sufficiency in the indigenous manufacture of heavy electrical equipment. The existing and impending challenges will not deter the organisation from achieving its principal objective: to take centre stage in the process of Nation Building through focus on leveraging Scale of operations,

50 Years of Engineering Excellence

Skill of organisational resources and Speed of execution, both strategy and project in a profitable and sustainable manner. BHEL will achieve this through the anchors of capability enhancement, project execution, cost competitiveness & quality, diversification, engineering & technology, and people development as envisaged in BHEL's 6-Point Agenda.

India's economy is currently passing through a difficult phase. In the current year, BHEL, like others, felt the effects of rapid economic downturn. At the same time, it was also the year in which the company made significant progress in consolidating our strengths to harness the opportunities in the next phase of economic growth.

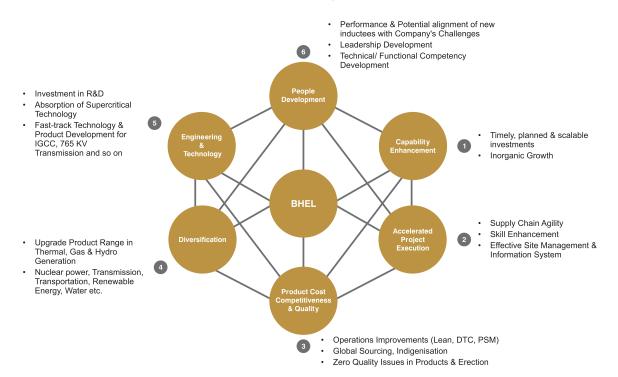
BHEL continues to sustain its leadership position in the Indian power sector. Towards this, company has been adopting two pronged strategy; focus on EPC business and enlarging scope of offer. BHEL is expanding its portfolio by adding Flue-Gas Desulphurisation (FGD), Water Management system, Air Cooled Condenser, and other Balance of Plant (BoP) systems. Company is fully harnessing potential in Spares & Services area, forging partnerships with Power Plant Developers for UMPPs. Increasing level of indigenisation in

Supercritical Technology, development of Adv. Ultra Supercritical power equipment, introduction of state-of-the-art CFBC technology and technology development are major strategies in Power Sector.

Industry segment too is feeling the effect of the contraction in investments. As planned, BHEL has taken various initiatives in recent past to expand its presence in Transportation (Rail), Solar and Transmission business areas, both by way of investments in existing facilities and by exploring new business models with focus on collaboration with value chain partners for capitalising new business opportunities. Partnership with SECI, SSL, PGCIL, SJVNL, REIL for setting up 4000 MW Ultra Mega Solar Power Project is a significant endeavour in this direction.

For business diversification, BHEL is pursuing capacity expansion (e.g. Locos), product development (e.g. 765 & 1200 kV transformer), collaboration with stakeholders (e.g. 4000 MW Ultra Mega Solar Power Project), capabilities' consolidation (e.g. water business) and gaining experience in new technology areas (e.g. NE Agra ±800 kV HVDC transmission line) to enhance share of Industry Segment in turnover-mix.

Six-Point Agenda





Large scale of BHEL operations creates a competitive advantage for company as it converts high assets base into economies of scale by spreading fixed costs, pooling resources and creating critical mass in a significant portion of power project value chain. Capacity augmentation for Power plant equipment manufacturing to 20,000 MW p.a., for locomotive manufacturing to 75 numbers p.a., for Seamless Steel Tubes to 86,500 MTPA, New Manufacturing Units - Centralized Stamping Unit at Jagdishpur, Power Plant Piping Unit at Thirumayam, Power Equipment Fabrication plant at Bhandara and merger of BHPV Vizag are steps undertaken by BHEL to leverage its scale.

Innovation is an integral aspect of our business strategy to enhance competitiveness and offer contemporary solutions to our customers. Investments in R&D are intensified to enhance capabilities in Product Development & Engineering with plan to maintain R&D expenditure at plus 2.5% of turnover. In new technology areas, we are focussing on indigenisation and development of Indian vendors for reducing import content in addition to design optimization, standardization of equipment modules, reducing rework cost, enhancing performance parameters and depackaging of bought-out-items & civil works, which are adopted across all business areas.

Accelerating project execution has been a key strategy of BHEL in recent times. We have continued strengthening our execution capabilities with various initiatives such as addition of 129 heavy cranes at project sites suitable for erection of 600/660 MW sets. We are also focusing on intermediate milestones, delivery cycle reduction, central monitoring system and deployment of additional tools & plants.

BHEL recognises that operations excellence is the foundation of its differentiated value proposition to customers. To address prevailing pricing pressures, company is focusing on all round cost reduction measures in different areas of operations through competitive buying, supply risk mitigation, IT application, operations improvement, and better employee productivity.

The gradual reduction of average age of employees from 48.96 yrs in 2006 to 40.84 yrs in 2013 shows demographic profile at BHEL is moving in favour of millennial generation. Therefore,

People Development strategy of BHEL is focusing on developing each person's competencies, their performance and potential in alignment with business plans. Leadership development, competency mapping, performance linked pay, career planning and succession planning initiatives are in various stages of implementation within the company.

Company works with a mission of providing sustainable business solution to its customers. BHEL is committed to offer fuel efficient, and environment friendly technologies and products to its customers. BHEL commissioned first BHEL make 660 MW Supercritical unit for NTPC at Barh and the first 800 MW Boiler for APPDCL at Krishnapatnam during 2013-14. For BHEL, sustainability is about achieving prosperity by balancing social equity and staying within the tolerable limits / capacity of the environment.

1.12 Risks and Concerns

BHEL has in place a Board approved Risk Management Charter & Policy (RMCP) which provides overall framework for Risk Management (RM) in the company. An apex committee, namely Risk Management Steering Committee (RMSC), having Executive Directors / Function Heads from Corporate Functions and Business Sectors as members is responsible for adopting and implementing the RM Framework across the organisation. It is entrusted with the responsibility of taking decisions to manage the risks. Chief Risk Officer (CRO) is the convener of RMSC and is responsible for periodic reporting to the Board of Directors based on deliberations in RMSC.

Some of the key risks the company faces, their impact and corresponding strategies undertaken by the company are discussed in the table:



Place: New Delhi

Dated: July 14, 2014

DIRECTORS' REPORT

Risk Statement	Mitigation Strategies
Order Book Reduction due to increasing competition, excess domestic manufacturing capacities and low business sentiments.	 Enhancing cost-competitiveness Increasing scope of offer Focus on EPC business Improving Performance Parameters
Delayed delivery of projects leading to LDs, penalties, and customer dissatisfaction.	 Shifting focus to intermediate milestones Delivery cycle reduction Central monitoring system Deployment of additional Tools & Plants Building agile supply chain
Online data & information security breach leading	Policies in place for Technical controls
to loss and critical information infrastructure breakdown.	Third party audit as per ISO27001 ISMS Standards
	Business Continuity Plan (BCP) & Disaster Recovery (DR) strategy in place
	Security Operations centre under process
	Crisis Management Group in place
Impact of External Factors viz. Govt. Policy, infrastructure inadequacy, constrained BoP inputs	Policy advocacy through Administrative Ministry & Industry Associations
etc. may adversely impact the business.	Liaison with key business partners
Rising debtors and shrinking order book may lead to working capital pressure.	Special Groups formed to accelerate cash collections
	Swift closure of punch-points with customers
	Better scheduling of supplies
	Taking up with financial institutions for direct payments
	Flagging the issues with government in case of State Utilities

For and on behalf of the Board of Directors of **BHARAT HEAVY ELECTRICALS LTD.**

B. Prasada Rao

Chairman & Managing Director



Annexure-II

Brief Resume of Directors proposed for appointment and re-appointment as per listing agreement [(clause 49 IV(G)(i)]

PART-TIME OFFICIAL DIRECTOR SHRI SUNIL KUMAR BAHRI

Shri Sunil Kumar Bahri, aged 58 years was inducted as Part-Time Official Director on the Board of BHEL w.e.f. 31st March, 2014.

A post graduate [M.A. (Economics)] from the Delhi School of Economics, Shri Bahri belongs to the 1981 batch of the Indian Audit & Accounts Service and is presently posted as the Additional Secretary and Financial Adviser in the Department of Industrial Policy and Promotion, Ministry of Commerce & Industry. He holds additional charge of the post of AS & FA to the Ministry of Heavy Industries & Public Enterprises and Department of Public Enterprises. He is a part time official Director on the Boards of HMT and HEC and is a Government nominee on the Governing Councils of National Productivity Council, National Institute of Design, Central Manufacturing Technology Institute and the National Automotive Testing R&D Infrastructure Project. As a member of the DMIC Trust, he is closely involved with overseeing the projects under the Delhi Mumbai Industrial Corridor.

He has over 33 years of varied experience in public financial management and auditing at both the Union & State levels. His core competencies include strategic planning, human resource management, performance audits and evaluation of e-Governance applications. He has served as Accountant General Assam and headed the Indirect Taxes, International Relations and the IT Audit functions in the office of the Comptroller & Auditor General of India. He also headed the Secretariat of the National Knowledge Commission. He has earlier served in the Embassy of India, Washington and also as Director General of the International Centre for Information Systems and Audit (iCISA) Noida. He was Principal Accountant General, Rajasthan before assuming his current responsibility.

Shri Bahri does not hold any shares in BHEL.

PART-TIME NON-OFFICIAL DIRECTOR

MS. HARINDER HIRA

Ms. Harinder Hira, aged 62 years, was inducted as Part-Time Non-Official Director on the Board of BHEL on 08.05.2014. She is a retired IAS officer of 1976 batch and she was Chief Secretary to the Government of Himachal Pradesh at the time of her retirement.

She holds a degree of Bachelor of Arts from St. Bede's College, Shimla. She holds Post-Graduate degree in Political Science from University of Jammu and also Masters in Social Sciences (Public Administration) from University of Birmingham, U.K.

Ms. Hira has extensive experience in Human Resource Development, Financial and Personnel Management, Policy Formulation and Management of Elections. In her long career of 36 years she has vast experience in various fields viz. Industries, Labour & Employment, Health & Medical Education, Irrigation and Public Health, Social Justice & Empowerment, Women and Child Development, Revenue.

Ms. Hira served as Additional Chief Secretary to the Government of HP in the departments of Industries, Labour and Employment, Revenue and Relief & Rehabilitation and as Principal Secretary in the departments of Health, Irrigation and Public Health, Social Justice & Empowerment, Women and Child. She has also worked as Deputy Election Commissioner in the Election Commission of India. She was Deputy Commissioner of Chamba District and Sub Divisional Magistrate of Shimla.

Important milestones in her career have been the launching of National Rural Health Mission in the state, starting of Open Heart Surgery, opening of new medical college at Tanda (Kangra), Modernisation and Computerisation of Revenue records and formulating a policy for the Rights of Children.

Ms. Hira does not hold any shares in BHEL.



FUNCTIONAL DIRECTORS

SHRI R. KRISHNAN

Shri R. Krishnan, aged 59 years, assumed charge as Director (Human Resources) of BHEL, a Maharatna Public Sector Engineering and Manufacturing Enterprise on 01.04.2012.

An Electrical and Electronics Engineer from REC, Trichy (now NIT) and a Post Graduate in Design & Production of Heavy Electrical Equipment from MACT, Bhopal (Presently MANIT, Bhopal), Shri Krishnan joined BHEL as an Engineer Trainee in 1977. He has 37 years of diversified and versatile professional experience through working in major segments of BHEL.

As Head of Human Resources, his role involves multi-dimensional communication with unions, staff associations and also individually with a cross-section of employees. His main aim is to set overall directions and formulate corporate strategies in the area of Human Resource Management, managing business environment, relations with Government and major stake-holders, media & employees and networking with counterparts in other top public & private sector companies. Motivating the work force and balancing their expectations with the company's vision, policies and its constraints is his main focus area. BHEL's unflagging commitment to investing in upgradation of knowledge and skills of its employees has been ensured by Shri Krishnan.

BHEL is a committed Corporate citizen fully alive to the need of building synergy between business and CSR as an integral part of its business strategy. Shri Krishnan has led and guided his team to take up various initiatives in this area. Significant among those are - BHEL has joined hands with Government of India's Project Udaan for enhancing the employability of the youth of J&K and to integrate them with the mainstream of the country. Also, the campaign titled "Vision to All – BHEL's Call" has been responded with more than 51,000 pledges from employees and their families for donation of their eyes. This campaign was spearheaded by him through Unit visits and addressing employees.

Due to Shri Krishnan's involvement in his people, a number of awards such as SCOPE Meritorious award for Human Resource Management, Golden Peacock award for sustainability, Golden Peacock award for occupational health and safety 2011, etc.

have been won by BHEL. Also, BHEL has won the "Golden Peacock National Training Award 2012" after a gap of more than a decade. He has also been conferred the Distinguished Alumni Award, 2013 by NIT, Trichy.

Prior to this, he was heading the company's Heavy Power Equipment Plant, Hyderabad as Executive Director. Under his leadership, the company's Hyderabad plant achieved many milestones including the doubling of Physical Turnover in almost all products in a span of just two years; introduction of AC-AC Technology for E-2000 Oil Rigs, new technology of Frame 9FA Gas Turbines and Pumps for supercritical applications and the award of 'Commendation for Significant Achievement' in the CII-EXIM – Business Model for two years in succession.

Shri Krishnan also established the Multi-Modal Transport System for despatch of Gas Turbines to various sites, including one through Bangladesh; introduced Techno-Commercial MoU concept in the Unit – the first product being Pulverisers and guided the process of Value Stream Mapping (Lean Manufacturing) in Products such as BFP-DT, HP Heaters, Pumps & Pulverisers.

Earlier, he headed the Corporate Research & Development division of BHEL at Hyderabad as General Manager (Incharge) and officiating Executive Director. Under his stewardship as General Manager, BHEL, Bhopal, Shri Krishnan was responsible for Planning, Development and Quality. He was involved in Long Range Planning, Operation Planning and Strategic Planning, apart from Quality functions of all the products manufactured by BHEL Bhopal.

In addition, as General Manager, he was Incharge for Electrical Machines, covering Commercial, Material Management, Engineering, Production and Service-After-Sales for manufacturing of Motors upto 25 MW range. He was also responsible for Design and Production of Hydro Generators up to 200 MW and was Incharge of Transportation products like Motors and Alternators for AC / DC, Diesel, AC EMU and DEMU applications of Indian Railways. Shri Krishnan was also given additional responsibility of BHEL's Electrical Machines Repair Plant (EMRP), Mumbai.

A Fellow of the Institution of Engineers and a Chartered Engineer, Shri Krishnan is also Part-



time Chairman of Dada Dhuniwale Khandwa Power Limited.

Shri Krishnan does not hold any shares in BHEL.

SHRI W.V.K. KRISHNA SHANKAR

Shri W.V.K. Krishna Shankar, aged 59 years, was inducted as Director (Industrial Systems & Products) on the Board of BHEL w.e.f. 1st August, 2013. Under his stewardship Industry Sector booked orders worth ₹ 5,473 cr. during 2013-14 - a growth of 22% over 2012-13 and synchronised highest ever 1698 MW captive sets – a 142 % growth over 2012-13.

He is a Mechanical Engineer from University Visveswarayya College of Engineering, Bangalore University and has a Diploma in Management. He underwent training in Corporate Planning at IMI (now IMD), Geneva, Switzerland. During a career spanning 37 years with Bharat Heavy Electricals Limited, he handled a variety of assignments in strategic as well as operational areas in various capacities and functions. He was elevated to the position of Executive Director in July, 2010.

Having started his career in BHEL at Tiruchirappalli in 1977, he actively participated in project planning, scheduling and monitoring activities related to the setting up of Seamless Steel Tube Plant of BHEL at Tiruchirappalli. After commissioning of the plant, he was moved to Corporate Office of BHEL where he designed and implemented project monitoring systems at corporate level for two large investment schemes of BHEL, viz. Phase-III expansion of the Boiler Plant (4000 MW) at Tiruchirappalli and establishment of a Boiler Auxiliaries Plant at a green field site in Ranipet. He was also closely associated at Corporate Level in the evolution & design of 'Product Manager' based organisation structures for implementation across various units of BHEL.

During 1998 to 2004, as part of Industry Business Sector, he played a key role in marketing of Pulverized fuel based Captive Power Plants, DG Power Plants and Defence Products & Systems.

He has also worked with the National Manufacturing Competitiveness Council (NMCC) formed by the Government of India as a forum at the highest level for policy dialogue to energize & sustain manufacturing in India. He was associated with the drafting of the 'National Strategy for Manufacturing' in March, 2006 as well as the recommendations forming a part of

the 'Report of Prime Minister's Group on Measures for ensuring sustained growth of the Indian Manufacturing Sector' in September, 2008.

He was involved in drawing up five Corporate Plans for the company starting with the 'Corporate Plan for the 80s'. As Executive Director (Corporate Planning & Development), Shri Krishna Shankar led the exercise in creating a new vision, mission and values for the company in 2010-11 by carrying out a unique experiment of capturing the imagination of the younger generation. The company's new 'Strategic Plan 2012-17' piloted by him lays emphasis on building eight business verticals of BHEL, viz. Utility Power Plant Business; Spares & Services Business; Captive Power Plant Business; Transmission Business; Transportation Business; Industrial Products & Defence; Renewable Energy Business; and Water Business.

He successfully handled the Investor Relations portfolio for five years. He has represented BHEL at several interactive forums in Canada, France, Germany, Italy, Singapore, Switzerland, UK and USA. As Secretary of the Management Committee of BHEL – top most policy making body in the company as well as the Secretary of the Committee of Functional Directors, Shri Krishna Shankar was closely associated with the short term and long term aspects of the company operations. Shri Krishna Shankar is currently a Director on the Board of Dada Dhuniwale Khandwa Power Limited. He is also Chairman of Audit Committee of Dada Dhuniwale Khandwa Power Limited.

Shri Krishna Shankar is holding 100 equity shares of BHEL.

SHRI ATUL SOBTI

Shri Atul Sobti, aged 55 years, has been inducted as Director (Power) on the Board of Bharat Heavy Electricals Limited (BHEL) w.e.f. 1st December, 2013.

Shri Sobti is a 'Mechanical Graduate Engineer' with 'Post Graduation in International Management' and 'Diploma in Project Management'. He was awarded the Gold Medal at IMI, while pursuing Post Graduation programme. He has also undergone Advance Management Training Programmes at IIM, Ahmedabad and Asian Institute of Management, Manila.

Shri Sobti has a repertoire of diverse and versatile

50 Years of Engineering Excellence

professional experience of 34 years, working in various capacities in all major segments of BHEL including International Operations Division, a major Manufacturing Plant of BHEL at Hyderabad,

Corporate Planning & Development, New Capital Projects and Project Engineering & Systems Integration Divisions at BHEL Hyderabad and Bangalore. The experience encompasses a wide spectrum of strategic as well as operational disciplines including Marketing & Business Development, Project Management, Operations Management, Strategic Management, Capital Investments and Project Engineering & Systems Development.

During his tenures at BHEL units at Bangalore and Hyderabad, the units achieved record financial and physical performance. He was also instrumental in steering the future growth plans and new business initiatives in these divisions.

During his tenure at BHEL's International Operations Division, he was a key contributor to a fifteen fold increase in its overseas business through securing and executing prestigious power projects and product orders from many countries including Oman, UAE, Iraq, Libya, China, Kazakhstan, Suriname, Bhutan, Sri Lanka, Egypt, Kuwait, Ukraine, etc.

As a member of New Capital Projects Group, in the eighties, Shri Sobti was actively associated in setting up of new BHEL plants at Rudrapur, Varanasi, PCRI-Haridwar, Jagdishpur, Goindwal, etc.

During his tenure in Corporate Planning & Development, he worked in various areas including Strategic Planning, Capital Investments, MoU, Operations Monitoring, Technology Licensing, etc. He was involved in drawing Corporate Plans of BHEL as well as creating Vision, Mission and Values for the company.

Shri Sobti had been an active member of 'CII National Committee of Young Managers', National level 'CII Trade committee' and 'Bangalore Chamber of Industry and Commerce (BCIC)'.

As Director (Power), he is responsible for spearheading the Power Sector business of BHEL and under his leadership, Power Sector achieved the highest ever Commissioning / Synchronisation

DIRECTORS' REPORT

of Power projects in 2013-14 besides securing the single largest order for a Power Project, ever secured by BHEL.

He is currently also holding additional charge of the post of Director (Engineering, R&D) in BHEL.

Shri Sobti is also Part-time Chairman on the board of Raichur Power Corporation Limited [a Joint Venture Company (JVC) of BHEL and Karnataka Power Corporation Ltd] and Part-time Director on the Board of NTPC - BHEL Power Projects Limited, (NBPPL), a BHEL - NTPC JVC.

Shri Sobti is holding 1500 equity shares of BHEL. •



Annexure-III

Sustainable Development

At BHEL, we believe in doing business in a sustainable manner that extends across the spheres of our Business strategy, environmental action, social support and governance. The relationship between the company, its products, its employees, its customers and the society is - to use the unavoidable metaphor - like a river, the deeper it gets the less noise it makes. It has been just a natural extension of the way BHEL saw itself and its responsibility. For almost fifty years of its existence, company has been leveraging technology and innovation for providing products, systems and services to its customers and enable them to use resources with better efficiency and productivity which is also evident from its Mission Statement - "Providing Sustainable Business solutions in the fields of Energy, Industry & Infrastructure".

Structured approach towards sustainability is in itself a value proposition which adds to the triple bottom line. This helps us in reducing - material, water & energy consumption, emission and waste generation; providing more acceptability for our operations in the society; and making our products & services more sustainable and profitable. It also enables us to contribute towards equitable development as a central theme so that the benefits of economic and business growth can reach to the maximum populace.

As always, our customers join us, challenge us, engage with us, and help us do it better. For BHEL, sustainability is an entrenched part of its glorious history which has enabled us to consistently make profits since 1971-72.

BHEL is not just a good corporate citizen; it is aspiring to change the world for the better.

3.1 Governance for Sustainability

BHEL believes that while Governance for sustainability, stakeholder engagement and disclosure on sustainability issues forms the bedrock for embedding sustainability within the corporate DNA, the organisational performance on

50 Years of Engineering Excellence

DIRECTORS' REPORT

Environmental and Social issues linked with its business is the ultimate measure for sustainability.

To ensure this, BHEL follows the guidelines on Corporate Social Responsibility (CSR) and Sustainability issued by Department of Public Enterprises under Ministry of Heavy Industries and Public Enterprises for Central Public Sector Enterprises.

There is a three-tier committee structure in the Company consisting of a Sub-Committee, Level-1 Committee and a Board Level Committee (BLC) for Corporate Social Responsibility & Sustainable Development. The above three Committees are involved in the process of undertaking, screening, review, recommendation and approval of CSR & SD projects undertaken by BHEL. The annual budget for CSR & SD is approved by Board of Directors of BHEL. Based on the budgetary outlay, the annual plan for SD is approved by the BLC for CSR & SD.

During 2013-14, BHEL spent 1.64% of PAT of the year 2012-13 towards CSR & Sustainability activities.

3.2 Our Sustainability Performance-Environmental

3.2.1 Sustainability framework

Any successful initiative requires being loaded with enabling structures right from the beginning. For sustainable development, a guiding force has also been created in the form of a 'Sustainable Development Policy' keeping in view the scale and nature of activities, products & services.

Sustainable Development Policy

We at BHEL offer products, systems and services designed to benefit the society

We are committed to undertake practices that meet the economic, ecological and social responsibility tenets of sustainable development

We will work with all our stakeholders to ensure continuous improvement in the Sustainable Development of our operations within the ambit of the guidelines issued by the Government of India

The policy is further ingrained and reflected in the strategy of the company through its Strategic Plan 2012-17. The focus areas have been identified for ensuring sustainable Development in BHEL through its products and services as well as inhouse activities.



Key projects & initiatives are undertaken in the areas of Renewable energy generation through Solar Power Plants, energy conservation through installation of turbo-ventilators, tree plantation, water conservation, energy efficiency, workplace environment improvement by installing Fumes Extraction Systems, Noise Level Reduction Systems, Resource Conservation Systems, and Utilization of Non-Conventional Energy Sources.

Material and Natural Resource Management

Company has a strong institutionalised mechanism to recycle the products and waste. Some of the measures adopted in BHEL to minimize waste (Scrap) generation at the source itself are:

- BHEL recycles/reuses nearly 3-5% of its materials as recycled input materials, thereby reducing impact on natural resources
- Central Foundry Forge Plant (CFFP), Haridwar manufactures Steel Forgings and Castings for which the molten steel required is produced in the Steel Melting Shop using steel scrap as a major raw material. This mild steel (MS) scrap received from other units are used directly for steel melting while the recycled scrap of CFFP Haridwar is processed and segregated gradewise before use





Recycling of MS scrap for producing molten steel required for steel forgings & castings at Steel Melting Shop, CFFP, Haridwar

- Computerized nesting plan of each plate is done to adjust maximum number of jobs in a plate
- Off-cuts of size > 1 square meter generated after nesting & cutting are preserved and reused to cut smaller jobs, strong backs, lifting lugs & tackles etc.
- Disposal of hazardous/non-hazardous wastes is done through MSTC / Other Authorized agencies

Energy Management

In addition to primary energy sources used in processes across BHEL, secondary energy in terms of electricity is being used. Thrust on energy conservation and efficiency is also identified as strategic business need. Some of the recent initiatives taken in Energy management across BHEL are:

- Installation of Grid Interactive Solar Power Plant of 5 MWp capacity at BAP Ranipet which is expected to generate around 74 Lakh units of electricity per annum, thereby mitigating the Carbon footprint of the organisation by 6660 MT CO₂-e per annum
- Installation of turbo-ventilators as part of energy conservation
- Thrust areas in BHEL pertaining to generation/ use of Renewable Energy are:
 - Installation of Roof Top Solar PV Systems
 - Installation of Solar Water Heating Systems
 - Installation of Grid interactive SPV Power



Grid Interactive Solar Power Plant of 5 MWp capacity installed at BAP Ranipet as part of Energy Management initiatives across BHEL

Plant (sub MW and MW scale)

- Installation of Solar Street light
- Load planning for reduction in maximum demand of power
- Installation of automatic power factor controller for inductive loads
- Avoiding idle running of equipment/ machine
- Optimum utilization of furnaces
- Arresting leakage in compressed air, steam piping and electrical system
- Use of alternate fuel
- Providing variable speed drives for motors on machines
- Providing power savers to lighting feeders
- Installation of Energy Management System

Water & Bio-diversity management

At BHEL, water and wastewater systems are sustainably managed to meet the needs of a growing community. As such, there is no water source which is significantly affected by withdrawal of water by BHEL units. Despite the growth in scale of activities at BHEL, water consumption has not increased in the last 3 years as there is an emphasis on recycling and reusing of water at workplace.

- Consistent efforts in developing rain water harvesting potential at all premises
- Discharges from the factory are treated, reused, recycled and only then drained. Facility like zero waste water discharge unit, has been created at HERP Varanasi, in which water, used as coolant, is recycled and finally exhausted



within the process. At HPBP Trichy unit, 100% treated trade effluent water is used for irrigation purpose within the complex to maintain zero discharge hence avoiding contamination of the water body

- Recycling of Hydro Test water, cooling tower from SSTP Trichy, treated sewage water from township and factory are facilities that are operating to their full capacities
- In compliance with environmental norms, the quality parameters of discharged water are within limits for each and every BHEL unit, as specified by the respective state Pollution Control Boards
- Green campuses till date, the company has planted more than 30 Lakh trees across the whole corporation

Carbon Management

BHEL units have initiated quantification of relevant gaseous emissions. However, the emission level of NOx, SOx, SPM & other significant parameters are within the limits prescribed by respective State Governments. Monitoring and control of emissions from boiler & gas plant furnaces are undertaken regularly to maintain pollution levels. Some of the recent activities in this direction are:

- Development of fixture for paint spray gun resulting in Volatile Organic Compounds (VOC) emission reduction through modification in paint spray gun
- Installation of fumes extraction system in fabrication shop resulting in Reduction in fugitive emission
- Heat treatment process eliminated in shock bars and lifting holders making the fabrication process simpler and thereby eliminating thermal heating
- Use of Scrubber to capture Acid mist
- Replacement of Coal-fired boiler to RLNGfired boiler and conversion of Oil-fired HTK to RLNG- fired leading to reduction in Suspended Particulate Matters (SPM) to the extent of 82%
- Conversion of Oil-fired burners to Natural Gasfired, thus reducing emissions
- Switching to cleaner fuel for reduction of emission and carbon footprint - HPEP Hyderabad

3.2.2 One Step Ahead

BHEL is sensitive to the fact that, globally, power sector currently accounts for 41% of energy-related CO₂ emissions. It is reiterated that decarburising power sector will be at the heart of our efforts towards extensive reduction in global CO, emissions. The company has always been a torchbearer in these endeavours for the industry in India. BHEL initiated Coal Research Programme in the late seventies to develop technologies for efficient utilisation of Indian coal and minimising its environmental impact. With 500 MW in 1984, 660 MW and 800 MW in 2008, and 700 MW in 2010, BHEL has been progressively introducing environmentfriendly and fuel efficient technologies for its customers. BHEL also brought CFBC for burning multiple fuels, HRSG for absorbing waste heat and IGCC for coal gasification technologies to India.

Today, BHEL's equipment boast of world-class performance attributes like, lower auxiliary power consumption, superior boiler efficiency, better plant heat rate & plant load factor (PLF) and finally lower life-cycle cost. Customers of BHEL, while remaining profitable, are able to serve the nation in accordance with prevalent and acceptable social and ecological standards. Various performance reports from Central Electricity Authority, India and North American Electric Reliability Corporation (NERC), USA explicitly indicate superior performance of BHEL thermal sets, which ultimately leads to most optimal utilization of fossil fuel coal in such power plants.

3.3 Our Sustainability Performance - Social

3.3.1 Management Approach

Towards addressing the second pillar of Triple Bottom Line Approach for Sustainability, BHEL has developed a CSR scheme and its Mission statement on CSR& Sustainability is "To be a committed corporate citizen, alive towards its Corporate Social Responsibility". BHEL has a well-structured CSR programme towards inclusive growth and equitable development.

The major focus of CSR is inclusive growth aimed at capacity building, empowerment of communities, environment protection and development of backward regions and upliftment of the marginalised



& under-privileged sections of the society. Company has supported various social initiatives across the country by undertaking projects in diversified areas like Community Development, Health & Hygiene, Education, Environment Protection, Disaster Management, and Talent Upgradation/Skill Development. BHEL undertakes CSR initiatives for implementation through various NGOs/Trusts/Social Welfare Societies engaged in social activities throughout the country.

3.3.2 Major CSR Activities undertaken during 2013-14

Some of the major CSR initiatives undertaken by BHEL for holistic improvement & welfare of society are:

Community Development

- Supported the project 'Anhad Gram' in 25 villages of the backward district of Munger in Bihar with 4 objectives -
 - Dairy development
 - Bio-mass fuel
 - Women Health & Hygiene
 - Food Processing & Preservation Unit
- Undertook a project 'Technology based advanced agricultural interventions' in tribal dominated Khargone district for economic empowerment of marginalised farmers. Through nursery/crop/pest management and post-harvest efforts
- Provided relief and succour to Uttarakhand flood victims by way of food, water, medicines and Mobile Medicare Units (MMU). Also, contributed ₹ 2 Crore to the Chief Minister's Relief fund. BHEL employees contributed their



BHEL employees contributed their one day's salary amounting to ₹ 6.38 Crore to PM's Relief fund for Uttarakhand flood victims

- one day's salary amounting to ₹ 6.38 Crore to PM's Relief fund
- Initiated a project 'Adoption of 15 Villages for Sustainable use of rain water harvesting to enhance livelihood of poor small farmers' in Bijawar block of Chhatarpur District (M.P.)

Education

- Supported 'Construction of tribal welfare school' at Bhubaneswar Nagar, Assam to provide education facilities to tribal, rural and slum children of the area
- Supported a project through NGO 'DISHA' to promote education and skill development of disadvantaged children and youth by imparting non-formal education to 1260 street/ slum children including skill training to 240 youth living in 10 slum clusters of Delhi



Supported a project through NGO 'DISHA' for education of street children

- Continued with our vocational training programs viz. 'Cutting & Tailoring' and 'Beauty Culture' for women from weak economic background thereby providing them with self-employment opportunities
- BHEL-FAEA (Foundation for Academic Excellence and Access) Education Scholarship Programme provided scholarships to 150 BPL candidates
- Provided scholarships to pursue higher education to 100 undergraduate girls from economically weaker sections in Haridwar, Uttarakhand
- UDAAN: Provided intensive training of nine months to 87 Engineering Degree & Diploma candidates of J&K at ATI, Chennai, BHEL's manufacturing units and different power sector

50 Years of Engineering Excellence

sites spanning all across India

 Sustained Graded Value Education Programmes (SGVEP): BHEL has entered into an agreement with highly esteemed organisation R.K. Mission to facilitate their mission of providing value based education to students of Delhi-based schools (Grade VII-Grade XI)

Health

- Financial support to an NGO named 'Sane & Enthusiast Volunteers Association of Calcutta' for construction of a Mental Health Care facility at Thakurpukur, Kolkata.
- Engaged services of 'Lifeline Express' train, the 'world's first-hospital-on-wheels', to provide free medical treatment to the most needy and poor people of Bundelkhand region. Around 1000 patients have been surgically operated upon for various problems



'Lifeline Express' train, the 'world's first hospital-on-wheels', to provide free medical treatment to the underprivileged of Bundelkhand

- Provided 4 Mobile Medical Units (MMUs) fully equipped with basic diagnostic equipment to HelpAge India for operation in the vicinity of the BHEL's remote project sites
- Partnered with NGO 'Global Cancer Concern India (GCCI)' for providing palliative care to poor patients including terminally ill cancer patients in Delhi/NCR and Bhopal
- Initiated health project 'Heal a Soul' for providing medical assistance to people suffering from Hemophilia
- Continued support to Sankar Foundation for carrying out orbital surgeries for poor patients from Andhra, Orissa and Chhattisgarh

Further, BHEL is the first CPSU to acknowledge

need of eye pledging to eradicate corneal blindness from India and built an innovative program for its employees and their families to pledge eyes, which later, after their death can be donated to beneficiary. For eradication of corneal blindness through eye donation, BHEL launched a noble and unique CSR initiative in May 2012 "VISION to ALL - BHEL's CALL" amongst its employees and associates as a social campaign. Till March 31, 2014, 63420 eye donation pledges were received from BHEL Employees, family members and other members of the society and a total of 1104 pairs of Eye Ball (Corneas – 2208) have been collected in order to restore the vision of corneal blind.

Fostering the tradition of repaying the society at large by actively participating in the welfare of local communities through numerous CSR & SD initiatives, BHEL undertakes socio-economic and community development programmes to promote education, improvement of living conditions and hygiene in villages and communities located in the vicinity of its manufacturing plants and project sites spread across the country.

3.3.3 United Nations Global Compact Programme

BHEL remained committed to United Nations Global Compact (UNGC) Programme and the set of core values enshrined in its ten principles on human rights, labour standards, environment and anti-corruption. BHEL has taken a lead role in promoting global compact principles in Indian organisations through active participation in Global Compact Network (GCN) – an apex level nodal agency, formed by leading Indian organisations. BHEL is now a Lifetime Corporate Member of Global



Mobile Medical Units (MMUs) fully equipped with basic diagnostic equipment provided to Help Age India



Compact Network, India. BHEL continued to remain in the forefront in all activities of the network as its Secretary. The company further continued with its commitment to the UNGC Programme through regular pooling of Communication of Progress (COP).

3.3.4 Occupational Health & Safety

Participative Management Culture has been the hallmark of BHEL's Industrial Relations policy since beginning. In BHEL, the workers participation scheme is at 3 levels viz. Shop Floor level, Plant level and the Apex level. The Apex level bipartite forum named "The Joint Committee for BHEL", functioning since 1973, has been the mainstay of smooth and cordial industrial relations in the company. Dedicated Safety and Occupational Health Centers are being run in the Factory premises taking care of safety and health issues at the work place. Some of the initiatives taken in factories to build and maintain safety and health culture at work place are:

- Periodic Health and Safety awareness campaigns
- Regular health and safety related training programmes at HRD Centre
- Display of posters and safety instructions
- Safety pledge & Tool box meetings
- Regular Plant Safety Inspections by Safety Officers / Supervisors and by a team of Shop executives & Safety Stewards
- Personal Protective Equipment
- Mock Drills in identified hazardous areas once in 6 months
- Publication of in-house magazines and hand books on various safety topics
- Work Permit system for carrying out critical activities
- Liaison with statutory authorities
- Internal audits & 3rd party audits
- Job Safety Analysis for identified activities
- Monthly departmental Safety Committee meetings and plant safety committee meeting
- Periodic safety drills
- Maintaining register of employees
- Scheduling preventive maintenance of machine/ equipment

- Periodic Maintenance & Testing of material handling equipment (including cranes, hoists, lifting tackles, forklifts, pallets); all pressure vessels/air receivers, power presses
- Material Safety Data Sheet (MSDS) is available for all the hazardous chemicals and safe work procedures are followed
- Operation control procedures are developed and issued to the concerned for implementation
- Monitoring of quality of food &water
- Well Person Screening scheme is initiated for the health screening of all employees over 40 years age
- Regular awareness programs on general safety & road safety for school children

Further, Annual Safety Heads Meet was conducted at BHEL Trichy on 28th - 29th May 2013 for sharing of experience amongst the people directly responsible for ensuring safety at their respective workplaces.

3.4 Sustainable developments in future

For BHEL, Sustainable development represents meeting the needs of the present without compromising the ability of future generations to meet their needs (as defined by the Brundtland Commission in its report titled "Our Common Future"). The company is committed to follow various External Charters, Government Guidelines and its own Sustainability Philosophy in letter and spirit. For BHEL, Sustainability is about achieving prosperity by balancing social equity and staying within the tolerable limits / capacity of the environment. BHEL is treading the path of Sustainability and the broad contour of this journey is set out by the Governance Structure of the organisation because the company believes that sustainability is a journey and not a destination in itself.

Annexure-IV

Business Responsibility Report

Section A: General Information about the Company

- 1. Corporate Identity Number (CIN) of the Company: L74899DL1964GOI004281
- 2. Name of the Company: BHARAT HEAVY ELECTRICALS LIMITED
- 3. Registered address: BHEL House, Siri Fort, New Delhi 110 049
- 4. Website: www.bhel.com
- 5. E-mail id: shareholderquery@bhel.in
- 6. Financial Year reported: 2013-14
- 7. Sectors that the Company is engaged in: Refer to 'Corporate Profile', Annual Report 2013-14
- 8. List three key products/services that the Company manufactures/provides
 - a. Steam Turbine, Generators, Boilers & accessories for Thermal power plant
 - Locomotives, propulsion equipment, traction motors/alternators, Transformers, VCBs for Transportation Sector
 - Power & instrument transformers, reactors, switchgear, capacitors, insulators, FACTS & HVDC system for Transmission segment
- 9. Total number of locations where business activity is undertaken by the Company
 - a. Number of International Locations (Provide details of major 5)

BHEL has 8 overseas offices. Major five locations from where business activity is undertaken by BHEL are Jakarta (Indonesia), Almaty (Republic of Kazakhstan), Thimpu (Bhutan), Dubai (UAE) and Shanghai (China).

b. Number of National Locations

The company has 17 manufacturing divisions, 2 repair units, 4 regional offices, 8 service centres, and 15 regional centres.

 Markets served by the Company – Local/State/ National/International / BHEL serves national as well as international markets.

Section B: Financial Details of the Company (2013-14)

Paid up capital : ₹ 489.52 Crore
 Total Turnover : ₹ 40,338 Crore
 Total Profit after Tax : ₹ 3,461 Crore

4. Total expenses incurred

on CSR &SD : ₹ 108.60 Crore

5. List of activities in which expenditure on CSR has been incurred: Refer to Annexure-III on 'Sustainable Development'

Section C: Other Details

 Does the Company have any Subsidiary Company/ Companies?

Yes, BHEL has one subsidiary company-BHEL Electrical Machines Ltd. (BHEL-EML), Kasaragod as on 31.03.14

 Do the Subsidiary Company/Companies participate in the BR Initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s)

BHEL-EML, Kasaragod does not participate in the BR initiatives of BHEL. However, BHEL-EML is a Schedule 'C' Central Public Sector Enterprise which adheres to the guidelines as issued by Government of India from time to time.

3. Do any other entity/entities (e.g. suppliers, distributors etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]

In most of the cases, BR initiatives are carried out by BHEL only.



Section D: BR Information

- 1. Details of Director/Directors responsible for BR
 - a) Details of the Director / BR Head responsible for implementation of the BR policy/policies

S.N.	Particulars	Details
1	DIN Number (if applicable)	03053133
2	Name	R. Krishnan
3	Designation	Director (HR)
4	Telephone number	011-26001003
5	e-mail id	rkrishnan@bhel.in

2. Principle-wise (as per NVGs) BR Policy/policies (Reply in Y/N)

The National Voluntary Guidelines on Social, Environmental and Economic Responsibilities of Business (NVGs) released by the Ministry of Corporate Affairs has adopted nine areas of Business Responsibility. These briefly are as under:

P1: Businesses should conduct and govern

- themselves with Ethics, Transparency and accountability.
- P2: Businesses should provide goods and services that are safe and contribute to sustainability throughout life cycle.
- P3: Businesses should promote the well beings of all employees.
- P4: Businesses should respect the interests of, and be responsive towards all stakeholders, especially those who are disadvantaged, vulnerable and marginalised.
- P5: Businesses should respect and promote human rights.
- P6: Businesses should respect, protect and make efforts to restore the environment.
- P7: Businesses, when engaged in influencing public and regulatory policy, should do so in responsible manner.
- P8: Businesses should support inclusive growth and equitable development.
- P9: Businesses should engage with and provide value to their customers and consumers in a responsive manner.

S.No.	Questions	P1	P2	Р3	P4	P5	P6	P 7	P8	P9
1	Do you have policy/policies for	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ
2	Has the policy being formulated in consultation with the relevant stakeholders?	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Y
3	Does the policy conform to any national /international standards? If yes, specify? (50 words)		Υ	Υ	Υ	Υ	Υ	N	Υ	Υ
4	Has the policy being approved by the Board?		Υ	Υ	Υ	Υ	Υ	N	Υ	Υ
	Is yes, has it been signed by MD/owner/CEO/ appropriate Board Director?									
5	Does the company have a specified committee of the Board/ Director/Official to oversee the implementation of the policy?		Υ	Y	Y	Y	Y	N	Y	Y
6	Indicate the link for the policy to be viewed online?	Links have been provided wherever applicable			r					
7	Has the policy been formally communicated to all relevant internal and external stakeholders?	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ
8	Does the company have in-house structure to implement the policy/policies?	Υ	Υ	Υ	Υ	Υ	Υ	N	Υ	Υ

S.No.	Questions	P1	P2	РЗ	P4	P5	P6	P 7	P8	P 9
9	Does the company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/policies?	Y	Y	Y	Y	Y	Y	Ν	Y	Y
10	Has the company carried out independent audit/ evaluation of the working of this policy by an internal or external agency	Y	Y	Y	Y	Y	Y	Ζ	Y	Υ

Notes:

- We have various practices established based on these principles, but do not have formal policy document with respect to some of them. We plan to bring out such policies in due course of time.
- 2. Once a policy is approved by the Board, it need not be necessarily signed by CMD/Board Director.
- Policies and procedures of the organisation are subject to audits/reviews during/by ISO 9001, ISO 14001, OHSAS 18001, CAG, Parliamentary Committee, Board of Directors, Committee of Functional Directors, Board Level Committee and/or Management Committee, etc.

2a. If answer to S.No. 1 against any principle, is 'No', please explain why: (Tick up to 2 options)

In respect of Principle 7 referring to Policy Advocacy, we have various practices established based on these principles, but do not have formal policy document with respect to some of them. We plan to bring out such policies in due course of time.

3. Governance related to BR

 Indicate the frequency with which the Board of Directors, Committee of the Board or CEO assess the BR performance of the Company. (Within 3 months, 3-6 months, annually, more than 1 year)

To assess the performance of CSR&SD activities, Board Level Committee for CSR&SD met 6 times during 2013-14.

Additionally, the minutes of the various committees' meetings, particularly Shareholders/ Investors Grievance Committee and Corporate Social Responsibility Committee are regularly put up to the Board for information.

 Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?

Annual Environment Sustainability Report is published and can be accessed through the link: http://www.bhel.com/healthsafety/global_compact.php

Section E: Principle-wise performance

Principle 1: Ethics, Transparency and Accountability

The company has a Board approved 'Code for Business Conduct & Ethics' for all Board Members and Senior Management personnel which can be viewed through the following link:

http://www.bhel.com/investor_relations/pdf/ Code%20of%20Business%20Conduct%20and%20 Ethics.pdf

In addition, as part of BHEL's persisting endeavour to set a high standard of conduct for its employees (other than those governed by standing orders), the 'BHEL Conduct, Discipline and Appeal Rules, 1975' are in place. The Company is subject to RTI Act, 2005 and audit by Statutory Auditors (under section 224 of the Companies Act, 1956), CAG audit under section 619 of the Companies Act, 1956. The company has also signed a MoU with Transparency International to adopt 'Integrity Pact' to make public procurement and contracting more transparent by binding both the parties to ethical conduct. Under delegation of power of various functionaries, accountability is well defined. Works Policy, Purchase Policy and other policy documents facilitate transparency in our working and commitment of highest order of integrity.

The Company also has a Shareholders'/Investors'



Grievance Committee specifically to look into matters related to redressal of shareholders and investors complaints. As reported by Karvy Computershare Private Limited (RTA), 1086 complaints were received from the shareholders during the year under review and all complaints were redressed up to 31st March, 2014.

In addition, a total of 61 public grievance complaints were received from the general public under the Centralized Public Grievance Redressal and Monitoring Scheme during the 2013-14. All the grievances were disposed of within the prescribed time of 60 days.

Principle 2: Products Life Cycle Sustainability

BHEL products & services are fuel efficient, energy efficient, environment friendly and are known for world-class performance. Performance of BHEL supplied power plant equipment is driven by lower auxiliary power consumption, higher plant efficiency, lower design heat rate, better PLF, all resulting in lower life cycle cost.

Four prime products which have incorporated environmental concerns in their design are Power Plants operating with Steam at Supercritical parameters, Flue-gas desulphurisation (FGD), Solar Photovoltaics and Electrostatic Precipitator (ESP).

BHEL is also implementing e-procurement in phased manner as business improvement and sustainable business practice. Reusable materials are being used for packing etc. Company has a strong institutionalized mechanism to recycle products and wastes. One of our units, Central Foundry Forge Plant (CFFP) manufactures Steel Forgings and Castings for which the molten steel required is produced in the Steel Melting Shop using steel scrap as a major raw material. BHEL recycled/reused nearly 3-5% of its materials as recycled input materials, thereby reducing impact on natural resources.

BHEL has pioneered entrepreneurship development in and around its manufacturing units by providing regular support to MSEs through knowledge sharing, training and development and resource mobilization etc. During 2013-14, BHEL procured about 19% of its total procurement from Micro and Small Enterprises in compliance to Public Procurement Policy 2012 for MSEs of the GOI.

Principle 3: Employee's Well-being

BHEL has been a frontrunner in the area of human resource management and have documented the HRM policies and rules in the form of a Codified Personnel Manual to ensure transparency and uniformity of implementation.

- 1. The total number of regular employees as on 31.03.2014: 47,525
- 2. Total number of employees hired on temporary/ contractual basis: BHEL does not hire employees on temporary / casual basis. However, BHEL awards job/works contracts to Contractors at its various Units/ Divisions/ Departments as per organisational needs. The no. of workers with Contractors varies from time to time.
- 3. Number of permanent women employees as on 31.03.2014: 2640
- 4. Number of permanent employees with disabilities as on 31.03.2014: 954
- 5. BHEL has 30 participating unions in respect of Workmen. There are two employee associations one for Executives and one for Supervisors in BHEL.
- 6. The percentage of permanent employees who are member of recognised employee association is not available.
- 7. In 2013-14, company received 8 complaints of sexual harassment out of which 6 have been disposed off satisfactorily. Further, no complaint of child labour / forced labour / involuntary labour/ discriminatory employment has been received.
- 8. During the year 2013-14, total number of training man-days per employee is 5. Various multi-skilling/skills up-gradation programmes, totaling approximately 4,900 programme days, were conducted by covering approx. 19,473 artisans. Approx. 12,995 vocational trainees (3,78,683 man-days) and 23,142 act apprentices (9,72,486 man-days) were trained in different units. HSE & Safety is a part of our induction training for all categories of employees. In addition, separate programmes are regularly conducted for other employees on HSE & Safety in Units/Regions.

Principle 4: Stakeholder Engagement

Yes, the company has identified Customers, Employees, Shareholders, Vendors and Society as its stakeholders. BHEL has processes in place to ensure inclusion of stakeholder concerns and expectations. Key issues are identified through ongoing stakeholder engagement and addressed by programmes or action plans with clear and measurable targets. BHEL has clearly identified the disadvantaged, vulnerable & marginalised stakeholders in the vicinity of the BHEL manufacturing units and their concerns are addressed as per CSR schemes to the extent possible.

Principle 5 - Human Rights

BHEL policies are in line with the principles of Human Rights, the Constitution of India, and various applicable laws. BHEL has special provisions for ensuring safeguard of women employees at the workplace. No instance of Human Rights abuse has been reported in the company.

Further, BHEL is a life time member of United Nations Global Compact (UNGC), India Network. The company reports its performance on 10 Principles of UNGC every year through Communication on Progress which is uploaded on company web-site also for public viewing which can be accessed at:

http://www.bhel.com/healthsafety/global_compact.php

Principle 6: Environment

All manufacturing Units of the company and Power Sector Regions are accredited to international standards viz. ISO-14001 for environmental management systems and have 'Health, Safety and Environment (HSE)' policy. The Environment Management System (EMS) provides for an excellent framework to identify / assess potential environmental risks and address them in a structured manner. As per the applicable statutes, the Environmental Statement showing related environmental compliance is submitted to the respective State Pollution Control Board by all manufacturing units.

BHEL has undertaken R&D initiatives towards CO_2 reduction and/or CO_2 capture through Oxy-fuel combustion, Biomass combustion, Ammonia based CO_2 sequestration systems, etc. The organisation is also striving to minimize internal carbon footprints

through various initiatives like setting up Solar Power Plants at manufacturing units at Bhopal, Trichy, Bangalore and Corp. R&D, Hyderabad. A Grid Interactive Solar Power Plant of 5 MWp capacity was set up at BAP Ranipet unit during 2013-14 which will generate approx. 7.5 Million Units of clean energy per annum and mitigate our carbon emission to the extent of more than 6500 MT CO₂-e per annum. Further, company has taken numerous projects for energy & water conservation in its manufacturing Units.

Under the aegis of the National Mission on Clean Coal Technology, BHEL in association with IGCAR, NTPC and other organisations, is developing Advanced Ultra Supercritical Technology. In conformity with green energy initiative, an energy efficient largest single cylinder non-reheat steam turbine for 100-140 MW application has already been developed to harness waste heat.

No show cause / legal notice received from Central Pollution Control Board (CPCB) is pending as on 31.03.14. However, two show cause / legal notices received from State PCB (one each from Punjab PCB and MP PCB) were pending as on 31.03.14.

Principle 7: Policy Advocacy

BHEL is a member of many trade and chamber / associations. Some of them are Confederation of Indian Industry (CII), Federation of Indian Chambers of Commerce and Industry (FICCI), Associated Chambers of Commerce and Industry of India (ASSOCHAM), Indian Electrical and Electronics Manufacturers Association (IEEMA).

BHEL participates in policy advocacy through these bodies for promoting company's interests through knowledge sharing. Some of the recent examples of its public advocacy activities are development of Indian Power Sector and Indian Manufacturing Industry, strengthening of technology base in the country, skill development and growth of Public Sector Enterprises through better governance.

Principle 8: Inclusive Growth

BHEL has a well structured CSR programme towards inclusive growth and equitable development. The company supports numerous social initiatives across the country by undertaking projects through specialized agency like NGO, Govt. agencies etc. Refer to Annexure-III on 'Sustainable Development'



for details of various initiatives undertaken during the year. Impact assessment of CSR & SD initiatives are being done by a third party to assess the fruitfulness of the initiatives undertaken.

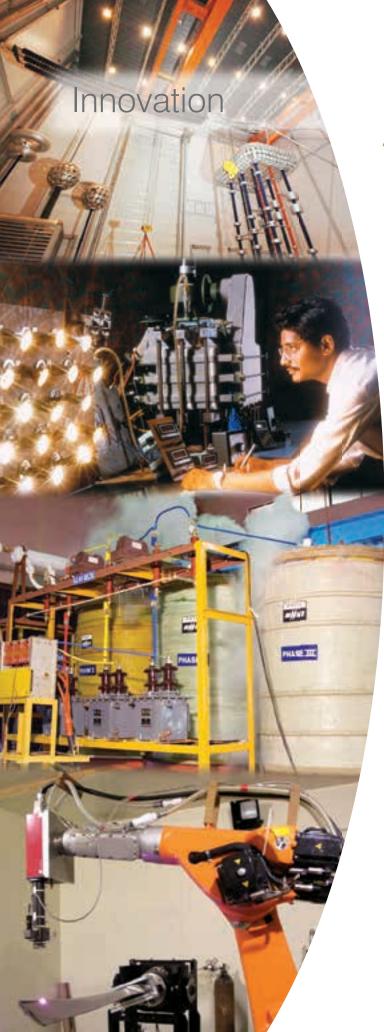
Principle 9: Customer Value

"He (customer) is the purpose of it (business)", as said by Gandhi ji, is enshrined in our corporate culture. Customer focus is part of our Vision, Mission and Values statements. The focus towards customers and end users of the products is evident from the fact that with 57% share in India's installed electricity generation capacity, BHEL equipped power plants generate nearly 65% of the electricity testifying higher customer value proposition of its products and services.

Detailed Product Labels/ Name Plates/ Test Certificates are provided to customers as per their requirement and terms of the contracts with them.

Giving diversified and large scale operations of BHEL, customers complaints are handled by respective business units / project divisions. The feedback of customers is taken regularly through customer satisfaction surveys, customers' meets and face-to-face interactions.

There is no case filed by any stakeholder against the company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behaviour during the last five years. •



Annexure-V R&D and Technological Achievements

5.1 Innovation → Product → Market

In today's global economy, all organisations including BHEL are faced with five major challenges viz. (a) increasing global competition emanating from free trade, mobility of capital, labour and knowledge; (b) increasing advances in technologies providing endless opportunities for new types of products and services; (c) changing and diverse market needs; (d) increasing volatility of natural resources and finally (e) increasing environmental concerns and maintaining sustainability.

Realising the gravity of these challenges, BHEL has adopted innovation as the central driver for implementing its strategy and achieving growth. The company has always stood above the rest in engineering sector in the country in research and development efforts to improve its performance in indigenising products & systems using the coming of age technologies meeting not only the needs of the country but also to stand competitive globally. This sustained focus on innovation has enabled BHEL to achieve consistent above-industry Value Addition and profitable growth.

Ongoing Technology Collaborations (Partner / Product)

Alstom SA, France Siemens AG, Germany

Mitsubishi Heavy

Industries Ltd., Japan

General Electric, USA Oto Melara, Italy

Sheffield Forgemasters UK

Metso, Finland Nuovo Pignone, Italy Vogt Power Intl, USA

GF India Industrial

TLT Gmbh, Germany

Once through Boilers Steam Turbines, TG.

Axial/lateral condensers Boiler Feed, Booster,

Cooling Water,

Condensate Extraction pumps for super-critical power plants, FGD

system

Gas Turbines 76 mm SRGMs

Forgings

C&I Automation platform Centrifugal Compressors

Water Treatment

Equipment

Fans



Over the years, BHEL entered into numerous technology collaboration arrangements with leading global manufacturing and engineering companies, such as General Electric Company of the United States, Siemens AG of Germany, Alstom SA of France, Mitsubishi Heavy Industries Ltd. of Japan and ABB Group of Switzerland. The company has successfully indigenised these technologies to meet the requirement of Indian customers and enhance depth in manufacturing. Today, with eleven ongoing collaborations, BHEL is focussing on successful adaptation and indigenisation of these technologies.

5.2 Innovation Strategy

Today, BHEL is deeply focused on innovation than ever before. As part of Strategic Plan 2012-17, the company is transforming its R&D and innovation in a structured and focussed manner through five pronged approach consisting of Strategic Direction, Portfolio Management, Partnerships & Alliances, Knowledge Management and Enablers.

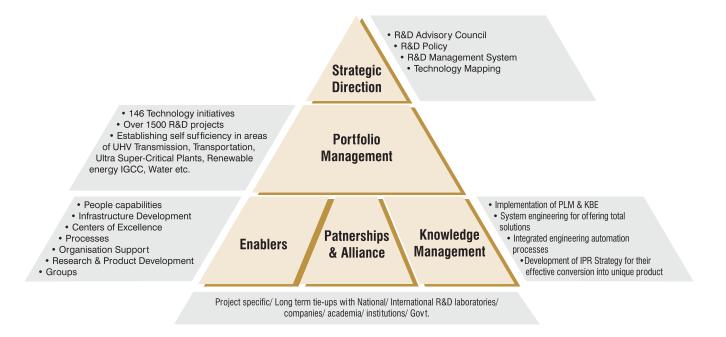
Strategic direction is provided to R&D through a policy framework under the guidance of R&D Advisory Council which has Indian Scientists of international repute. A portfolio of 146 technology initiatives comprising of 15 Mission Projects and 131 Technology Plans to build and consolidate

capabilities in emerging and existing areas have been identified and are under execution. The Technology Plans have been further broken down into specific R&D projects.

Major Mission Projects

- Establish 800 MW Advanced Ultra supercritical Power plants with parameters 710 °C/310 ata covering design, engineering, manufacturing installation & commissioning.
- 2. In-house capability to establish grid connected Solar Power plants with matching BOS (Both Solar PV & Solar Thermal).
- 3. Establishment of manufacturing plant for solar PV with commensurate R&D set up.
- 4. Develop total capability for transmission products/ substation of GIS up to 765 kV.
- 5. 3-phase propulsion systems for all railways needs covering electric/ diesel-electric loco, EMU, DEMU, MEMU, Coaches, metro and rolling stock addressing urban transportation.

BHEL has realigned its organisation structure for carrying out R&D activities effectively and is building Centres of Excellence to address infrastructural gaps. Infusing innovation in engineering processes including managing its knowledge base is identified as focus area in R&D at BHEL.



50 Years of Engineering Excellence

DIRECTORS' REPORT

Centers of Excellence

At Corp R & D, Hyderabad

- 1. Simulators
- 2. Computational Fluid Dynamics
- 3. Permanent Magnet Machines
- 4. Surface Engineering
- 5. Intelligent Machines and Robotics
- 6. Machine Dynamics
- 7. Compressors & Pumps
- 8. Nano-technology
- 9. UHV Laboratory
- 10. Advanced Transmission Systems

At Electronics Division, Bangalore

- Power Electronics and IGBT & Controller Technology
- 12. Control & Instrumentation

At High Pressure Boiler Plant, Trichy

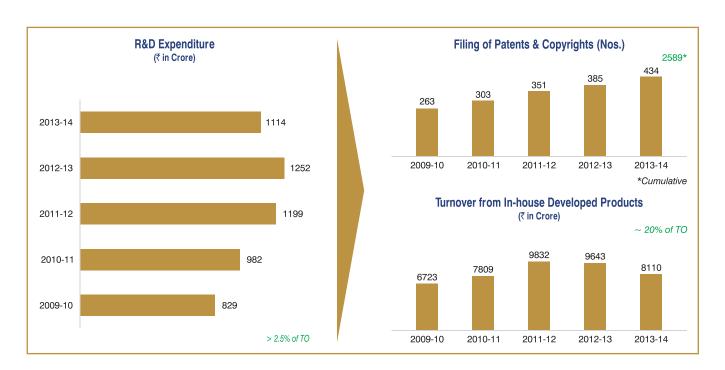
- 13. Advanced Fabrication Technology
- 14. Coal Research Centre

Continuing its focus on Knowledge Based Engineering (KBE) for reducing design cycle time and design optimisation in all its products, BHEL has initiated a number of KBE projects and a 'Competence Centre for KBE/PLM' has been set up to build expertise and facilitate KBE/PLM activities.

Further, with a view to bridge knowledge gaps BHEL has increased collaboration with academia and R&D Institutes for basic as well as applied research. Company is also putting in place all enablers like people capabilities, infrastructure, processes and organisation support to succeed in its ambitious technology endeavours.

5.3 Achievements during the year

BHEL has recorded significant achievements during the year. Centre of Excellence (COE) for Advanced Transmission Systems (ATS) has been established for undertaking development of technologies pertaining to HVDC, UHVAC up to 1200 kV, Reactive Power Management, Substation Automation, Wide Area Protection (WAP), etc. The R&D expenditure of the company for the year was ₹ 1114 Crore which was 2.76% of the turnover as against 2.49% for the previous year. This also includes the expenditure incurred on R&D efforts gone into major modifications/ improvements in products/designs against customer requirements which are not covered in R&D projects, 434 patents and copyrights were filed during the year 2013-14, enhancing the company's intellectual capital to 2,589, which are in productive use. Turnover from in house developed products amounted to ₹8110 Crore which is 20 % of the company Turnover.





During the year, there have been significant developments/ improvements in engineering, processes and products covering various business verticals like Power, Industry, Transportation and Renewables. Some notable achievements are:

- To address the requirement of boiler feed pump drives in 800 MW supercritical power plants, BHEL has developed its largest 20,500 kW, 4 Pole, 11 kV asynchronous cage induction motor with a specially designed ventilation circuit
- Development of a new variant of single cylinder reheat turbine up to 160 MW rating with improved efficiency



New variant of single cylinder reheat turbine of 125 MW rating with improved efficiency developed by BHEL

- To address the shortage of water for power plants, BHEL has developed Air Cooled Condenser (ACC) with modular (capable of handling heat duty of 10 MW) design of subsystems like heat exchanger bundles for a typical 80 MW thermal power plant
- To address the requirement of Indian Railways, BHEL has developed an Electric Multiple Unit (EMU) transformer suitable for IGBT based 3 phase 25 kV drive with provision of separate hotel load winding to cater to the coach air conditioning load
- A 30 kW Permanent Magnet Alternator, along with IGBT based DC voltage controller has been developed by BHEL for charging batteries for operation of air conditioners in AC coaches
- In a bid to offer technologically excelled and environmentally compliant product, BHEL has developed and tested successfully at international laboratory a 420 kV, 40 kA Single

Break Gas Insulated Substation (GIS) Circuit Breaker (CB) using spring hydro drive



420 kV, 40 kA, Single Break GIS Circuit Breaker using spring hydro drive developed and tested successfully by BHEL

- With a view to provide clean power source for telecom applications, BHEL has developed a 1 kW High Temperature Air-Hydrogen Proton Exchange Membrane (PEM) Fuel Cell stack utilizing commercial grade hydrogen and air as reactant feed gases thus reducing the operating costs. This is being up scaled to 5 kW
- As a part of development of high pressure turbine for Advanced Ultra Supercritical Parameters (AUSC), CFD & structural analysis of 3D blade profiles has been completed
- Under the new & renewable energy initiative, testing of 0.5 Nm³/hr system in simulated gas mixture has been completed successfully for production of H2 from Coal Gas (membrane based technology)
- Development of Phasor measurement unit for wide area measurement including integrated testing with open PDC (Phasor data concentrator) has been successfully completed
- As a part of process development initiative, studies on characterization, corrosion and strength behavior of dissimilar weldments of Nickel base alloys and 10% Cr steels have been carried out successfully and test result have been evaluated
- To meet strategic applications, BHEL has developed & tested successfully lighter (with 25% lower weight) and compact 1250 kW Permanent Magnet Generator (PMG) with key features like reduction in number of rotating parts and noise level less than 80 dB

Years of

Engineering Excellence



30 kW Permanent Magnet Alternator developed by BHEL for charging batteries for operation of air conditioners in AC coaches

- Development of a large capacity propylene refrigerant gas compressor capable of meeting higher flow requirements and suitable for dry gas seal system (to minimize emissions)
- BHEL has developed a light weight and compact 220 kV Capacitor Voltage Divider (CVD) in a single porcelain housing having 170 mm bore, leading to a compact, light and cost effective Capacitor Voltage Transformer (CVT)
- To address requirement of customers for small roof top and car parking applications, BHEL has developed a 500 W Photovoltaic Module with 15.9% efficiency which uses 12X10 configuration of 156 mm mono crystalline solar cells
- BHEL has developed very fast, accurate, and reliable state-of-the-art non destructive ultrasound infrared thermography technique for identifying and characterizing defects in Induction Pressure Weld (IPW) joints of boiler tubes by introducing high power ultrasound energy and capturing infrared signatures through infrared camera
- BHEL has established state-of-the-art 5 axis programming and scoop milling technology to manufacture 3D impellers of centrifugal compressors leading to reduction in manufacturing cycle time and cost

5.4 Future focus areas

BHEL has taken several technology development initiatives covering various business verticals viz. Power, Transportation, Transmission, Solar, Water, Defence, and other industries. Company will continue to pursue various projects undertaken

DIRECTORS' REPORT

in recent years with focus on low-carbon path technologies including faster assimilation of supercritical technology, development of Adv. Ultra Super Critical Technology, IGCC Technology commercialisation, Carbon capture, Solar PV &thermal, 765/1200 kV Transmission System, GIS up to 765 kV, ±800 kV HVDC system, IGBT based Propulsion Systems for higher rating Locos, EMU, Metro coaches on mission mode.

Further in frontier technology areas, the company is also engaged in Hydrogen energy applications like Fuel Cells for distributed environment friendly power generation, development of new materials with addition of nano-/micro-particles for improving characteristics, and superconducting application in Transformers, Generators, Motors, etc.



Annexure-VI

Corporate Governance

6.1 Our Philosophy on Corporate Governance

BHEL 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 towards building confidence of its various stakeholders including shareholders, customers, employees, suppliers and the society at large. The company has developed a framework for ensuring transparency, disclosure and fairness to all, especially minority shareholders.

The Vision of BHEL envisages "being a global engineering enterprise providing solutions for a better tomorrow" and its Mission is "Providing sustainable business solutions in the fields of Energy, Industry & Infrastructure".

The Corporate Governance Policy of BHEL rests upon the four pillars of Transparency, Full Disclosure, Independent Monitoring and Fairness to all. To strengthen this, BHEL has signed a MoU with Transparency International to adopt '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. BHEL's Corporate Governance policy is based on the following principles:

- i) Independence and versatility of the Board
- ii) Integrity and ethical behaviour of all personnel
- iii) Recognition of obligations towards all stakeholders-shareholders, customers, employees, suppliers and the society
- iv) High degree of disclosure and transparency levels
- v) Total compliance with laws in all areas in which the company operates

vi) Achievement of above goals with compassion for people and environment

The company believes that conducting business in a manner that complies with the Corporate Governance procedures and Code of Conduct, exemplifies each of our core values and positions us to deliver long-term returns to our shareholders, favourable outcomes to our customers, attractive opportunities to our employees and making the suppliers our partners in progress & enriching the society.

6.2 Board of Directors

i. Composition & Category of Directors

Pursuant to Companies Act, BHEL is a 'Government Company' as 63.06% of the total paid-up share capital of the Company is held by the President of India.

The composition of Board of Directors of BHEL has an appropriate mix of Executive Directors represented by Functional Directors including CMD and Non-Executive Directors represented by Government Nominees & Independent Directors, to maintain the independence of the Board and to separate the Board functions of management and control. As the Chairman is an Executive Director, Independent Directors comprise half of the strength of the Board.

As on 31st March, 2014, there were five Whole-time Executive (Functional) Directors including CMD and two Part-time Official Directors (Government Nominees) on the Board of BHEL. There existed one vacancy of Director (E, R&D) and eight vacancies of Part-time Non-official (Independent) Directors on the Board of BHEL. The matter of filling up of these vacancies is under consideration of Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, Government of India. Presently, Director (Power) is holding additional charge of the post of Director (E,R&D).



The composition of the Board of Directors is as follows:

Particulars	Board Structure
Chairman & Managing Director	1
Whole-time Executive (Functional) Directors	5
Part-time Official Directors (Government Nominees) representing the Ministry of Heavy Industries & Public Enterprises, Government of India	2
Part-time Non-official (Independent) Directors	8
Total	16

As on 31st March, 2014, there were five Whole-time Executive (Functional) Directors including CMD and two Part-time Official Directors (Government Nominees) on the Board of BHEL. There existed one vacancy of Director (E,R&D) and eight vacancies of Part-time Non-official (Independent) Directors on the Board of BHEL. The matter of filling up of these vacancies is under consideration of Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, Government of India. Presently, Director (Power) is holding additional charge of the post of Director (E,R&D).

ii. Attendance of each Director at the Board Meetings held during 2013-14 and the last AGM

Director's Name S/Shri		Board tings	Last AGM (held on 20.09.2013)
	Held	Attended	
EXECUTIVE DIRECTORS			
B. Prasada Rao#, Chairman & Managing Director	9	9	Yes
Atul Saraya, Director (Power) (superannuated on 30.11.2013)	6	6	Yes
O.P. Bhutani*, Director (E,R&D) (superannuated on 31.05.2013)	3	3	-
M.K. Dube*, Director (IS&P) (superannuated on 31.07.2013)	3	3	-
P. K. Bajpai, Director (Finance)	9	9	Yes
R. Krishnan, Director (HR)	9	9	Yes
W.V.K. Krishna Shankar, Director (IS&P) (w.e.f. 01.08.2013)	6	6	Yes
Atul Sobti*##, Director (Power) (w.e.f. 01.12.2013)	3	3	-
PART-TIME OFFICIAL DIRECTORS – GOVT. NOMINEES			
Ms. Kusumjit Sidhu Additional Secretary & Financial Adviser, Department of Industrial Policy and Promotion, Ministry of Commerce & Industry (w.e.f. 10.05.2013) (upto 01.01.2014)	6	5	Yes



Ambuj Sharma, Additional Secretary Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises	9	9	Yes
S.K. Bahri* Additional Secretary & Financial Adviser, Department of Industrial Policy and Promotion, Ministry of Commerce & Industry (w.e.f. 31.03.2014)	-	-	-
PART-TIME NON-OFFICIAL (INDEPENDENT) DIRECTORS			
S. Ravi (upto 09.03.2014)	9	9	Yes
Trimbakdas S. Zanwar (upto 11.11.2013)	6	6	Yes
Smt. Chandra lyengar* (w.e.f. 01.04.2013) (upto 29.05.2013)	3	1	-

[#] holding additional charge of Director (E,R&D) w.e.f. 01.06.2013 upto 28.02.2014 ## holding additional charge of Director (E,R&D) w.e.f. 01.03.2014

iii. Number of other Boards or Board Committees* in which Director of BHEL is a member or Chairman as on 31st March, 2014

Director's name S/Shri	Details of Directorships in other Companies	Details of Committee Memberships and Committee Chairmanship in other companies
B. Prasada Rao Chairman & Managing Director	-NIL-	-NIL-
P. K. Bajpai Director (Finance)	Latur Power Company Ltd.	-NIL-
R. Krishnan Director (HR)	Dada Dhuniwale Khandwa Power Ltd.	-NIL-
W.V.K. Krishna Shankar Director (IS&P)	Dada Dhuniwale Khandwa Power Ltd.	Audit Committee: Dada Dhuniwale Khandwa Power Ltd. (Member)
Atul Sobti Director (Power)	NTPC BHEL Power Projects Pvt. Limited	-NIL-
	2. Raichur Power Corporation Ltd.	
Ambuj Sharma Part-time Official Director	Hindustan Paper Corporation Ltd.	-NIL-
S.K. Bahri Part-time Official Director	Heavy Engineering Corporation Limited	-NIL-

^{*}Only Chairmanship/Membership of the Audit Committee and Shareholders'/Investors' Grievance Committee has been considered.

No Director of the company holds office at the same time as Director in more than fifteen (15) companies. No Director of the company is a member in more than ten (10) Committees or is a Chairman of more than

^{*} denotes the respective person was not a Director of BHEL as on last AGM date.

Years of **Engineering Excellence**

DIRECTORS' REPORT

five (5) Committees across all companies in which he is a Director.

iv. No. of Board Meetings held, dates on which

The meetings of the Board are normally held at the Company's Registered Office in New Delhi and are scheduled well in advance. The Company Secretary, in consultation with the Chairman & Managing Director, sends a written notice of each Board meeting to each Director. The Board agenda is circulated to the Directors in advance.

The members of the Board have access to all information of the company and are free to recommend inclusion of any matter in agenda for discussion. In case of need, the senior management is invited to attend the Board Meetings to provide additional inputs relating to the items being discussed and / or to give presentation to the Board. The Board meets at least once in a guarter to review the quarterly results and other items on the agenda. Additional meetings are held, when necessary.

During the year under review, the Board met nine times on the following dates:

(i) April 8, 2013

May 23, 2013 (ii)

(iii) May 24-27, 2013

(iv) August 3, 2013

(v) October 8, 2013

(vi) November 6, 2013

(vii) December 11, 2013 (viii) January 2, 2014

(ix) February 5, 2014

v. Board's Responsibilities

The Board's mandate is to oversee the company's strategic direction, review and monitor corporate performance, ensure regulatory compliance and safeguard the interests of the shareholders.

vi. Role of Independent Directors

The Independent Directors play an important role in deliberations at the Board and Committee meetings and bring to the company their expertise in the fields of engineering, finance, management, law and public policy.

The Board has established various Committees such as the Audit Committee, Shareholders' / Investors' Grievance Committee, Remuneration Committee, HR Committee, CSR & SD Committee, Committee of Independent Directors and Nomination Committee

having adequate representation of Independent Directors.

In terms of Clause 49 of the Listing Agreement, the Audit Committee and the Shareholders' / Investors' Grievance Committee are chaired by an Independent Director and the said Committees' functions are within the defined terms of reference. The Remuneration Committee has been constituted to comply with the requirements of DPE Guidelines on Corporate Governance for CPSEs and Clause 49 of the Listing Agreement. Consequent upon the adoption of the DPE Guidelines on Corporate Social Responsibility and Sustainable Development for CPSEs, the Board constituted the "Board Level Committee for Corporate Social Responsibility (CSR) & Sustainable Development (SD)" for proper and periodic monitoring of CSR activities and oversee Sustainable Development activities. In line with DPE OM dated 28.12.2012 on Model Role & Responsibilities of Non-Official Directors for CPSEs, the Board has constituted a Committee of Independent Directors. The minutes of all the committee meetings are circulated and discussed in the Board Meetings.

vii. Information placed before the Board of **Directors**

The information under the following heads are usually presented to the Board of Directors of BHEL either as part of the agenda papers or are tabled / presented during the course of Board meeting:

- Annual operating plans and budgets and any updates.
- Capital budgets and any updates.
- Quarterly results for the company and its operating divisions or business segments.
- Minutes of meetings of Audit Committee and other Committees of the Board.
- Minutes of Board Meetings of unlisted subsidiary companies.
- Statement of all significant transactions and arrangements entered into by unlisted subsidiary companies.
- The information on recruitment and remuneration of senior officers just below the Board level.
- Details of any Joint Venture or R&D project or technical collaboration agreement requiring approval of Board of Directors.



- Significant labour problems and their proposed solutions. Any significant development in Human Resources / Industrial Relations front like signing of wage agreement, implementation of Voluntary Retirement Scheme, etc.
- Sale of material, nature of investments, subsidiaries, assets, which is not in normal course of business.
- Action Taken Report on matters desired by the Board.
- Disclosure of Interest by Directors about directorships and Committee positions occupied by them in other companies.
- Quarterly report on Compliance of various laws.
- Information relating to major legal disputes.
- Status of Arbitration cases.
- Short term Investment of surplus funds.
- Any contract(s) in which Director(s) are deemed to be interested.
- Status of shareholders' grievances on quarterly basis.
- Information/status in respect of Power & Industry Sectors and International Operations Division on quarterly basis.
- Significant Capital Investment proposals.
- Changes in significant accounting policies and practices and reasons for the same.
- Detailed presentation on performance of various units/functions.
- Any other information required to be presented to the Board either for information or approval.

viii. Selection of New Directors

As per Articles of Association of BHEL, the President of India through Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, appoints the Chairman & Managing Director, Functional Directors and Part-time Official Directors on the Board of BHEL and also nominates Part-time Non-official Directors (Independent Directors) on the Board of BHEL.

The Independent Directors are selected by the Department of Heavy Industry in consultation with the Search Committee of the Department of Public Enterprises which maintains a panel of eminent personalities having wide experience in the field of

Management, Finance, Engineering, Administration and Industry.

ix. Membership term & Retirement policy

The appointment of Chairman & Managing Director and Functional Directors shall be on such terms and conditions, remuneration and tenure as the President of India may from time to time determine.

Two Part-time Official Directors viz. Additional Secretary/Joint Secretary, Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises and Additional Secretary & Financial Adviser, Ministry of Commerce and Industry are nominated by the Government of India on the Board of BHEL. They continue to be on the Board of BHEL at the discretion of the Government of India.

The tenure of Part-time Non-official (Independent) Directors is decided by the Department of Heavy Industry. Normally, an Independent Director is appointed for a period of three years and such appointees are liable to retire by rotation in terms of the provisions of the Articles of Association of BHEL.

x. Code of Conduct

As part of BHEL's persisting endeavour to set a high standard of conduct for its employees, a 'Code of Business Conduct and Ethics' has been laid down for all Board Members and Senior Management personnel. In line with MoU 2011-12 signed with DHI, the said Code was revised in line with changes in the regulatory framework & changing business dynamics and to incorporate other relevant provisions to strengthen the Code.

The Code encompasses:

- General Moral Imperatives;
- Specific Professional Responsibilities; and
- Additional Duties / Imperatives for Board Members and Senior Management Personnel.

A copy of the said revised Code has been placed on the company's website 'www.bhel.com'. Additional suggestions / ideas to improve the said Code are gladly invited.

xi. Charter of the Board of Directors

For the purpose of clearly defining the roles and responsibilities of the Board and individual Directors, the Board has laid down a Charter of the

50 Years of Engineering Excellence

Board of Directors. The Charter also articulates our corporate governance objectives and approach.

xii. CEO/CFO certification

CEO / CFO certification pursuant to Clause 49(V) of the Listing Agreement is enclosed.

6.3 Audit Committee

i. Terms of reference

The terms of reference of the Audit Committee specified by the Board are in conformity with the requirements of Section 292A of the Companies Act, 1956 as well as Clause 49 of the Listing Agreement and are as follows:

- 1. Oversight of the company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible.
- 2. Recommending to the Board, the appointment, re-appointment and if required, the replacement or removal of the Statutory Auditor and the fixation of audit fees.
- Approval of payment to Statutory Auditors for any other services rendered by the statutory auditors.
- Reviewing with the management, the annual financial statements before submission to the Board for approval, with particular reference to:
 - Matters required to be included in the Directors' Responsibility Statement to be included in the Board's report in terms of clause (2AA) of section 217 of the Companies Act, 1956.
 - b. Changes, if any, in accounting policies and practices and reasons for the same.
 - c. Major accounting entries involving estimates based on the exercise of judgment by management.
 - d. Significant adjustments made in the financial statements arising out of audit findings.
 - e. Compliance with listing and other legal requirements relating to financial statements.
 - f. Disclosure of any related party transactions.

DIRECTORS' REPORT

- g. Qualifications in the draft audit report.
- 5. Reviewing with the management, the quarterly financial statements before submission to the Board for approval.
- 6. (i) Reviewing with the management, performance of statutory and internal auditors, adequacy of the internal control systems.
 - (ii) To ensure compliance of internal control systems.
- Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit.
- 8. Discussion with internal auditors any significant findings and follow up there on.
- Reviewing the findings of any internal investigations by the internal auditors into matters where there is suspected fraud or irregularity or a failure of internal control systems of a material nature and reporting the matter to the Board.
- (i) Discussion with Statutory Auditors/ Internal Auditors periodically about internal control systems.
 - (ii) Discussion with Statutory Auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern including observations of the Auditors.
- 11. To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of non payment of declared dividends) and creditors.
- 12. To review the functioning of the Whistle Blower Mechanism, in case the same is existing.
- 13. To review the Audit paras referred to BLAC by the Internal Audit / Board and / or Govt. of India and to provide its suggestions / guidance/comments on the issues referred to it.
- Carrying out any other function as is mentioned in the terms of reference of the Audit Committee.



ii. Composition of Committee, name of members & Chairman:

The Audit Committee comprises a majority of Independent Directors as mandated by the Listing Agreement. Further, the Committee is chaired by an Independent Director. The member directors comprise of professionals of repute and standing with background in commerce, finance, administration and governance, both national and international.

The Audit Committee was last reconstituted on 28th January, 2014. The Committee comprises of the following directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
S. Ravi (Part-time Non-official Director) (Upto 09.03.2014)	Chairman	7	7
Ms. Kusumjit Sidhu (Part-time Official Director) (Upto 01.01.2014)	Member (w.e.f. 12.11.2013)	-	-
Ambuj Sharma (Part-time Official Director)	Member	7	7
Trimbakdas S. Zanwar (Part-time Non-official Director) (upto 11.11.2013)	Member	5	5
Director (HR)	Member (w.e.f. 28.01.2014)	2	2

Company Secretary acts as the Secretary to the Committee. Director (Finance), Head of Internal Audit and a representative of Statutory Auditors attend the meetings as invitees.

iii. Meetings and Attendance

The Audit Committee met seven times on 8th April, 2013, 23rd May, 2013, 3rd August, 2013, 20th September, 2013, 6th November, 2013, 5th February, 2014 and 3rd March, 2014 during the year 2013-14. The details of the attendance of each member is given in the above table.

6.4 Remuneration Committee

i. Remuneration policy

BHEL being a Public Sector Undertaking, the

appointment and remuneration of CMD / Functional Directors are decided by the Govt. of India. The part-time non-executive directors are not paid any remuneration except sitting fees for attending meetings of the Board or Committee thereof. Moreover, the terms of appointment of CMD / Directors, as approved by the President of India, provide for fixation of certain perks and benefits like leased accommodation, payment of HRA, furnished accommodation, productivity linked incentive etc., as per rules of BHEL. As such, the Board had constituted a Remuneration Committee in its meeting held on 7th December, 2005 with the following terms of reference in line with Clause 49 of the Listing Agreement.

ii. Terms of reference

- a. Oversight of the company's policy on specific remuneration packages, perquisites for Wholetime Directors including pension rights and any compensation payment, which are not fixed by the President of India.
- b. Approve certain perquisites for Whole-time Directors which are within the powers of Board. Review of the elements of remuneration package of individual directors summarized under major groups, such as incentives/benefits, bonus, stock options, pension etc.
- Finalisation of policies on perks and benefits and other related matters which are not fixed by the President of India but within the powers of Board.
- Approval of fixed component and performance linked incentives based on the performance criteria.
- e. Finalisation of the criteria of making payments to Non-Executive Directors.
- f. Recommendation of fees/compensation/ stock options, if any, to be paid/granted, to nonexecutive directors, including independent directors, to the Board of Directors/ Shareholders.
- g. Carrying out any other function related to the terms of reference of the Remuneration Committee.

iii. Composition of Committee, names of members & Chairman

The Remuneration Committee was last reconstituted on 6th December, 2012. The Board of Directors in its meeting held on 02.01.2014 decided that the roles



of the Remuneration Committee and the Remuneration Committee on Performance Related Pay (Point No. 6.9 of the Corporate Governance Report) be taken care of by a single "Remuneration Committee". The terms of reference and other details of this "Remuneration Committee" are given at Point 6.9 of this Report. Upto 02.01.2014, the Committee comprised the following directors:

Name of the Director S/Shri	Position
Trimbakdas S. Zanwar (Part-time Non-official Director) (upto 11.11.2013)	Chairman
Ambuj Sharma (Part-time Official Director)	Member
S. Ravi (Part-time Non-official Director)	Member
Director (Finance)	Member
Director (HR)	Member

Company Secretary of the company acts as the Secretary to the Committee.

iv. Meetings and Attendance

No meeting of the Remuneration Committee took place during the year.

v. Details of remuneration of Functional Directors during the year 2013-14 are given below:-

(in ₹)

SI. No.	Name of the Director S/Shri	Salary	Benefits	Performance Linked Incentives	Total	Service Contract/ Notice Period Severance Fee
1.	B. Prasada Rao	25,84,032	8,53,864	9,15,131	43,53,026	
2.	Atul Saraya (upto 30.11.2013)	39,99,968	14,16,653	6,28,029	60,44,650	
3.	O.P. Bhutani (upto 31.05.2013)	20,82,275	10,79,204	6,23,782	37,85,261	
4.	M.K. Dube (upto 31.05.2013)	34,73,073	12,15,060	6,55,474	53,43,607	
5.	P. K. Bajpai	24,58,684	5,47,297	6,14,375	36,20,356	Liable to retire by rotation
6.	R. Krishnan	24,26,354	7,02,000	6,02,251	37,30,605	Liable to retire by rotation
7.	W.V.K. Krishna Shankar (w.e.f. 01.08.2013)	14,83,040	5,96,608	3,19,481	23,99,129	Liable to retire by rotation
8.	Atul Sobti (w.e.f. 01.12.2013)	8,46,466	1,10,686	1,71,070	11,28,222	Liable to retire by rotation

vi. Details of payments made to Independent Directors during the year 2013-14 are given below:-

(in ₹)

Name of the Independent Directors	Sittin	Total	
S/Shri	Board Meeting		
S. Ravi	1,80,000	3,60,000	5,40,000
Trimbakdas S. Zanwar	1,20,000	1,65,000	2,85,000
Smt. Chandra lyengar	20,000	-	20,000



Independent Directors were entitled for sitting fee @ ₹ 20,000/- per Board Meeting and ₹ 15,000/- per Board Level Committee Meeting attended by them.

vii. Equity Shares held by Directors

Except as stated hereunder, none of the Directors, hold any Equity Shares in BHEL (as on 31st March, 2014):

Name of the Director S/Shri	No. of shares held
B. Prasada Rao	2000
W. V. K. Krishna Shankar	100
Atul Sobti	1500

The company has not issued any stock options during the year 2013-14.

6.5 Shareholders' Committees

6.5.1 Share Transfer Committee

The Board constituted a Share Transfer Committee on 25th March, 1992, which comprises Chairman & Managing Director, Director (Power) and Director (Finance) of the company.

The Share Transfer Committee considers and approves all share-related issues, transfer/ transmission of shares, issue of duplicate share certificate etc., in physical mode besides taking note of beneficiary position under demat mode.

Meetings during 2013-14

The Share Transfer Committee met 36 times during the year. The minutes of the Share Transfer Committee meetings are periodically placed before the Board of Directors.

6.5.2 Shareholders'/Investors' Grievance Committee (SIGC)

i. Terms of Reference

The Shareholders'/Investors' Grievance Committee was set up on 26th July, 2001 specifically to look into matters related to redressal of shareholders and investors complaints like transfer of shares, non-receipt of Balance Sheet, dividend and any other relevant grievance that the shareholder may have.

ii. Composition of Committee, name of members & Chairman

The Shareholders'/Investors' Grievance Committee was last reconstituted on 23rd May, 2013.The Committee comprises of the following directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
S. Ravi (Part-time Non-official Director) (Upto 09.03.2014)	Chairman	4	4
Director (Finance)	Member	4	4
Director (HR)	Member	4	4

Company Secretary shall act as its Secretary.

Company Secretary is the Compliance Officer in terms of Clause 47 of the Listing Agreement with the Stock Exchanges.

iii. Meetings and Attendance

The Committee met four times on 12th June, 2013, 20th September, 2013, 6th November, 2013 and 5th February, 2014 during the year under review. The details of the attendance of each member is given in the above table.

Detail of shareholders' complaints

As reported by Karvy Computershare Private Limited (RTA) to SEBI, 1086 complaints were received from the shareholders during the year under review and all complaints were redressed upto 31st March, 2014. No complaint was pending at the end of the period under report.

6.6 HR Committee

i. Terms of Reference

The Board constituted the HR Committee on 31st May, 2006 specifically to look into the following matters:

- Review of present policies with respect to promotion and reward / incentive to the Executives.
- Suggest both short term and long term changes in the policies to prepare BHEL for the changed / emerging business environment.



ii. Composition of Committee, name of members & Chairman

The HR Committee was last reconstituted on 16th July, 2012. The Committee comprises the following directors:

Name of the Director S/Shri	Position
Trimbakdas S. Zanwar (Part-time Non-official Director) (upto 11.11.2013)	Chairman
Ambuj Sharma (Part-time Official Director)	Member
S. Ravi (Part-time Non-official Director) (upto 09.03.2014)	Member
Director (Finance)	Member
Director (HR)	Member

Company Secretary shall act as its Secretary.

iii. Meetings and Attendance

No meeting of the HR Committee took place during the year.

6.7 Committee on Mergers & Acquisitions

i. Terms of Reference

The Board constituted the Committee on Mergers & Acquisitions on 25th January, 2007 specifically to look into the following matters:

- a. To examine the feasibility of the proposals relating to mergers, acquisitions and takeover of entities in terms of powers granted by Government of India to Navratna PSUs and make necessary recommendations to the Board.
- To examine the synergy and strategic fit between BHEL and the M&A opportunity and decide on recommendations at various stages of Due Diligence.
- To take a view on the valuation of the target, bidding strategies, term sheets, mode of financing and finalise recommendations on crucial issues pertaining to definitive

- documents like Shareholders' and Share Purchase Agreements, etc.
- d. To provide guidance on post M&A issues of management restructuring, relationship with parent company and other related issues.

ii. Composition of Committee, name of members & Chairman

The M&A Committee was last reconstituted on 26th March, 2011. The Board of Directors in its meeting held on 02.01.2014, dissolved the Mergers & Acquisition Committee, suggesting that in case of any specific requirement, the Committee may be reconstituted by the Board. Upto 02.01.2014, the Committee comprised the following directors:

Name of the Director S/Shri	Position
Ambuj Sharma (Part-time Official Director)	Chairman
S. Ravi (Part-time Non-official Director)	Member
Director (Power)	Member
Director (E, R&D)	Member
Director (IS&P)	Member
Director (Finance)	Member

Head of M&A Dept. shall be the permanent invitee and the Company Secretary shall provide secretarial support to the Committee.

iii. Meetings and Attendance

No meeting of the Mergers & Acquisitions Committee took place upto 02.01.2014.

6.8 Project Review Committee

i. Terms of Reference

The Board constituted the Project Review Committee on 25th January, 2007 with the following terms of reference:

- a. The Project Review Committee shall have at least four meetings in a year.
- b. The quorum for the meetings shall be three members.
- c. The Project Review Committee shall



review the status of projects costing ₹ 100 Crore and above, orders won/lost and major customer complaints in respect of Power & Industry Sectors and International Operations Division, on quarterly basis.

- d. The Project Review Committee may invite such of the executives, as it considers appropriate to be present at the meetings of the Committee.
- e. The Project Review Committee shall make necessary recommendations, wherever required, to the Board relating to projects in respect of Power Sector, Industry Sector and International Operations and also on related issues.

ii. Composition of Committee, name of members & Chairman

The Committee was last reconstituted on 6th December, 2012. The Board of Directors in its meeting held on 02.01.2014 reviewed various Committees and in view of the current business scenario & rationale for the Committees decided to dissolve the Project Review Committee. Upto 02.01.2014, the Committee comprised the following directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
S. Ravi (Part-time Non-official Director)	Chairman	3	3
Ambuj Sharma (Part-time Official Director)	Member	3	3
Director (Power)	Member	3	3
Director (IS&P)	Member	3	3

Head of International Operations of BHEL shall be invited as and when required. Company Secretary of the company shall act as Secretary to the Committee.

iii. Meetings and Attendance

The Committee had met three times on 23rd May, 2013, 20th September, 2013 and 18th October, 2013. The details of the attendance of each member is given in the above table.

6.9 Remuneration Committee on Performance Related Pay

i. Terms of Reference

In line with the DPE guidelines issued vide Office Memorandum no. 2 (70)/08-DPE (WC) dated 26.11.2008, Board constituted the Remuneration Committee on Performance Related Pay on 23rd April, 2009 to decide the bonus/ variable pay pool and policy for its distribution across the executives and non-unionised supervisors.

ii. Composition of Committee, name of members & Chairman

The Committee was last reconstituted on 6th December, 2012. The Committee comprised the following directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
S. Ravi (Part-time Non-official Director)	Chairman	1	1
Ambuj Sharma (Part-time Official Director)	Member	1	1
Trimbakdas S. Zanwar (Part-time Non-official Director) (upto 11.11.2013)	Member	1	1

Director (HR) will be the permanent invitee.

iii. Meetings and Attendance

The Committee had met once on 8th October, 2013. The details of the attendance of each member is given in the above table.

The Board of Directors in its meeting held on 02.01.2014 decided that the roles of the aforementioned Remuneration Committee on Performance Related Pay and Remuneration Committee (Point No. 6.4 of the Corporate Governance Report), constituted pursuant to the Listing Agreement, be taken care of by a single "Remuneration Committee" with the following terms of reference:-

 a. Oversight of the company's policy on specific remuneration packages, perquisites for Whole-time Directors

- including pension rights and any compensation payment, which are not fixed by the President of India.
- b. Approve certain perquisites for Wholetime Directors which are within the powers of Board. Review of the elements of remuneration package of individual directors summarized under major groups, such as incentives/benefits, bonus, stock options, pension etc.
- c. Finalisation of policies on perks and benefits and other related matters which are not fixed by the President of India but within the powers of Board.
- d. Approval of fixed component and performance linked incentives based on the performance criteria.
- e. Finalisation of the criteria of making payments to Non-Executive Directors.
- f. Recommendation of fees/compensation/ stock options, if any, to be paid/granted, to non-executive directors, including independent directors, to the Board of Directors/ Shareholders.
- g. To decide the bonus/ variable pay pool and policy for its distribution across the executives and non-unionised supervisors.
- h. Carrying out any other function related to the terms of reference of the Remuneration Committee.

No meeting of the new Remuneration Committee has taken place thereafter.

6.10 Board Level Committee for Corporate Social Responsibility & Sustainable Development

i. Terms of Reference

In line with DPE Guidelines on Corporate Social Responsibility for CPSEs, the Board constituted the Board Level Apex Committee for CSR on 25th November, 2010 for proper & periodic monitoring of CSR activities. Further, in terms of DPE Guidelines on Sustainable Development, the Board of Directors mandated that the Committee will also oversee Sustainable Development activities. Accordingly, the said Committee was re-designated as "Board Level

Committee for Corporate Social Responsibility (CSR) & Sustainable Development (SD)".

ii. Composition of Committee, name of members & Chairman

The Committee was last reconstituted on 11th December, 2013. The Committee comprises the following directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
S. Ravi (Part-time Non-official Director)	Chairman (w.e.f. 11.12.2013)	3	3
(upto 09.03.2014)	Member	3	3
Trimbakdas S. Zanwar (Part-time Non- official Director) (upto11.11.2013)	Chairman	3	3
Ambuj Sharma (Part-time Official Director)	Member	6	6
Director (Finance)	Member	6	6
Director (HR)	Member	6	6

Head (CSR)-ED/GM In-charge, Corporate Office would be Permanent Invitee and the Company Secretary shall continue to act as Secretary of the Committee.

iii. Meetings and Attendance

The Committee met six times during the year on 23rd May, 2013, 20th September, 2013, 6th November, 2013, 2nd January, 2014, 20th February, 2014 and 3rd March, 2014. The details of the attendance of each member is given in the above table.

6.11 Committee of Independent Directors

i. Terms of Reference

In line with DPE OM dated 28.12.2012 on Model Role & Responsibilities of Non-Official Directors for CPSEs, a Committee of Independent Directors has been constituted by the Board.



ii. Composition of Committee, name of Members & Chairman

The Committee comprises the following Independent Directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
S. Ravi (Part-time Non- official Director) (upto 09.03.2014)	Chairman & Lead Independent Director	1	1
Trimbakdas S. Zanwar (Part-time Non- official Director) (upto11.11.2013)	Member	1	1

Company Secretary shall provide secretarial support to the Committee.

iii. Meetings and Attendance

The Committee met once during the year on 20th September, 2013. The details of the attendance of each member is given in the above table.

6.12 Board Level Nomination Committee

i. Terms of Reference

The Board constituted the Nomination Committee on 22nd March, 2013 to recommend to the Board nomination of BHEL officials in the Boards of its subsidiaries and other government organisations which are required to be approved by the Board of BHEL before further submission to DHI.

ii. Composition of Committee, name of Members & Chairman

The Committee comprises the following Directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
S. Ravi (Part-time Non- official Director) (upto 09.03.2014)	Chairman	1	1
Director (E,R&D)	Member	-	-
Director (Finance)	Member	1	1
Director (HR)	Member	1	1

Head/ HR shall be the permanent invitee. Company Secretary of the company shall act as Secretary to the Committee.

iii. Meetings and Attendance

The Committee met once during the year on 15th February, 2014. The details of the attendance of each member is given in the above table.

6.13 General Meetings

i. Location and time of last three AGMs:

Year	Location	Date	Time
FY 2010-11 (47 th AGM)	Talkatora Indoor Stadium, Talkatora Garden, New Delhi-110001	20 th September, 2011	10.00 a.m.
FY 2011- 12 (48 th AGM)	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110 001	19 th September, 2012	10.00 a.m.
FY 2012- 13 (EGM)	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110 001	27 th June, 2013	11.00 a.m.
FY 2012- 13 (49 th AGM)	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110 001	20 th September, 2013	10.00 a.m.

ii. Details of Special resolutions passed in previous three AGMs and EGM

A Special Resolution in respect of Amendment in the Articles of Association (for sub-division of equity shares of ₹ 10/- each into 5 equity shares of ₹ 2/- each) was passed in the 47th Annual General Meeting held on 20.09.2011.

Special Resolutions in respect of approval of Modified Draft Rehabilitation Scheme (MDRS) incorporating amalgamation between Bharat Heavy Plate and Vessels Limited (BHPVL), the wholly owned subsidiary of Bharat Heavy Electricals Limited (BHEL) and BHEL were passed in the Extraordinary General Meeting held on 27th June, 2013. Consequently, Board for Industrial and Financial Reconstruction (BIFR) has sanctioned the MDRS envisaging merger of Bharat Heavy Plate and Vessels Limited (BHPVL) with BHEL on 29.08.2013. The BHPVL stands merged with BHEL from 30.08.2013 (Effective date).

iii. Postal Ballot

No special resolutions were passed through postal ballot in the previous year. No such resolutions are proposed through postal ballot during the year.

6.14 Disclosures

Disclosures on materially significant related party transactions that may have potential conflict with the interests of Company at large

The company has not entered into any materially significant related party transactions that may have potential conflict with the interests of the company at large. Nonetheless, transactions with related parties have been disclosed in Point No. 18 of Note 31-Other Notes on Financial Statement in the Annual Report.

ii. Non-compliances / penalties & strictures imposed on the company related to capital markets during the last three years

No such non-compliance has occurred nor any penalty or stricture been imposed on the company in the last three years. The company has set the highest standards with respect to observance and conformity with laws and all compliances are made before the deadlines stipulated by statute.

iii. Whistle Blower policy

Whistle Blower Policy of the company is under the process of formulation.

iv. Details of compliance with the requirements of DPE Guidelines on Corporate Governance, compliance with mandatory requirements and adoption of the non-mandatory requirements of Clause 49

All mandatory requirements of the DPE Guidelines on Corporate Governance for CPSEs & Clause 49 of the Listing Agreement have also been duly complied with by the company except those relating to required number of Independent Directors in Board and Committees.

In addition to compliance with mandatory requirements, BHEL has also been following some of the non-mandatory requirements as given in Clause 49. The company has already set up a Remuneration Committee to

approve specific aspects of the remuneration of directors. The company is already in the regime of unqualified financial statements.

In line with the DPE guidelines, listing agreement and with the objective of providing the Directors a) insight into guidelines and procedures for successful discharge of their statutory duties, b) better understanding of the business environment to envision the future and develop strategies and c) need based training to meet the Specific requirements of the board members, BHEL Board has approved a policy for Training of Directors. It covers both general and specific trainings more tuned towards company specific areas.

Other non-mandatory requirements would be gradually complied with on need basis by the company.

No expenditure has been debited in the books of accounts which is not for the purpose of business and no expenses incurred and accounted which are personal in nature and incurred for the Board of Directors and Top Management.

v. Presidential Directives

No Presidential Directive was received during the last three years i.e. 2011-12, 2012-13 & 2013-14.

vi. Risk Management

In pursuance of Clause 49(IV) (C) of the Listing Agreement and Clause 7.3 of the DPE Guidelines on Corporate Governance for CPSEs, BHEL has in place a Board approved Risk Management Charter & Policy (RMCP), laying down procedures to inform Board members about the risk assessment and minimization. The RMCP provides the overall framework for Risk Management (RM) process of the company. The RM process includes Risk identification, Risk assessment, Risk evaluation, Risk categorisation, Risk mitigation and escalation / reporting of the risks as per defined process and periodicity and RM governance structure. RMCP also includes mechanism for review of risks and its periodicity.

An apex committee, namely Risk Management Steering Committee (RMSC), having Executive



Directors/ Function Heads from Corporate Functions and Business Sectors as members is responsible for adopting and implementing the RM Framework across the organisation. It is entrusted with the responsibility of taking decisions to manage the risks. Chief Risk Officer (CRO) is the convener of RMSC and is responsible for reporting to Board of Directors based on deliberations in RMSC.

In addition, 35 Risk Management Committees (RMC) have been formed at the Business Sectors/ Regions/ Plants/ Corporate Functions level, in the RM Organisation structure comprising key decision makers within the respective areas. RMC is responsible for adopting and implementing the RM Framework at the respective Units/ Regions and Plants.

During 2013-14, top ten risks for the company were identified and the status of risk management was reviewed twice by BLAC and Board.

vii. Auditor's certificate on Corporate Governance Auditor's certificate on Corporate Governance is enclosed.

6.15 Communication of financial and other information

As required under Clause 41, company issues a notice of at least 7 days in advance to the stock exchanges of the Board Meetings in which the unaudited / audited financial results are due for consideration. Further, the said results are intimated immediately after they are taken on record / approved to the Stock Exchanges. These financial results are published within 48 hours of conclusion of the Board or Committee meeting at which the financial results were approved in at least in one English daily newspaper circulating in the whole or substantially the whole of India and in one daily newspaper published in the language of the region, where the registered office of the company is situated and also uploaded on the company's website www.bhel.com. The company is also filing/ submitting information required under Listing Agreement on the new systems viz NSE Electronic Application Processing System or NEAPS and BSE Listing Center developed by NSE and BSE respectively.

Official news releases including important events like receipt of major orders, transcripts of investors' conferences and information to shareholders viz. shareholding pattern, details of unpaid dividend etc. are also displayed on the company's website.

In compliance with Clause 54 of the Listing Agreement, the company's website also contains additional updated information like shareholding pattern, compliance with corporate governance, contact information of the designated officials of the company responsible for assisting and handling investor grievances etc.

In line with Ministry of Corporate Affairs (MCA) Guidelines, BHEL has also uploaded on its website information regarding unpaid/unclaimed dividend as on the date of last AGM containing details of persons entitled to receive the dividend, amount due & due date for transfer into Investor Education & Protection Fund (IEPF). The procedure for claiming unpaid/unclaimed dividend by shareholders (in case same has not been transferred to IEPF) has also been uploaded.

6.16 General Shareholder Information

i. AGM

Date	Time	Venue
19 th Sept., 2014	10.00 AM	FICCI AUDITORIUM, Barakhamba Road, (Tansen Marg), New Delhi-110 001
		11011 201111 110 001

ii. Financial year : 1st April, 2013 to

31st March, 2014

iii. Dates of Book : 10th September, 2014 Closure to 19th September, 2014

(Both days inclusive)

iv. Dividend payment date : On or before

18th October, 2014

v. Dividend History:

BHEL has been following "Stability cum Growth" policy with regard to dividend payment. The details of dividend paid by BHEL during the last ten years and the amount of unclaimed dividend as on 31.03.2014 are



summarized as under:

Year	Rate of Dividend	No. of shares (₹ in Crore)	Total Amount of Dividend Paid (₹ in Crore)	Date on which Dividend was declared	Unclaimed Dividend as on 31.03.2014 (₹)
2004-2005 (Interim)	35%	24.476	85.67	10.12.2004*	Already transferred to Investor Education & Protection Fund
2004-2005 (Final)	45%	24.476	110.14	29.09.2005	Already transferred to Investor Education & Protection Fund
2005-2006 (Interim)	40%	24.476	97.90	07.12.2005*	Already transferred to Investor Education & Protection Fund
2005-2006 (Spl. Interim)	85%	24.476	208.05	07.03.2006*	Already transferred to Investor Education & Protection Fund
2005-2006 (Final)	20%	24.476	48.95	15.09.2006	Already transferred to Investor Education & Protection Fund
2006-2007 (Interim)	125%	24.476	305.95	25.01.2007*	Already transferred to Investor Education & Protection Fund
2006-2007 (Final)	60%	48.952	293.71	17.09.2007	11,48,646#
2007-2008 (Interim)	90%	48.952	440.57	25.01.2008*	19,11,717\$
2007-2008 (Final)	62.50%	48.952	305.95	17.09.2008	18,11,986
2008-2009 (Interim)	90%	48.952	440.57	29.01.2009*	26,57,484
2008-2009 (Final)	80%	48.952	391.62	17.09.2009	17,43,680
2009-2010 (Interim)	110%	48.952	538.47	21.01.2010*	29,10,380
2009-2010 (Final)	123%	48.952	602.11	17.09.2010	27,23,107
2010-2011(Interim)	132.50%	48.952	648.62	15.03.2011*	24,50,860
2010-2011 (Final)	179%	48.952	876.24	20.09.2011	32,72,844
2011-2012 (Interim)	136%	244.76 @	665.75	02.03.2012*	29,44,586
2011-2012 (Final)	184%	244.76 @	900.72	19.09.2012	49,36,926
2012-2013 (Interim)	106%	244.76 @	518.89	01.02.2013*	33,77,139
2012-2013 (Final)	164.5%	244.76 @	805.26	20.09.2013	44,25,248
2013-2014 (Interim)	65.5%	244.76 @	320.64	05.02.2014*	24,33,052

^{*} Date of meeting of Board of Directors in which interim dividend was declared

[#] proposed to be transferred to Investor Education and Protection Fund (IEPF) on 23.10.2014

^{\$} proposed to be transferred to Investor Education and Protection Fund (IEPF) on 01.03.2015 @Post-split number of shares of face value of ₹ 2/-

In case a shareholder has not been able to receive dividend for any of the last seven years and which has not yet been transferred to the Investor Education & Protection Fund (IEPF), he |she can claim this unpaid dividend by following the procedure uploaded on the company's website (www.bhel.com)



vi (a) Listing on Stock Exchanges and Stock Code

BHEL's shares are listed on the following Stock Exchanges for which listing fees for 2013-14 has been paid:

Name of the Stock Exchange	Stock Code
1. Bombay Stock Exchange Limited	500103
Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai - 400 001	
2. National Stock Exchange of India Limited	BHEL
Exchange Plaza, Plot no. C/1, Block - G, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051	

(b) Payment of Annual Custodian Fee to Depositories

The Annual Custodian fee has been paid to NSDL and CDSL for the financial year 2013-14.

vii. Delisting of Equity Shares

BHEL filed necessary application with Calcutta Stock Exchange Association Limited (CSE) for delisting. Final approval from CSE is still awaited, however, "BHEL" Scrip has not been appearing in the list of securities listed on the CSE.

viii. Market Price Data & performance in comparison to broad-based indices such as S&P BSE Sensex, S&P BSE PSU Index and CNX Nifty are as under:-

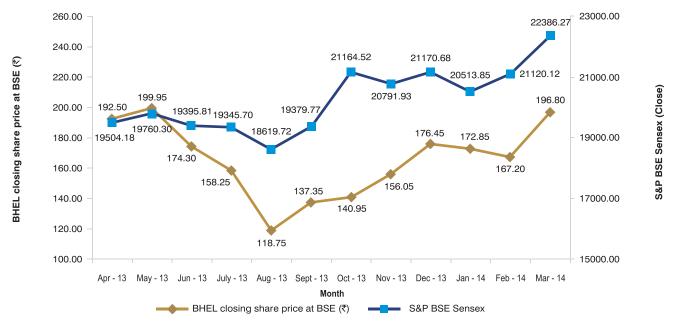
BHEL Vs. S&P BSE Sensex

High, Low and Closing market price of BHEL shares on the **Bombay Stock Exchange Ltd. (BSE)** visà-vis **S&P BSE Sensex**, No. of shares traded and Turnover during each month in the last financial year ended March 31, 2014 are summarized as under:

Month	BHEL share price at BSE (₹)			S&P BSE Sensex			No. of shares	Turnover (₹ in Lakh)
	High	Low	Close	High	Low	Close	traded	
Apr-13	194.50	176.00	192.50	19,622.68	18,144.22	19,504.18	84,36,522	15,488.45
May-13	207.90	187.60	199.95	20,443.62	19,451.26	19,760.30	94,27,068	18,681.46
June-13	201.70	162.10	174.30	19,860.19	18,467.16	19,395.81	69,72,795	12,492.09
July-13	189.90	148.35	158.25	20,351.06	19,126.82	19,345.70	1,15,14,699	19,859.96
Aug-13	160.65	100.35	118.75	19,569.20	17,448.71	18,619.72	3,46,14,629	39,960.31
Sep-13	152.55	118.50	137.35	20,739.69	18,166.17	19,379.77	3,05,91,143	41,697.47
Oct-13	151.90	131.30	140.95	21,205.44	19,264.72	21,164.52	1,51,32,080	21,683.64
Nov-13	158.35	131.05	156.05	21,321.53	20,137.67	20,791.93	1,73,48,646	24,782.10
Dec-13	181.20	153.00	176.45	21,483.74	20,568.70	21,170.68	1,51,33,100	25,096.74
Jan-14	177.90	160.15	172.85	21,409.66	20,343.78	20,513.85	1,95,90,231	33,021.34
Feb-14	173.35	145.75	167.20	21,140.51	19,963.12	21,120.12	86,57,972	13,606.01
Mar-14	201.95	161.40	196.80	22,467.21	20,920.98	22,386.27	12,44,87,950	2,08,186.74

Source: www.bseindia.com





BHEL Vs. S&P BSE PSU Index

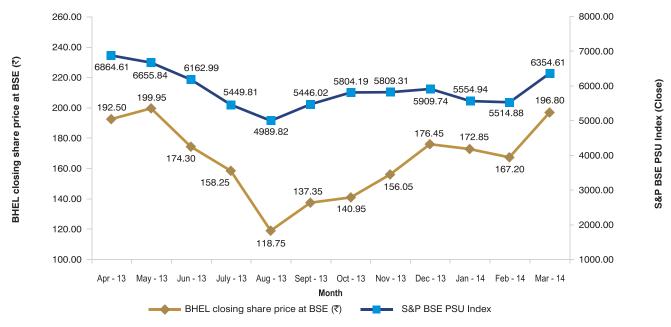
High, Low and Closing market price of BHEL shares on the Bombay Stock Exchange Limited (BSE) vis-à-vis S&P BSE PSU Index, during each month in the last financial year ended March 31, 2014 are summarized as under:

Month	BHEL s	hare price at E	BSE (₹)	S&	P BSE PSU Inc	lex
	High	Low	Close	High	Low	Close
Apr-13	194.50	176.00	192.50	6,924.55	6,339.32	6,864.61
May-13	207.90	187.60	199.95	7,078.13	6,639.68	6,655.84
June-13	201.70	162.10	174.30	6,675.88	5,888.45	6,162.99
July-13	189.90	148.35	158.25	6,277.32	5,234.19	5,449.81
Aug-13	160.65	100.35	118.75	5,533.55	4,774.97	4,989.82
Sep-13	152.55	118.50	137.35	5,823.82	4,938.86	5,446.02
Oct-13	151.90	131.30	140.95	5,839.55	5,392.22	5,804.19
Nov-13	158.35	131.05	156.05	5,970.39	5,548.07	5,809.31
Dec-13	181.20	153.00	176.45	6,106.47	5,626.68	5,909.74
Jan-14	177.90	160.15	172.85	5,976.49	5,472.38	5,554.94
Feb-14	173.35	145.75	167.20	5,674.05	5,405.32	5,514.88
Mar-14	201.95	161.40	196.80	6,475.58	5,472.64	6,354.61

Source: www.bseindia.com



Performance of BHEL Closing Share Price at BSE ($\stackrel{?}{\sim}$) vs. S&P BSE PSU Index (Close) during 2013-14

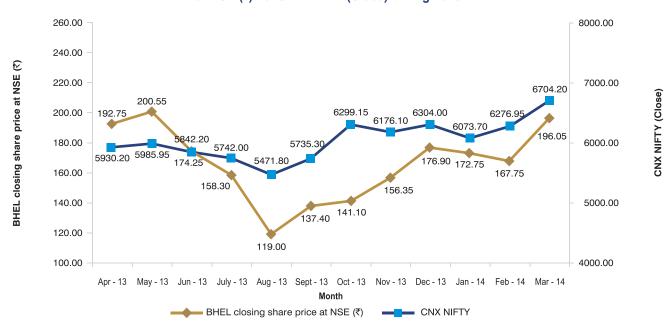


BHEL Vs. CNX Nifty

High, Low and Closing market price of BHEL shares on the **National Stock Exchange of India Limited (NSE)** vis-à-vis **CNX Nifty,** No. of shares traded and Turnover, during each month in the last financial year ended March 31, 2014 are summarized as under:

Month	BHEL sha	are price a	t NSE (₹)	CNX NIFTY			No. of shares	Turnover	
	High	Low	Close	High	Low	Close	traded	(₹ in Lakh)	
Apr-13	194.80	175.50	192.75	5962.30	5477.20	5930.20	5,96,23,154	1,09,737.83	
May-13	207.90	187.80	200.55	6229.45	5910.95	5985.95	6,80,58,291	1,34,931.61	
June-13	201.85	162.05	174.25	6011.00	5566.25	5842.20	5,07,79,073	90,085.82	
July-13	190.55	148.25	158.30	6093.35	5675.75	5742.00	9,06,00,554	1,56,525.15	
Aug-13	160.65	100.15	119.00	5808.50	5118.85	5471.80	22,78,79,245	2,62,544.00	
Sep-13	152.90	118.40	137.40	6142.50	5318.90	5735.30	21,79,42,161	2,98,383.84	
Oct-13	151.95	131.15	141.10	6309.05	5700.95	6299.15	11,22,81,954	1,60,875.10	
Nov-13	158.65	131.00	156.35	6342.95	5972.45	6176.10	12,24,81,871	1,74,882.71	
Dec-13	181.20	152.65	176.90	6415.25	6129.95	6304.00	11,75,25,199	1,95,070.73	
Jan-14	177.80	160.45	172.75	6358.30	6027.25	6073.70	7,34,67,878	1,23,336.70	
Feb-14	173.80	145.55	167.75	6282.70	5933.30	6276.95	8,38,36,737	1,31,520.94	
Mar-14	202.15	160.80	196.05	6730.05	6212.25	6704.20	8,64,63,727	1,61,338.45	

Source: www.nseindia.com



Performance of BHEL Closing Share Price at NSE (₹) vs. CNX NIFTY (Close) during 2013-14

ix. Policy on Insider Trading

BHEL endeavors to preserve the confidentiality of unpublished price sensitive information and to prevent misuse of such information. For this purpose and in line with the SEBI (Prohibition of Insider Trading) Regulations, 1992, the company had adopted "Code of Conduct for Prevention of Insider Trading" on 26th August, 2002.

Pursuant to SEBI (Prohibition of Insider Trading) (Amendment) Regulations, 2008 issued in November, 2008, BHEL had revised its "Code of Conduct for Prevention of Insider Trading". The revised BHEL "Code of Conduct for Prevention of Insider Trading, 2009" came in to force on 29th January, 2009. The objective of the Code is to prevent dealing in securities of the Company by an Insider (Directors and other Designated Employees) either on his own behalf or on behalf of any other person, on the basis of unpublished price sensitive information. The Board has appointed Director (Finance) as the Compliance Officer under the Code.

x. Registrar & Share Transfer Agent (RTA)

M/s Karvy Computershare Private Ltd.

Delhi Address	Hyderabad Address
UNIT: BHEL 105-108, Arunachal Building, 19, Barakhamba Road, New Delhi – 110 001	UNIT: BHEL 17-24, Vittal Rao Nagar, Madhapur, Hyderabad – 500 081
Tel.: 011-23324401 43681700/01/02/21 Fax: 011-23730743 Email: ksbldelhi@karvy.com	Tel.: 040-44655000 Fax: 040-44655024 Email: madhusudhan.ms@karvy.com einward.ris@karvy.com Website: www.karvycomputershare.com

RTA's performance in servicing shareholders has been satisfactory. All the investor grievances have been promptly attended to.



xi. Share Transfer System

The share transfer system with respect to physical shares consists of activities like receipt of shares along with transfer deed from transferees, its verification, preparation of Memorandum of Transfers, its approval by the Share Transfer Committee and dispatch of duly endorsed share certificates to the respective transferees within the prescribed time as per the Listing Agreement. In line with SEBI Circular dated July 5, 2012, share certificates are being issued within 15 days of date of lodgment for transfer, sub-division and consolidation. Share Transfer activities under physical segment like receipt/dispatch of documents, their verification and preparation of Memorandum of Transfers are being carried out by M/s. Karvy Computershare Private Limited.

xii. Distribution of Shareholding

(i) Distribution of shares according to size of holding as on 31st March 2014

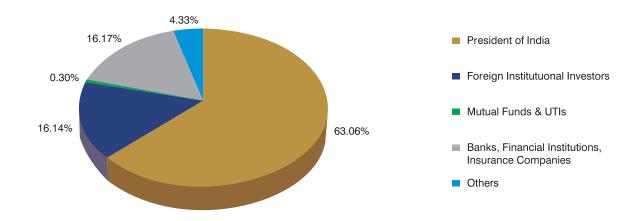
No. of equity share(s) held	No. of Shareholders	% of Shareholders	No. of Shares	% of Shareholding
1 - 500	3,78,599	93.23%	3,62,23,377	1.48%
501 - 1000	16,037	3.95%	1,26,24,188	0.51%
1001 - 2000	6,789	1.67%	1,02,97,839	0.42%
2001 - 3000	1,798	0.44%	45,70,386	0.19%
3001 - 4000	688	0.17%	24,45,415	0.10%
4001 - 5000	507	0.13%	24,08,858	0.10%
5001 - 10000	751	0.19%	54,20,409	0.22%
10001 & Above	904	0.22%	2,37,36,09,528	96.98%
Total	4,06,073	100%	2,44,76,00,000	100%

(ii) Shareholding Pattern as on 31st March 2014

Category		2014		2013
	Voting strength (%)	No. of shares held	Voting strength (%)	No. of shares held
Promoters Holding				
Indian Promoters-				
- President of India (POI)	63.06	1,54,34,52,000	67.72	1,65,75,52,000
Total Promoter holding	63.06	1,54,34,52,000	67.72	1,65,75,52,000
Non-promoters Holding				
Mutual Funds and UTI	0.30	73,47,397	1.00	2,44,71,627
Banks, Financial Institutions, Insurance Companies	16.17	39,58,44,109	11.41	27,93,51,514
Foreign Institutional Investors (including Qualified Foreign Investor)	16.14	39,50,53,774	14.76	36,11,22,791
Others				
Directors & Relatives	0.00	3,600	0.00	3,100

Bodies Corporate	0.96	2,35,91,005	1.50	3,66,67,462
Individuals	2.89	7,05,49,138	3.23	7,90,88,900
Foreign Nationals	0.00	1,090	0.00	1,090
NRIs	0.22	53,38,381	0.24	57,42,426
Trust	0.05	11,99,678	0.03	8,56,552
Clearing Members	0.21	52,19,828	0.11	27,42,538
Total Non-promoter holding	36.94	90,41,48,000	32.28	79,00,48,000
Grand Total	100.00	2,44,76,00,000	100.00	2,44,76,00,000

Shareholding Patterns as on 31st March, 2014



(iii) List of shareholders who are holding more than 1% of the shares of the Company as on 31st March 2014

Category & Shareholder's Name	2014			
	Voting strength (%)	No. of shares held		
Promoters				
1. President of India (POI)	63.06	1,54,34,52,000		
Non-promoters				
1. Life Insurance Corporation of India	9.92	24,28,90,195		
2. Lazard Asset Management LLC A/c Lazard Emerging Markets Portfolio	1.59	3,89,42,264		
3. Comgest SA A/c Magellan	1.23	3,00,00,000		
4. LIC of India Market plus 1 Growth Fund	1.02	2,49,39,880		

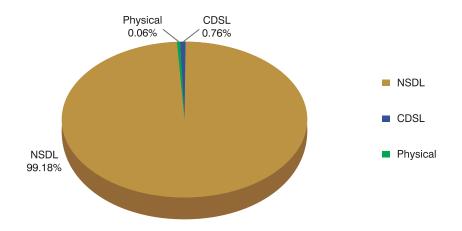
xiii. Dematerialisation of shares and liquidity

In accordance with the directions of the Securities & Exchange Board of India (SEBI), trading in BHEL shares by all categories of investors in demat form has been made compulsory w.e.f. 5th April, 1999. BHEL has executed agreement with both the depositories of the country i.e. National Securities Depository Limited (NSDL) and Central Depository Services (India) Limited (CDSL) for admission of its securities under demat mode. As on 31st March, 2014, 99.94% of the total equity share capital of BHEL



is being held in demat mode by the shareholders. Shareholding of Hon'ble President of India (being the Promoter of the company holding 63.06% of the paid-up share capital of the company) is also held in dematerialized form. The International Securities Identification Number (ISIN) allotted to the company is INE257A01026.

Shares held by depositories as on 31st March, 2014



xiv. Outstanding GDRs /ADRs / Warrants or any convertible instruments, conversion date and likely impact on equity:

Nil

xv. Plant locations

BHEL Manufacturing Units	Bangalore	 Electronics Division Electronics Systems Division Electro Porcelains Division
	Bhopal	4. Heavy Electrical Plant
	Goindwal	5. Industrial Valves Plant
	Haridwar	6. Heavy Electrical Equipment Plant
		7. Central Foundry Forge Plant
	Hyderabad	8. Heavy Power Equipment Plant
	Jagdishpur	9. Insulator Plant
		10. Centralised Stamping Unit
	Jhansi	11. Transformer Plant
	Rudrapur	12. Component Fabrication Plant
	Ranipet	13. Boiler Auxiliaries Plant
	Tiruchirappalli	14. High Pressure Boiler Plant15. Seamless Steel Tube Plant



Thirumayam 16. Power Plant Piping Unit

Vishakhapatnam 17. Heavy Plates & Vessels Plant

BHEL Repair Units Mumbai 1. Electrical Machine Repair Plant

Varanasi 2. Heavy Equipment Repair Plant

BHEL Subsidiary Kasaragod 1. BHEL Electrical Machines Ltd.

xvi. Address for correspondence

Shareholders can send their queries regarding Transfer of shares, Non-receipt of dividend, Revalidation of Dividend Warrants and any other correspondence relating to the shares of the Company either to:

KARVY COMPUTERSHARE PVT. LTD.

UNIT: BHEL

Delhi: 105-108, Arunachal Building Phone: 011-23324401

19, Barakhamba Road 43681700/01/02/21

<u>New Delhi – 110 001</u> Fax: 011-23730743

Email: ksbldelhi@karvy.com

Hyderabad: 17-24, Vittal Rao Nagar, Phone: 040-44655000

Madhapur, Fax: 040-44655024

<u>Hyderabad – 500 081</u> Email: <u>madhusudhan.ms@karvy.com</u>

einward.ris@karvy.com

OR

Shri I.P. Singh

Company Secretary

Phone: 011-26001046

Fax: 011-66337533

BHEL Email: <u>shareholderquery@bhel.in</u>

Regd. Office: BHEL House, Siri Fort,

New Delhi - 110 049

Place: New Delhi

Dated: July 14, 2014

Note: Shareholders holding shares in electronic mode should address all correspondence to their respective depository participants.

Declaration: Pursuant to Clause 49(I-D) of the Listing Agreement with Stock Exchanges, it is hereby declared that all Board members and Senior Management personnel have affirmed compliance with BHEL's "Code of Business Conduct and Ethics" for the financial year 2013-14.

For and on behalf of the Board of Directors of BHARAT HEAVY ELECTRICALS LTD

(B. Prasada Rao)

Chairman & Managing Director

117



CFO and CFO Certification

To,

The Board of Directors Bharat Heavy Electricals Ltd., New Delhi.

- (a) We have reviewed financial statements and the cash flow statement of Bharat Heavy Electricals Limited for the year ended 31st March, 2014 and that to the best of our knowledge and belief:
 - (i) These statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;
 - (ii) These statements together present a true and fair view of the company's affairs and are in compliance with existing accounting standards, applicable laws and regulations.
- (b) There are, to the best of our knowledge and belief, no transactions entered into by the Company during the year 2013-14 which are fraudulent, illegal or violative of the Company's Code of Conduct.
- (c) We accept responsibility for establishing and maintaining internal controls for financial reporting and that we have evaluated the effectiveness of the internal control systems of the company pertaining to financial reporting and we have disclosed to the auditors and the Audit Committee, deficiencies in the design or operation of such internal controls, if any, of which we are aware and the steps we have taken or propose to take to rectify these deficiencies.
- (d) We have indicated to the auditors and the Audit Committee.
 - (i) significant changes in internal control over financial reporting during the year 2013-14;
 - (ii) significant changes in accounting policies during the year 2013-14 and that the same have been disclosed in the notes to the financial statements; and
 - (iii) instances of significant fraud of which we have become aware and the involvement therein, if any, of the management or an employee having a significant role in the Company's internal control system over financial reporting.

W. A.

(P.K. Bajpai)
Director (Finance)

(B. Prasada Rao) Chairman & Managing Director

Place: New Delhi Date: May 29, 2014



Auditors' Certificate on Corporate Governance

The Members

Bharat Heavy Electricals Ltd.

We have examined the compliance of conditions of Corporate Governance by Bharat Heavy Electricals Ltd. for the year ended on 31.03.2014 as stipulated in Clause 49 of the Listing Agreement of the said company with the Stock Exchanges and the DPE Guidelines on Corporate Governance for Central Public Sector Enterprises (DPE Guidelines).

The compliance of conditions of Corporate Governance is the responsibility of the management. Our examination was limited to procedures and implementation thereof, adopted by the company for ensuring the compliance of the conditions of the Corporate Governance. It is neither an audit nor an expression of the opinion on the financial statements of the company.

In our opinion and to the best of our information and according to the explanations given to us, we certify that as on 31.03.2014, the company has complied with all the conditions of Corporate Governance as stipulated in the above mentioned Listing Agreement and DPE Guidelines except Clause 49(1)(A) of Listing Agreement (Clause 3.1.4 of the DPE Guidelines) relating to condition of not less than fifty percent of board of directors being independent.

We further state that such compliance is neither an assurance as to the future viability of the company nor the efficiency or effectiveness with which the management has conducted the affairs of the company.

For and on behalf of S.N. Dhawan & Company Chartered Accountants FRN 000050N

(S.K. Khattar)

Partner M. No. 84993

Place: New Delhi Dated: July 14, 2014



Annexure-VII

7.1 Conservation of Energy

Following related activities were completed.

- 1. Energy audit was conducted by specialised agency at HEEP-Haridwar unit.
- 2. Energy Conservation projects (32 Nos.) were implemented across the company, as suggested by the specialised agencies in the Energy Audit reports.
- 3. To spread awareness on energy conservation, National Energy Conservation Day was organised across the company.
- Officials (17 Nos.) from various units were trained for Energy Management System (ISO-50001).
- 5. More than 1400 Turbo Wind Ventilators were installed across the company.

7.2 Technology Absorption and Research & Development

Research & Development

- Specific areas in which R&D carried out by the Company
- 2. Benefits derived as a result of the above R&D

Given in the Directors' Report under R&D and Technological achievement (Annexure V)

3. Future plan of action:

The following are the major thrust areas for R&D and technology:

- More efficient conventional thermal power plants using supercritical parameters
- More efficient conventional thermal power plants using ultra-supercritical & Advanced Ultra supercritical (Ad-USC) parameters
- Advanced control and instrumentation platform for thermal power plant and industrial application
- Coal research for refinement of understanding Indian coal characteristics

- Integrated Gasification Combined Cycle (IGCC) power plants
- Green technologies for Reduction of emissions such as Underground Coal Gasification, clean development mechanism (CDM) projects etc.
- Atmospheric and Circulating Fluidized Bed Combustion (CFBC) boilers
- Large size hydro power plants with higher efficiency and longer life
- Advanced transmission systems like ±800kV HVDC, 765 kV, 1200 kV Transmission systems/ products
- Flexible AC Transmission systems, including devices such as Thyristor Controlled Series Compensation, phase shifting transformer, static synchronised compensator (STATCOM), controlled shunt reactor, etc.
- Gas insulated switchgear
- Efficient, reliable and cost effective transportation solutions including IGBT – based applications, three-phase AC drive system for diesel electric locos, MEMU
- Higher rating Industrial steam turbines
- Enhancing efficiency of the existing products
- Grid connected renewable energy systems such as solar PV, solar thermal, wind, etc.
- Simulators
- Advanced Fabrication Technologies
- Surface coatings including ceramic applications
- Residual life assessment studies
- Deployment of new technologies including deployment of Intelligent machines & robotics, for reducing cycle time and cost
- Specialised engineering software applications
- Knowledge Management
- Total Engineering solutions including EPC with focus on design automation/ KBE/ PLM
- Vibration and noise reduction
- Applications based on high temperature Superconductors

50 Years of Engineering Excellence

DIRECTORS' REPORT

- Desalination and Water Treatment Plants
- Flue Gas Desulphurisation (FGD) systems
- Nano-technology applications
- Hydrogen energy and fuel cells

4. Expenditure on R&D

Place: New Delhi

Dated: July 14, 2014

Total ₹ 1113.79 Crore
 Recurring ₹ 981.58 Crore
 Capital ₹ 132.21 Crore
 Expenditure as a percentage of total turnover 2.76 %

7.3 Technology Absorption and Adoption

Details of technology imported during the last 5 years:

Technology	Year of import	Absorption status
Large size forgings	2010	Technology absorption in progress.
Centrifugal Compressors	2010	Technology absorption in progress.
Flue Gas Desulphurisation (FGD) systems	2013	Technology absorption in progress.

7.4 Foreign Exchange Earnings and Outgoings

(₹ Crore)

	2013-14	2012-13
(i) Foreign Exchange Used	6758	6982
(ii) Foreign Exchange Earned	8778	12357

For and on behalf of the Board of Directors of BHARAT HEAVY ELECTRICALS LTD

(B. Prasada Rao)

Chairman & Managing Director



Annexure-VIII

Statement pursuant to Section 212 of the Companies Act, 1956 relating to Subsidiary Company

	Name of the Subsidiary Company	BHEL Electrical Machines Ltd.
1	Financial year of the Subsidiary ended on	31 st March, 2014
2	Date from which they became subsidiary	19 th January 2011
3	Share of the Subsidiary held by the Company as on 31st March 2014	
	a) Number & Face Value	5355000 Equity Shares of ₹ 10/- each fully paid up
	b) Extent of holding	51%
4	The Net aggregate amount of the subsidiary Company Profit/(Loss) so far as it concerns the member of the holding Company	(₹ in Crore)
	a) Not dealt with in the holding Company's Accounts	
	i) For the Financial Year ended March 31, 2014	(-) 0.54
	ii) Up to the previous financial years of the Subsidiary Company	(-) 0.47
	b) Dealt with in the holding Company's accounts	
	i) For the Financial Year Ended March 31, 2014	Nil
	ii) For the Previous financial year of the Subsidiary Company since they became the holding Company's Subsidiary	Nil

For and on behalf of the Board of Directors of **BHARAT HEAVY ELECTRICALS LTD**

Place: New Delhi (B. Prasada Rao) Dated: July 14, 2014 Chairman & Managing Director

Annexure-IX

Independent Auditors' Report

To the Members of Bharat Heavy Electricals Limited

Report on the Financial Statements

We have audited the accompanying financial statements of **Bharat Heavy Electricals Limited** ("the company"), which comprise the Balance Sheet as at March 31, 2014, and the Statement of Profit and Loss and Cash Flow Statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flows of the company in accordance with the Accounting Standards notified under the Companies Act, 1956 ("the Act") read with the General Circular 15/2013 dated 13th September 2013 of the Ministry of Corporate Affairs in respect of section 133 of the Companies Act, 2013. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures

in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- (a) in the case of the Balance Sheet, of the state of affairs of the company as at March 31, 2014;
- in the case of the Statement of Profit and Loss, of the profit for the year ended on that date; and
- (c) in the case of the Cash Flow Statement, of the cash flows for the year ended on that date.

Report on Other Legal and Regulatory Requirements

 As required by the Companies (Auditor's Report) Order, 2003 ("the Order") issued by the Central Government of India in terms of sub-section (4A) of section 227 of the Act, we give in the Annexure a statement on the matters



- specified in paragraphs 4 and 5 of the Order.
- 2. As required by section 227(3) of the Act, we report that:
 - we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
 - b. in our opinion proper books of account as required by law have been kept by the company so far as appears from our examination of those books and proper returns adequate for the purposes of our audit have been received from branches not visited by us.
 - bb. the report on the accounts of branch offices audited under section 228 by a person other than the company's auditor has been forwarded to us as required by clause (c) of sub-section (3) of section 228 and have been dealt with in preparing our report in the manner considered necessary by us;

- c. the Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement dealt with by this report are in agreement with the books of account and with the returns received from branches not visited by us.
- d. in our opinion, the Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement comply with the Accounting Standards notified under the Companies Act, 1956 read with the General Circular 15/2013 dated 13th September 2013 of the Ministry of Corporate Affairs in respect of section 133 of the Companies Act, 2013;
- e. In terms of Notification No. GSR 829(E) dated 21.10.2003 issued by the Department of Company Affairs, Government of India, the provisions of Section 274(1)(g) of the Companies Act, 1956 are not applicable to the Company.

For Wahi & Gupta Chartered Accountants FRN 002263N

have been for

(Y.K. Gupta) Partner M.No 016020 For S. N. Dhawan & Co. Chartered Accountants FRN 000050N

(S.K. Khattar)
Partner
M. No 084993

Date: May 29, 2014

Place: New Delhi



Annexure to Independent Auditors' Report

(Referred to in Paragraph 1 under the heading "Report on Other Legal and Regulatory Requirements" of our report of even date on the accounts of Bharat Heavy Electricals Limited for the year ended March 31, 2014)

- i) (a) The company has maintained proper records showing full particulars including quantitative details and situation of its fixed assets.
 - (b) According to the information and explanations given to us, physical verification of fixed assets is being conducted in a phased manner by the management under a programme designed to cover all the fixed assets over a period of three years, which, in our opinion, is reasonable having regard to the size of the Company and nature of its business and no material discrepancies were noticed on such verification to the extent verification was made during the year. In respect of 65 locomotives given to Indian Railways on lease instead of physical verification a certificate confirming physical possession of these locomotives has been obtained from Indian Railways as per the lease agreement.
 - (c) According to the information and explanations given to us, the company has not disposed off any substantial part of its fixed assets during the year.
- ii) (a) As explained to us physical verification of inventory has been conducted by the management under Perpetual Inventory Programme at regular intervals during the year except for stock of work in progress and finished goods in few units where these are verified at the year end with reference to the inspection reports and production reports of the Production Planning Department of such units. In regard to stocks lying with contractors/fabricators and other parties,

- confirmations were received in a few cases only. In our opinion the frequency of verification is reasonable.
- (b) In our opinion and according to the information and explanations given to us, the procedures of physical verification of inventories followed by the management are reasonable and adequate in relation to the size of the company and the nature of its business.
- (c) In our opinion and according to the information and explanations given to us, the company has maintained proper records of its inventories and discrepancies noticed on physical verification of inventories were not material with regard to the size and nature of operations of the company and have been properly dealt with in the books of account.
- (a) According to the information given to us, the company has not granted any loans, secured or unsecured to companies, firms and other parties covered in the register maintained under section 301 of the Companies Act, 1956. Therefore clauses (iii) (b) to (iii)(d) of Paragraph 4 of the Order are not applicable to the company.
 - (b) According to the information given to us, the company has not taken any loans, secured or unsecured, from companies, firms or other parties covered in the register maintained under Section 301 of the Companies Act, 1956. Therefore clauses (iii) (f) and (iii) (g) of Paragraph 4 of the Order are not applicable to the company.
- iv) In our opinion and according to the information and explanations given to us, there is an adequate internal control system commensurate with the size of the company and the nature of its business with regard to



purchase of inventory and fixed assets and for the sale of goods and services. Further on the basis of our examination of the books and records of the company and according to the information and explanations given to us, we have neither come across nor have been informed of any continuing failure to correct major weaknesses in the internal control systems.

- v) According to the information and explanations given to us, we are of the opinion that during the year there are no contracts and arrangements that need to be entered in the register maintained under Section 301 of the Companies Act, 1956. Therefore clause (v) (b) of Paragraph 4 of the Order is not applicable to the company.
- vi) According to the information and explanations given to us, the company has not accepted any deposits from public during the year within the meaning of sections 58A and 58AA or any other relevant provisions of the Companies Act, 1956 and the Companies (Acceptance of Deposits) Rules 1975.
- vii) According to the information and explanations given to us, the company has an internal audit department responsible for carrying out internal audit of various sections at head office, regional offices and units at periodical intervals as per the approved audit plan. In our opinion, the internal audit system of the company is generally commensurate with size and nature of its business.
- viii) We have broadly reviewed the books of account and records maintained by the company pursuant to the Companies (Cost Accounting Records) Rules 2011 prescribed by the Central Government under section 209(1)(d) of the Companies Act, 1956 and are of the opinion that prima facie the prescribed accounts and records have been made and maintained. We have, however, not made a detailed examination of the cost records with a view to determine whether they are accurate & complete.

- ix) (a) According to the information and explanations given to us, in our opinion, the company is generally regular in depositing with appropriate authorities undisputed statutory dues including Provident Fund, Investor Education and Protection Fund, Employees State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, Excise Duty, Customs Duty, Cess and any other material statutory dues as applicable to it.
 - (b) According to the information explanations given to us, no undisputed amounts payable in respect of Provident Fund, Investor Education and Protection Fund, Employees State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, Excise Duty, Customs Duty, Cess and other statutory dues outstanding as at March 31, 2014 for a period of more than six months from the date they become payable except in the case of Libya project, where as per the agreement, the income tax liability has to be discharged by the customer directly to the Libyan Government. The amount outstanding for more than six months is ₹ 37.09 Crore pertaining to financial year 2008-09 & 2009-10.
 - (c) According to the information and explanations given to us, the particulars of Sales Tax, Income Tax, Excise Duty, Service Tax, Custom Duty and Cess which have not been deposited on account of dispute are as under:

SI. No.	Name of the Statute	Nature of the Dues	Pending Amount	Amount paid under protest	Forum where dispute is pending
1	Central Sales Tax Act, Work Contract Tax Act, Lease Tax,	Sales Tax, Entry Tax & Work	101.57	37.67	Assessing Officer
		Contract Tax	192.49	17.84	Dy. Commissioner / Jt. Commissioner/ Commissioner (Appeals)
			247.42	55.07	Appellate Tribunal
			444.30	59.66	High Court
			3.43	3.38	Supreme Court
			377.11	21.75	Various Appellate Authorities
2	Income Tax Act, 1961	Income Tax	0.30	-	Assessing Officer
			0.32	-	High Court
			0.28	-	Commissioner(Appeals)
3	Central Excise Act, 1944	Excise Duty	52.25	3.29	Commissioner (Appeals)
			332.29	10.09	Appellate Tribunal
			43.25	4.37	High Court
4	Service Tax under the Finance Act, 1994	Service Tax	55.35	-	Commissioner (Appeals)
			224.74	0.61	Appellate Tribunal
			11.62	-	High Court
5	Customs Act,1962	Custom duty	0.21	0.06	Commissioner (Appeals)
			2.93	2.83	Various Appellate Authorities

- x) The company has no accumulated losses as at March 31, 2014 and has not incurred any cash losses during the financial year covered by our audit and the immediately preceding financial year.
- xi) According to the records of the company examined by us and the information and explanations given to us, the company has

not defaulted in repayment of dues to financial institutions, banks or debenture holders. However, the company is yet to redeem the bonds (including interest) amounting to ₹ 6.52 Crore issued by the erstwhile subsidiary company (Bharat Heavy Plates & Vessels Limited) merged with the BHEL in the current year.



- xii) According to the information and explanations given to us, the company has not granted any loans and advances on the basis of security by way of pledge of shares, debentures and other securities.
- xiii) In our opinion, the company is not a chit fund or a Nidhi/mutual benefit fund/ society. Therefore, provisions of clause (xiii) of Paragraph 4 of the Order are not applicable to the company.
- xiv) In our opinion and according to the information and explanations given to us, the company is not dealing or trading in shares, securities, debentures and other investments. Accordingly, the provisions of clause (xiv) of the Paragraph 4 of the Order are not applicable to the company.
- xv) In our opinion and according to the information and explanations given to us, the company has not given guarantees for loans taken by others from banks or financial institutions.
- xvi) As per information and explanations given to us, the company has not obtained any term loan during the year.
- xvii) According to the information and explanations

- given to us and on an overall examination of the Balance Sheet of the company, we report that no funds raised on short-term basis have been used for long-term investment.
- xviii) According to the information and explanations given to us, the company has not made any preferential allotment of shares to parties and companies covered in the register maintained under section 301 of the Companies Act, 1956.
- xix) In our opinion, the company has not issued any debentures during the year. Therefore, provisions of clause (xix) of Paragraph 4 of the Order are not applicable to the company.
- xx) The company has not raised any money by way of public issue during the year. Therefore, provisions of clause (xx) of Paragraph 4 of the Order are not applicable to the company.
- xxi) During the course of our examination of the books and records of the company, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, no major fraud on or by the company has been noticed or reported during the year.

For Wahi & Gupta Chartered Accountants FRN 002263N

home am fr

Date: May 29, 2014 Partner
Place: New Delhi M.No 016020

For S. N. Dhawan & Co. Chartered Accountants FRN 000050N

(S.K. Khattar)
Partner
M. No 084993

Management Reply to Point No. (ix)(b): In respect of ECCO Libya, as per the contract, the income tax liability has to be discharged by the customer (ECCO). ECCO has confirmed that they will honor their committment and directly approach the Libyan tax authorities. Further to this, ECCO has partially discharged this liability during the year as well as in 2014-15.

गोपनीय



सं/ MAB-III/Rep./01-20/A/cs-BHEL/2014-15/Vol.-III/ 6-2-2-भारतीय लेखा एवं लेखा परीक्षा विभाग

कार्यात्तम प्रयान निदेशक, थाणिनियक लेखा परीक्षा एवं पदेन सदस्य लेखा परीक्षा थोर्ट-III नई दिल्ली

Indian Audit & Accounts Department

OFFICE OF THE

PRINCIPAL DIRECTOR OF COMMERCIAL AUDIT
& EX-OFFICIO MEMBER, AUDIT BOARD-III
NEW DELHI

दिनांक/Dated: OS July 2014

सेवा में,

अध्यक्ष एवं प्रबंध निदेशक, भारत हैयी इतिविद्रकरस तिमिटेड, नई दिस्सी

विषय:- 31 मार्च 2014 को समाप्त वर्ष के लिये भारत हैवी इलैक्ट्रिक्स लिमिटेड, नई दिल्ली के वार्षिक लेखाओं पर कंपनी अधिनियम 1956 की बारा 619(4) के अन्तर्गत भारत के नियंत्रक-महालेखा परीक्षक की टिप्पणियाँ।

महोदव,

में भारत हैवी इतैक्ट्रिक्टस लिग्टिंड, नई दिल्ली के 31 मार्च 2014 को समाप्त वर्ष के लेखाओं पर कंपनी जिम्मियम 1956 की धारा 619(4) के अंतर्गत भारत के नियंत्रक-महालेखापरीक्षक की टिप्पणियाँ अवेपित कर रही हैं। कृपया इस पत्र की संलग्नकों सहित प्राप्ति की पावती भैजी जाए।

भवदीया.

संसम्भः यद्योपरि ।

तन्तुल एस मितल) (तनुना एस मितल) प्रधान निदेशक



COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 619(4) OF THE COMPANIES ACT, 1956 ON THE ACCOUNTS OF BHARAT HEAVY ELECTRICALS LIMITED, NEW DELHI FOR THE YEAR ENDED 31 MARCH 2014

The preparation of financial statements of Bharat Heavy Electricals Limited, New Delhi, for the year ended 31st March 2014 in accordance with the financial reporting framework prescribed under the Companies Act, 1956 is the responsibility of the Management of the Company. The Statutory Auditors appointed by the Comptroller and Auditor General of India under section 619(2) of the Companies Act, 1956 are responsible for expressing opinion on these financial statements under Section 227 of the Companies Act, 1956 based on independent audit in accordance with the Standards on Auditing prescribed by their professional body, the Institute of Chartered Accountants of India. This is stated to have been done by them vide their Audit Report dated 29.05.2014.

I, on behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 619(3) (b) of the Companies Act, 1956 of the financial statements of Bharat Heavy Electricals Limited, New Delhi for the year ended 31 March 2014. This supplementary audit has been carried out independently without access to the working papers of the Statutory Auditors and is limited primarily to inquiries of the Statutory Auditors and Company personnel and a selective examination of some of the accounting records. On the basis of my audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to Statutory Auditors' report under Section 619(4) of the Companies Act, 1956.

For and on the behalf of the Comptroller & Auditor General of India

(Tanuja S. Mittal)
Principal Director of Commercial Audit &
Ex-officio Member, Audit Board - III,
New Delhi

Place : New Delhi Dated : 05 July, 2014

Annual Accounts



- 132 Annual Accounts Standalone
- 181 BHEL-EML Subsidiary Company
- 213 Consolidated Financial Statements



Balance Sheet

As at March 31, 2014 (₹ in Crore)

Part	ticulars	Note No.	Figures as at	31.03.2014	Figures as at	31.03.2013
T.	EQUITY AND LIABILITIES					
(1)	Shareholders' Funds					
	(a) Share capital	1	489.52		489.52	
	(b) Reserves & surplus	2	32557.53	33047.05	29954.58	30444.10
(2)	Non-current liabilities					
	(a) Long-term borrowings	3	104.77		129.20	
	(b) Other Long-term liabilities	4	6600.17		5789.68	
	(c) Long-term provisions	5	7496.43	14201.37	5944.02	11862.90
(3)	Current liabilities					
	(a) Short-term borrowings	6	2550.00		1286.00	
	(b) Trade payables	7	8719.02		9675.18	
	(c) Other current liabilities	8	11444.14		13862.37	
	(d) Short-term provisions	9	2829.59	25542.75	2998.11	27821.66
	TOTAL			72791.17		70128.66
II.	ASSETS					
(1)	Non current assets					
	(a) Fixed assets	10				
	(i) Tangible assets		4525.13		4314.67	
	(ii) Intangible assets		167.81		143.82	
	(iii) Capital work-in-progress		622.01		1133.51	
	(iv) Intangible assets under development		20.11	5335.06	38.08	5630.08
	(b) Non-current investments	11	420.17		429.17	
	(c) Deferred tax assets (net)	12	1968.95		1550.69	
	(d) Long-term loans and advances	13	1167.14		905.54	
	(e) Other non-current assets	14	11881.07	15437.33	10653.72	13539.12
(2)	Current assets					
	(a) Inventories	15	9797.55		11763.82	
	(b) Trade receivables	16	28071.92		29234.49	
	(c) Cash and Bank Balances	17	11872.93		7732.05	
	(d) Short term loans and advances	18	2023.86		2029.12	
	(e) Other current assets	19	252.52	52018.78	199.98_	50959.46
0:-	TOTAL			72791.17		70128.66

Significant Accounting Policies

Other notes to financial statements

31

The accompanying notes 1 to 31 & significant accounting policies form an integral part of the financial statements.

For and on behalf of Board of Directors

(I.P. Singh) Company Secretary (P.K. Bajpai) Director (Finance) (B. Prasada Rao) Chairman and Managing Director

As per our report of even date attached

For S.N. Dhawan & Co. Chartered Accountants FRN-000050N For Wahi & Gupta Chartered Accountants FRN-002263N

and we

have been for

Place : New Delhi Date : May 29, 2014 (S.K. Khattar) Partner M.No. 084993 (Y.K. Gupta) Partner M.No.016020



Statement of Profit & Loss

for the year ended March 31, 2014

(₹ in Crore)

Part	culars	Note No.		r the current d 31.03.2014		the previous d 31.03.2013
T.	Revenue from operations (Gross)	20		40337.92		50156.48
	Less : Excise duty			1342.26		1904.01
	Less : Service tax			606.84		634.80
	Revenue from operations (Net)			38388.82		47617.67
II.	Other operational income	21		720.01		806.98
III.	Other income	22		1616.03		1121.71
	Total revenue (I to III)			40724.86		49546.36
IV.	Expenses					
	Cost of material consumption, erection					
	and engineering expenses	23		22099.08		27899.37
	(Increase)/Decrease in work in progress &	24		10== 10		440.04
	fnished goods	0.5		1057.40		116.21
	Employees benefits expense	25		5933.78		5752.78
	Finance cost	26		132.63		125.27
	Depreciation & amortisation expense	10.1		982.92		953.39
	Other expenses of manufacture, administration, selling and distribution	27		3308.50		3776.56
	Provisions (net)	28		2258.70		1565.77
	Less: Cost of jobs done for internal use	20		68.46		75.87
	Total expenses			35704.55		40113.48
V.	Profit before prior period adjustments and			00704.00		40110.40
٧.	tax			5020.31		9432.88
VI.	Add/less: Prior period adjustments (net)	29		-6.01		-0.44
VII.	Profit before tax for the year			5014.30		9432.44
VIII.	-	30				
	a) Current tax		1911.00		2822.15	
	b) Deferred tax		-357.48	1553.52	-4.44	2817.71
IX.	Profit for the year			3460.78		6614.73
	Earnings per share (Basic & Diluted)			14.14		27.03
	(Refer para no. 20 of Note 31) in ₹					
	Face Value per share (in ₹)			2.00		2.00
	Significant Accounting Policies					
	Other notes to financial statements	31				

The accompanying notes 1 to 31 & significant accounting policies form an integral part of the financial statements.

For and on behalf of Board of Directors

(I.P. Singh) Company Secretary

Place: New Delhi

Date: May 29, 2014

(P.K. Bajpai) Director (Finance) (B. Prasada Rao) Chairman and Managing Director

As per our report of even date attached

For S.N. Dhawan & Co. Chartered Accountants FRN-000050N For Wahi & Gupta Chartered Accountants FRN-002263N

7.30

have been for

(S.K. Khattar) Partner M.No. 084993

(Y.K. Gupta) Partner M.No.016020



Cash Flow Statement

for the year ended March 31, 2014

(₹ in Crore)

	2013-14	2012-13
A. CASH FLOW FROM OPERATING ACTIVITIES		
Net Profit Before Tax as per Statement of Profit and Loss	5014.30	9432.44
Adjustment for		
Depreciation/Amortisation	988.95	954.16
Lease Equalisation	0.51	0.29
Provisions (Net)	1629.24	423.95
Bad Debts & LD & investment written off	70.30	377.26
Profit on sale of Fixed assets	-0.05	-3.31
Profit on sale of Long Term Investments	0.00	-31.50
Profit on sale of Short Term Investments	-0.02	0.00
Finance cost	132.66	125.27
Interest/Dividend Income	-652.42	-623.95
Operating Profit before Working Capital changes	7183.47	10654.61
Adjustment for		
Trade & Other Receivables	-952.82	-4368.69
Inventories	1945.06	1788.30
Trade Payable & Advances	-1526.27	-2971.92
Cash generated from operations	6649.44	5102.30
Direct Taxes Paid (Net of refund)	-2131.30	-3237.52
NET CASH INFLOW / (OUTFLOW) FROM OPERATING ACTIVITIES	4518.14	1864.78
B. CASH FLOW FROM INVESTING ACTIVITIES		
Purchase of Fixed Assets	-791.42	-988.52
Sale and Disposal of Fixed Assets	121.72	12.72
Sale and Disposal of short term Investments	0.02	0.00
Sale of Investment in Subsidiary & Joint Ventures	0.00	64.00
Investment in Subsidiary & Joint Ventures (net)	9.00	0.00
Adjustment pursuant to amalgamation (refer para no. 26 of note 31)	-108.20	0.00
Interest & Dividend income	600.81	573.75
Net Cash used in Investing Activities	168.07	338.05
C. CASH FLOW FROM FINANCING ACTIVITIES		
Short term & Long term Borrowing (Net)	1233.01	1304.43
Dividend Paid (including tax on dividend)	-1315.55	-1648.57
Finance cost	-126.65	-122.52
Net Cash used in Financing Activities	209.19	466.66
D. NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	4140.88	1060.07
Opening Balance of Cash and Cash Equivalents	7732.05	6671.98
Closing Balance of Cash and Cash Equivalents (Refer Note no.17)	11872.93	7732.05
ote 1 : Cash & Cash Equivalents consists of cash and bank balance & deposits with banks.		

Note 1 : Cash & Cash Equivalents consists of cash and bank balance & deposits with banks.

2 : Previous year's figures have been regrouped/rearranged wherever necessary.

3 : Cash & Cash Equivalents includes ₹ 3.87 Crore (₹ 3.52 Crore) unclaimed dividend lying in designated bank accounts.

For and on behalf of Board of Directors

(I.P. Singh) Company Secretary (P.K. Bajpai)
Director (Finance)

(B. Prasada Rao) Chairman and Managing Director

As per our report of even date attached

For S.N. Dhawan & Co. Chartered Accountants FRN-000050N

For Wahi & Gupta Chartered Accountants FRN-002263N

War Ship

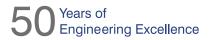
home len for

(S.K. Khattar) Partner M.No. 084993 (Y.K. Gupta) Partner M.No.016020

134

Place: New Delhi

Date: May 29, 2014



1 - Share Capital

(₹ in Crore)

	Figures as at 3	31.03.2014	Figures as at	31.03.2013
Authorised				
1000,00,00,000 equity shares of ₹ 2 each (previous ye 1000,00,00,000 equity shares of ₹ 2 each)	ar	2000.00		2000.00
Issued, Subscribed & Paid up Capital		489.52		489.52
244,76,00,000 fully paid equity Shares of ₹ 2 each (previous year 244,76,00,000 equity shares of ₹ 2 each)	ıs			
 The reconciliation of the number of equity share outstanding is set out below : 	es			
	Number	Amount	Number	Amount
Shares outstanding at the beginning of the year	2447600000	489.52	2447600000	489.52
Shares bought back during the year	-	-	-	-
Shares outstanding at the end of the year	2447600000	489.52	2447600000	489.52
 b) Details of shares held by shareholders holding mo than 5% shares at the year end 	No. of shares	% age of holding	No. of shares	% age of holding
President of India (POI) alongwith nominees	1543452000	63.06%	1657552000	67.72%
Life Insurance Corporation of India	242890195	9.92%	141433662	5.78%
Face Value per share (₹)		2.00		2.00
c) Terms / rights attached to the equity shares:				

The company has only one class of equity shares having par value of \mathbb{Z} **2 per share** (previous year \mathbb{Z} 2 per share). Each holder of the equity shares is entitled to one vote per share.

d) 4.66% of BHEL's total paid up equity share capital (11,41,00,000 shares) were sold by Government of India through Block Deal to Life Insurance Corporation of India on 03.03.2014.



2 - Reserves & surplus

	Figures as	at 31.03.2014	Figures as	at 31.03.2013
Capital reserve				
Opening Balance	2.74		2.74	
Add:Addition pursuant to amalgamation (Refer para no. 26 of note 31)	0.02		-	
Add:Adjustment on amalgamation (Refer para no. 26 (f) of note no. 31)	33.80	36.56		2.74
General reserve				
Opening balance	28849.72		23849.72	
Add: transfer from surplus i.e. balance in statement of profit and loss	2500.00		5000.00	
Less: Deductions		31349.72		28849.72
Surplus i.e. balance in statement of profit and loss				
Opening Balance	1102.12		1031.23	
Add:Adjustment of debit balance of Profit & Loss account upto 30.09.2011 pursuant to Amalgamation (Refer para no. 26(j) of Note 31)	-278.05		-	
Add:Adjustment pursuant to Amalgamation for profit during the period from 01.10.2011 to 31.03.2013 (Refer para no. 26(j) of Note 31)	59.95		-	
Add:Adjustment for provision for tax and deferred tax on amalgamation (Refer para no. 26(j) of Note 31)	136.85		-	
Add: profit for the year	3460.78		6614.73	
Profit available for appropriation	4481.65		7645.96	
Less: Appropriation-				
- General reserve	2500.00		5000.00	
- Dividend (including interim dividend of ₹ 320.64 Crore previous year ₹ 518.89 Crore)	692.68		1323.00	
- Corporate dividend tax (including tax on interim dividend ₹ 54.49 Crore , previous year ₹ 84.18 Crore)	117.72	1171.25	220.84	1102.12
		32557.53		29954.58
Proposed dividend on equity per share (₹)		1.52		3.29



3 - Long-term borrowings

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Unsecured		
Long term maturities of finance lease obligations	104.77	129.20
	104.77	129.20

4 - Other long-term liabilities

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Trade payables	764.91	756.10
Advances received from customers & others	5759.88	4959.23
Deposits from contractors & others	75.38	74.35
	6600.17	5789.68

5 - Long-term provisions

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Provision for employees benefits	2437.96	2185.47
Contractual Obligation	4692.95	3613.96
Other long-term provisions	365.52	144.59
	7496.43	5944.02

6 - Short-term borrowings

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Secured		
From banks		
Rupee export packing credit (secured by first charge by way of hypothecation of raw materials, components, work-in-progress, finished goods, stores, trade receivables both present and future)	2550.00	1286.00
	2550.00	1286.00

7 - Trade Payables

	Figures as at 31.03.2014	Figures as at 31.03.2					
Trade Payables	8644.69		9600.05				
Acceptances	74.33		75.13				
	8719.02		9675.18				
(Refer to Para no. 10 of Note 31 for micro and small enterprises disclosure)							



8 - Other current liabilities

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Current maturities of finance lease obligation	67.68	75.24
Advances received from customers & others	8902.48	11261.12
Deposits from contractors & others	538.14	481.00
Bonds pursuant to amalgamation (para no 26 of note 31)	1.00	-
Unclaimed dividend *	3.87	3.52
Other payables/ liabilities **	1914.35	2030.88
Interest accrued but not due	0.39	1.15
Interest accrued and due on :		
Bonds pursuant to Amalgamation (para no. 26 of note 31)	5.52	-
Rupee export packing credit	2.89	-
State Government Loans	2.33	2.33
Finance lease	5.49	7.13
	11444.14	13862.37

Advances received from customers & others include valuation adjustment -

9 - Short-term provisions

	Figures as at 31.03.2014	Figures as at 31.03.2013
Provision for employees benefits	570.10	488.33
Proposed Dividend	372.04	804.11
Corporate dividend tax	63.23	136.66
Contractual obligation	943.86	1376.02
Other short-term provisions	880.36	178.66
Corporate Social Responsibility	0.00	14.33
	2829.59	2998.11

[₹] **4025.65 Crore** (previous year ₹ 5759.02 Crore)

^{*} There is no amount due & outstanding as at balance sheet date to be transferred to Investor Education & Protection Fund.

^{**} Includes Employees dues and Statutory dues.



10 - Fixed assets (₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
(i) Tangible assets		
Gross block	11644.66	10441.74
Less: Accumulated depreciation	7122.37	6130.42
Less: Lease adjustment account	-2.84	-3.35
Net Block	4525.13	4314.67
(ii) Intangible assets		
Gross block	405.83	341.52
Less: Accumulated depreciation/amortisation	238.02	197.70
Net block	167.81	143.82
(iii) Capital work in progress		
Construction work-in-progress -Civil	121.23	214.65
Construction stores (including in transit)	8.95	11.27
Plant & machinery and other equipments		
- Under Erection/ Fabrication/awaiting erection	345.80	630.17
- In transit	146.03	277.30
Leased assets under erection	0.00	0.12
	622.01	1133.51
(iv) Intangible assets under development	20.11	38.08
	20.11	38.08
Total	5335.06	5630.08
Refer to details in Note no. 10.1		



Note 10.1

Fixed Assets

			Gross Block					Depreci	iation			Net E	Block
	Cost As at 01.04.2013	Additions/ adjustments during the year	pursuant to	Deductions/ adjustments during the year	31.03.2014	Accumulated Depreciation/ Amortisation as at 01.04.2013	Accumulated depreciation pursuant to amalgamation	Depreciation for the year	Depreciation Adjustment	Lease Adjustment Account	Accumulated Depreciation/ Amortisation as at 31.03.2014	31.03.2014	
Factory/ Office Complex													
(i) Tangible assets													
Freehold land (incl. development exp.)	17.81	7.32	0.16		25.29							25.29	17.81
Leasehold land (incl. development exp.)	6.20	58.82		4.86	60.16	0.41		0.63			1.04	59.12	5.79
Roads, bridges and culverts	25.02	2.97	0.25		28.24	5.13	0.18	0.42			5.73	22.51	19.89
Buildings	1591.50	205.42	9.62	11.43	1795.11	594.13	8.83	106.20	-9.91		699.25	1095.86	997.37
Leashold buildings	3.12				3.12	1.39		0.05			1.44	1.68	1.73
Drainage, sewerage and water supply	24.74	4.27	0.44		29.45	11.65	0.38	0.65			12.68	16.77	13.09
Railway siding	16.43	0.09	0.18		16.70	9.07	0.18	0.73			9.98	6.72	7.36
Locomotives and wagons	44.32	8.10	0.17		52.59	20.86	0.17	2.70			23.73	28.86	23.46
Plant & Machinery	6508.40	738.27	51.02	3.01	7294.68	3991.92	49.26	680.98	2.96		4725.12	2569.56	2516.48
Electronic data processing equipments	142.55	33.10	3.72	3.78	175.59	135.94	3.71	1.70	28.65		170.00	5.59	6.61
Electrical installations	299.90	35.41	1.52	0.21	336.62	119.25	1.52	19.99	-0.03		140.73	195.89	180.65
Construction Equipment	247.92	19.82	4.41	6.82	265.33	163.04	4.41	32.59	-6.80		193.24	72.09	84.88
Vehicles	18.55	1.59	0.56	0.58	20.12	16.13	0.52	0.55	-0.56		16.64	3.48	2.42
Furniture & fixtures	51.46	4.21	0.57	0.50	55.74	14.86	0.55	3.81	-0.21		19.01	36.73	36.60
Office & other equipments	169.26	13.47	1.36	1.33	182.76	81.44	1.32	10.83	-0.76		92.83	89.93	87.82
Fixed assets costing upto ₹10,000/-	105.84	8.07	1.53	4.48	110.96	105.84	1.53	8.05	-4.46		110.96	0.00	
Capital expenditure	0.44				0.44	0.44					0.44		
Assets Given on Lease	497.15				497.15	493.79				2.84	493.79	6.20	6.71
EDP Equipment taken on lease	400.31	34.37	0.91	39.02	396.57	232.94	0.57	64.08	-36.56		261.03	135.54	167.37
Office & other equipment taken on lease	3.84	0.33		0.00	4.17	0.74		0.30			1.04	3.13	3.10
Other assets taken on lease	2.17			0.17	2.00	2.17		0.11	-0.17		2.11	-0.11	
Total Tangible Assets- Factory	10176.93	1175.65	76.42	76.19	11352.81	6001.14	73.13	934.37	-27.85	2.84	6980.79	4374.86	4179.14
(ii) Intangible Assets													
-Internally developed													
Software													
Others	40.10	19.78			59.88	23.45		11.25			34.70	25.18	16.65
-Others													
Software	140.69	10.19	0.59	1.05	150.42	120.30	0.55	12.02	-0.30		132.57	17.85	20.39



(₹ in Crore)

													1 01010	
			Gross Block				Depreciation					Net Block		
	Cost As at 01.04.2013	Additions/ adjustments during the year		Deductions/ adjustments during the year	Cost As at 31.03.2014	Accumulated Depreciation/ Amortisation as at 01.04.2013	Accumulated depreciation pursuant to amalgamation	Depreciation for the year	Depreciation Adjustment	Lease Adjustment Account	Accumulated Depreciation/ Amortisation as at 31.03.2014			
Technical Know-how	151.88	19.40		0.00	171.28	45.10		15.57			60.67	110.61	106.78	
Others	8.85	15.40			24.25	8.85		1.23			10.08	14.17		
Total intangible Assets- Factory	341.52	64.77	0.59	1.05	405.83	197.70	0.55	40.07	-0.30		238.02	167.81	143.82	
Total of Factory Assets	10518.45	1240.42	77.01	77.24	11758.64	6198.84	73.68	974.44	-28.15	2.84	7218.81	4542.67	4322.96	
Township/ Residential														
Tangible assets														
Freehold land (incl. development exp.)	2.09	0.22	0.08		2.39							2.39	2.09	
Leasehold land (incl. development exp.)	2.04	9.67		0.28	11.43	0.62		0.12	-0.08		0.66	10.77	1.42	
Roads, bridges and culverts	5.68	1.34	0.20		7.22	3.01	0.11	0.09			3.21	4.01	2.67	
Buildings	171.50	2.14	4.05	0.00	177.69	64.40	3.78	4.18	0.04		72.40	105.29	107.10	
Leasehold buildings	0.27			0.00	0.27	0.21		0.06			0.27	0.00	0.06	
Drainage, sewerage and water supply	17.36	2.36	0.22	0.00	19.94	14.53	0.19	0.38			15.10	4.84	2.83	
Plant and Machinery	19.81	3.95		0.00	23.76	12.56		1.54			14.10	9.66	7.25	
Electronic Data Processing Equipment		0.03			0.03							0.03		
Electrical installations	18.53	0.53	0.48		19.54	14.98	0.37	0.53			15.88	3.66	3.55	
Vehicles	1.07			0.07	1.00	1.02		0.01	-0.07		0.96	0.04	0.05	
Furniture & fixtures	0.94	0.27	0.09	0.00	1.30	0.36	0.09	0.13			0.58	0.72	0.58	
Office & other equipments	22.91	1.97	0.14	0.77	24.25	14.98	0.13	1.04	-0.75		15.40	8.85	7.93	
Fixed assets costing upto ₹ 10000/-	2.61	0.41		0.00	3.02	2.61		0.41			3.02	0.00		
Total Tangible Assets- Township	264.81	22.90	5.26	1.12	291.85	129.28	4.67	8.49	-0.86		141.58	150.27	135.53	
Total of Township Assets	264.81	22.90	5.26	1.12	291.85	129.28	4.67	8.49	-0.86		141.58	150.27	135.53	
Total of Tangible Assets	10441.74	1198.55	81.68	77.31	11644.66	6130.42	77.80	942.86	-28.71	2.84	7122.37	4525.13	4314.67	
Total of Intangible Assets	341.52	64.77	0.59	1.05	405.83	197.70	0.55	40.07	-0.30		238.02	167.81	143.82	
Total of Factory & Township	10783.26	1263.32	82.27	78.36	12050.49	6328.12	78.35	982.92	-29.01	2.84	7360.39	4692.94	4458.49	
Previous year	9706.64	1126.22		49.60	10783.26	5413.47		953.39	-38.74	3.35	6328.12	4458.49	4296.81	
The details of R&D capit included in above	al items													
Plant & Machinery & other Equipments	435.14	49.46		1.65	482.95	266.49		36.16	-0.25		302.40	180.55	168.65	
Building	37.02	4.43			41.45	17.67		1.09			18.76	22.69	19.35	

Gross Block as at 31.03.2014 includes assets condemned and retired from active use ₹ 85.29 Crore (Previous year ₹ 61.57 Crore)

Net Block as at 31.03.2014 includes assets condemned and retired from active use ₹ 0.02 Crore (Previous year ₹ 0.14 Crore)

Gross Block excludes cost of assets purchased out of grant received from Govt. of India for research as executing agency since the property does not vest with the Company.

₹ in Crore	2013-14	2012-13
	42.04	30.81



11 - Non-current investments

	Figures as a	t 31.03.2014	Figures as at 31.03.2013		
Long Term Investments (at cost)					
Unquoted Shares(Fully paid up):					
TRADE:					
1892 (previous year 1402) Equity shares of ₹ 10/- each (Previous year ₹ 10 each) of Engineering Projects (India) Ltd.	*		*		
728960 (previous year 728960) Equity shares of ₹ 10/- each of AP Gas Power Corporation Ltd.	0.91		0.91		
5000000 (Previous year 5000000) Equity shares of ₹ 10/- each of Neelachal Ispat Nigam Ltd.	5.00	5.91	5.00	5.91	
Subsidiary Company					
5355000 (previous year 5355000) Equity Shares of ₹ 10/- each of BHEL Electrical Machines Ltd.	5.36	5.36	5.36	5.36	
Joint Venture Companies					
1999999 (previous year 1999999) Equity Shares of ₹ 10/- each of Powerplant Performance Improvement Ltd.	2.00		2.00		
Less: Provision for dimunition in value	2.00		2.00		
- 50000000 (previous year 25000000) Equity Shares of ₹ 10/each of NTPC-BHEL Power Projects Pvt. Ltd.	50.00		25.00		
- 331523312 (previous year 331523312) Equity Shares of $\stackrel{\textstyle <}{\scriptstyle <}$ 10/- each of Raichur Power Corporation Ltd.	331.52		331.52		
- 22500000 (previous year 22500000) Equity Shares of $\stackrel{?}{ ext{$<$}}$ 10/each of Dada Dhuniwale Khandwa Power Ltd.	22.50		22.50		
- 2500000 (previous year 2500000) Equity Shares of ₹ 10/- each of Latur Power Company Ltd.	2.50		2.50		
- 2379999 (previous year 2379999) Equity Shares of ₹ 10/- each of BHEL-GE Gas Turbine Services Pvt. Ltd.	2.38	408.90	2.38	383.90	
Advances deposit towards issue of Shares					
To Bharat Heavy Plate & Vessels Ltd.		0.00		34.00	
OTHER THAN TRADE:					
3 (Previous year 3) shares of ₹ 100/- each of BHEL House Building Cooperative Society Ltd., Hyderabad		*		*	
250 shares of ₹ 10/- each of BHPV Employees Consumers Cooperative Stores Ltd.		*		-	
10 shares of ₹ 50/- each of Cuffe Parade Persopolis Premises Cooperative Society Ltd., Mumbai		*		-	
20 shares of ₹ 50/- each of Hill View Cooperative Housing Society Ltd., Mumbai		*		-	
Share Money paid in advance to M/s. Rita Enterprises, Mumbai for allotment of 50 shares of \ref{thm} 10 each		*		-	
Share Money paid in advance to M/s. Asish Enterprises, Mumbai for allotment of 50 shares of \ref{thm} 10 each		*		-	
* Value of less than ₹ 1 lakh/-					
		420.17		429.17	
Aggregate value of unquoted investments		420.17		429.17	
Aggregate provision in diminution in value of investments		2.00		2.00	



12 - Deferred tax assets (Net)

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Provisions	1317.02	1088.81
Statutary dues	609.47	484.03
Modvat Adjustment	50.05	60.79
Others	40.66	31.94
	2017.20	1665.57
Deferred Tax Liabilities		
Depreciation	48.25	114.88
Deferred tax assets (net)	1968.95	1550.69

13 - Long-term loans and advances

	Figures as at 31.03.2014		Figures as a	t 31.03.2013
Loans				
Loans to subsidiary companies	0.00		234.98	
Loans to employees	0.01		0.01	
Loans to Public Sector Undertakings	8.00		12.00	
Interest accrued and or due on loans	0.32	8.33	0.56	247.55
Advances (recoverable in cash or in kind or for value to be received)				
For purchases	413.29		113.42	
Capital advance	36.06		60.76	
To Others	58.85	508.20	70.06	244.24
Deposits				
Balance with customs, port trust and other govt authorities		55.55		42.48
Other deposits		65.05		51.22
Advance tax/TDS (Net of provision for taxation ₹ 8007.45 Crore (Previous year ₹ 9268.23 Crore))		563.36		343.06
· · · · · · · · · · · · · · · · · · ·		1200.49	-	928.55
Less: Provisions		33.35		23.01
		1167.14	-	905.54
Sub classification:-			-	
Secured, considered good		8.09		12.15
Unsecured, considered good		1159.05		893.39
Doubtful		33.35		23.01
		1200.49		928.55
Includes:				·
Due from Officers		0.01		0.01



14 - Other non-current assets

(₹ in Crore)

	Figures as	at 31.03.2014	Figures as a	at 31.03.2013
Long term trade receivables	14858.76		13036.39	
Less: Provision for bad & doubtful debts	2403.35		1804.84	
Less: Automatic price reduction adjustment	574.34	11881.07	577.83	10653.72
		11881.07		10653.72
Sub classification: Long term trade receivables				
Secured, considered good		-		-
Unsecured, considered good		11881.07		10653.73
Doubtful		2977.69		2382.67
		14858.76		13036.39
Long term trade receivables include deferred debts-				
- ₹ 11619.96 Crore (previous year ₹ 9859.62 Crore)				

15 - Inventories (₹ in Crore)

	Figures as a	at 31.03.2014	Figures as a	t 31.03.2013
Raw material & components	3702.96		4489.12	
Material-in-transit	593.50	4296.46	664.73	5153.85
Work-in-progress		3009.87		4188.19
(including items with sub-contractors)				
Finished goods	1498.52		1358.14	
Inter division transfers in transit	295.84	1794.36	297.06	1655.20
Stores & spare parts				
Production	210.35		238.85	
Fuel stores	17.06		23.94	
Miscellaneous	47.46	274.87	45.20	307.99
Materials with fabricators/contractors		197.34		234.94
Loose tools		31.14		44.36
Scrap (at estimated realisable value)		65.47		63.42
Non moving inventory	214.78		170.64	
Less: Provision for non-moving inventory	86.74	128.04	54.77	115.87
		9797.55		11763.82



16 - Trade receivables

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Debts outstanding for a period exceeding six months	15015.42	11631.09
Other debts	14248.31	18604.19
	29263.73	30235.28
Less: Provision for bad & doubtful debts & automatic price reduction adjustment	1191.81	1000.79
	28071.92	29234.49
Trade receivables include deferred debts-		
- ₹ 6327.62 Crore (previous year ₹ 7220.91 Crore)		
Trade receivables include goods despatched pending billing		
- ₹ 1328.75 Crore (previous year ₹ 1705.16 Crore)		
Trade receivables include valuation adjustment-		
- ₹ 1342.28 Crore (previous year ₹ 1274.42 Crore)		
Particulars of trade receivables :		
Secured, considered good	-	-
Unsecured, considered good	28071.92	29234.49
Doubtful	1191.81	1000.79
	29263.73	30235.28

17 - Cash & Bank Balances

	Figures as at 31.03.2014	Figures as at 31.03.2013
Cash & cash equivalents		
Balances with Banks*	2383.66	2562.47
Cheques, Demand Drafts on hand	185.54	418.47
Cash & Stamps in on hand	0.94	1.11
Remittances in transit	0.06	0.00
Other Bank Balances		
Fixed Deposit having maturity more than 3 months & less than 12 months	9302.73	4750.00
	11872.93	7732.05
* Includes		
Earmarked against unclaimed dividend	3.87	3.52
Non-repatriable account	5.87	13.16



18 - Short-term loans and advances

(₹ in Crore)

	Figures as at	31.03.2014	Figures as at	31.03.2013
Loans				
Loans to Employees	0.02		0.02	
Materials issued on loan	0.00		9.74	
Loans to others	0.00		0.01	
Loans to Public Sector Undertakings	8.00		4.00	
Interest accrued and or due on loans	1.95	9.97	2.64	16.41
Advances (recoverable in cash or in kind or for value to be received)				
To subsidiaries	0.51		0.55	
To employees	39.68		31.07	
For purchases	505.78		695.56	
To Others	1046.82	1592.79	940.91	1668.09
Deposits				
Balance with customs, Port Trust and other Govt. Authorities		436.82		336.71
Others		86.86		60.24
		2126.44		2081.45
Less: Provision for doubtful loans, advances & deposits		102.58		52.33
		2023.86		2029.12
Particulars of Loans and advances:-				
Secured, considered good		8.14		6.19
Unsecured, considered good		2015.72		2022.93
Doubtful		102.58		52.33
		2126.44		2081.45
Includes:				
Due from Officers		0.15		0.11

19 - Other current assets

	Figures as at 31.03.2014	Figures as at 31.03.2013
Interest Accrued on Banks Deposits	252.52	199.98
	252.52	199.98



20 - Revenue from operations

(₹ in Crore)

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Sales less returns (gross)	33136.29	42893.34
Income from external erection & other services & revenue from works contract	7201.63	7263.14
Refer point no. 29a of note no. 31	40337.92	50156.48

21 - Other operational income

(₹ in Crore)

	Figures for the current year ended 31.03.2014		_	
Export Incentives		27.04		24.26
Rental income on leased assets	0.93		0.93	
Lease equalisation account	-0.51	0.42	-0.29	0.64
Scrap sale		284.88		283.35
Receipt from sale/transfer of surplus stock		0.05		0.07
Others	_	407.62		498.66
	_	720.01		806.98

22 - Other income

		Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
A. Other income			
Profit on sale of long term Investments		-	31.50
Profit on sale of short term investment		0.02	-
Profit from sale of fixed assets & capital stores (net)		0.05	3.31
Dividend		21.38	19.00
Exchange variation (net)		658.78	143.38
Others (including grants of NIL (previous year ₹ 0.33 Crore) from Govt. of India for R&D Projects)		304.76	319.57
To	tal (A)	984.99	516.76
B. Interest Income*			
From customers		0.09	0.03
From banks		613.85	534.41
Others		17.10	70.51
To	al (B)	631.04	604.95
*TDS ₹ 60.36 Crore (previous year ₹ 56.08 Crore)			
Total Other Income Total	(A+B)	1616.03	1121.71



23 - Cost of material consumption, erection and engineering expenses

(₹ in Crore)

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Consumption of raw material & components*	17137.51	23043.84
Consumption of stores & spares	569.19	583.89
Erection and Engineering exp payment to subcontractors	4392.38	4271.64
	22099.08	27899.37
*Refer point no. 29 f of Note No. 31		

24 - Increase/(Decrease) in work in progress & finished goods

(₹ in Crore)

Figures for the current year ended 31.03.2014		Figures for the previous year ended 31.03.2013		
3009.94		4188.13		
4188.13		4821.13		
13.29	-1191.48		-633.00	
1498.80		1359.89		
1359.89		952.42		
1.11	137.80		407.47	
	-3.72	_	109.32	
	-1057.40	_	-116.21	
			126.49	
	126.49		99.97	
_	3009.94 4188.13 13.29 1498.80 1359.89	year ended 31.03.2014 3009.94 4188.13 13.29 -1191.48 1498.80 1359.89 1.11 137.80 -3.72 -1057.40	year ended 31.03.2014 year ended 3009.94 4188.13 4188.13 4821.13 13.29 -1191.48 1498.80 1359.89 952.42 1.11 137.80 -3.72 -1057.40 130.62	

25 - Employees benefits expense

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Salaries, wages, bonus, allowances & other benefits	5019.40	4856.50
Contribution to gratuity fund	107.13	142.09
Contribution to provident and other funds	328.32	297.60
Group insurance	10.56	11.77
Staff welfare expenses	468.37	444.82
	5933.78	5752.78



26 - Finance cost

(₹ in Crore)

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Interest expense	103.90	42.39
Interest on income tax	4.47	-
Other Borrowing Costs	24.26	82.88
	132.63	125.27
Less: Borrowing Cost capitalised		-
	132.63	125.27

27 - Other expenses of manufacture, administration, selling & distribution

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Royalty, technical, Resident consultant's charges & other	104.00	104.10
consultancy charges	134.03	124.10
Rent	81.95	84.79
Excise duty	285.61	307.14
Power & Fuel	603.52	555.78
Rates & taxes	74.75	71.42
Service tax	8.25	13.22
Insurance	119.34	125.79
Repairs:		
Buildings	84.04	95.59
Plant & machinery	44.56	37.83
Others	135.40	152.36
Other expenses in connection with exports	23.30	28.28
Losses written off	0.05	1.06
Bad debts written off	8.58	28.12
Carriage outward	382.40	573.44
Travelling & conveyance	186.78	197.45
Miscellaneous expenses	1027.67	994.12
Liquidated damages charged off	61.67	348.08
Donations	0.06	0.03
Corporate social responsibility & sustainability development expenses	46.54	37.96
	3308.50	3776.56



28 - Provisions (net)

(₹ in Crore)

	•	the current 31.03.2014	Figures for the previous year ended 31.03.2013	
Doubtful debts, Liquidated damages and loans & advances				
Created during the year	1469.92		1195.88	
Less: written back during the year	713.85	756.07	819.55	376.33
Contracutal Obligations				
Created during the year	1116.95		1786.05	
Less: written back during the year	487.49	629.46	644.23	1141.82
Others				
Created during the year	947.14		86.87	
Less: written back during the year	73.97 873.17		39.25	47.62
	2258.70			1565.77

29 - Prior period adjustment (net)

(₹ in Crore)

		Figures for the current year ended 31.03.2014		Figures for the previous year ended 31.03.2013	
Income					
Sales less returns	0.00		1.97		
Other income	Other income 0.03 0.0				
Expenditure					
Payment to Subcontractor	0.14		0.06		
Consumption of Raw material & components	0.40	0.40			
Depreciation	6.03	6.03			
Interest Cost	0.03		0.00		
Misc. Expenses	-0.56	-0.56 6.04		2.53	
	_	-6.01		-0.44	

30 - Tax expense

	Figures for the current year ended 31.03.2014		Figures for the previou year ended 31.03.201	
a) Current tax				
For current year	1899.95		3042.00	
For earlier years	11.05 1911.00		-219.85	2822.15
b) Deferred tax charge / (credit)				
For current year	-315.10		-163.26	
For earlier years	-42.38	-357.48	158.82	-4.44
		1553.52		2817.71

Significant Accounting Policies

1 Basis of preparation of Financial Statements

The financial statements have been prepared as of a going concern on historical cost convention and on accrual method of accounting in accordance with the generally accepted accounting principles and the provisions of the Companies Act, 1956 as adopted consistently by the Company.

2 Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the Management to make estimates and assumptions that affect the income and expenditure during the reporting period and the assets and liabilities including contingent liabilities at the date of financial statements. The differences between actual results and estimates are recognised in the period in which results are known.

3 Fixed Assets

Fixed assets (other than land acquired free from State Government) are carried at the cost of acquisition or construction or book value less accumulated depreciation and impairment, if any.

Cost includes value of internal transfers for capital works, taken at actual / estimated factory cost or market price, whichever is lower. Effect of extraordinary events such as devaluation/ revaluation in respect of long term liabilities/ loans utilised for acquisition of fixed assets is added to/ reduced from the cost.

Land acquired free of cost from the State Government is valued at ₹ 1/- except for that acquired after 16th July 1969, in which case the same is valued at the acquisition price of the State Government concerned, by corresponding credit to capital reserve.

4 Leases

Finance Lease

A) (i) Assets Given on Lease Prior to 1st April 2001

Assets manufactured and given

on finance lease are capitalised at the normal sale price/fair value/ contracted price and treated as sales.

Depreciation on the same is charged at the rate applicable to similar type of fixed assets as per Accounting Policy on 'Depreciation'. Against lease rentals, matching charge is made through Lease Equalisation Account.

Finance income is recognised over the lease period.

(ii) Assets Given on Lease on or after 1st April, 2001

Assets manufactured and given on finance lease are recognised as sales at normal sale price / fair value/ NPV.

Finance income is recognised over the lease period.

Initial direct costs are expensed at the commencement of lease.

B) Assets Taken on Lease on or after 1st April 2001

Assets taken on lease are capitalised at fair value / NPV / contracted price.

Depreciation on the same is charged at the rate applicable to similar type of fixed assets as per Accounting Policy on 'Depreciation'. If the lease assets are returnable to the lessor on expiry of lease period, the same is depreciated over its useful life or lease period, whichever is shorter.

Lease payments made are apportioned between finance charges and reduction of outstanding liability in relation to assets taken on lease.

Operating Lease

A) Assets Given on Lease:

Assets manufactured and given on operating lease are capitalised. Lease income arising therefrom is recognised as income over the lease period.



B) Assets Taken on Lease:

Lease payments made for assets taken on operating lease are recognised as expense over the lease period.

5 Intangible Assets

- A) Intangible assets are capitalised at cost if
- a. It is probable that the future economic benefits that are attributable to the asset will flow to the company, and
- b. The company will have control over the assets, and
- c. The cost of these assets can be measured reliably and is more than ₹ 10,000/-. Intangible assets are amortised over their estimated useful lives not exceeding three years in case of software and not exceeding ten years in case of others on a straight line pro-rata monthly basis.

B)

- a. Expenditure on research including the expenditure during the research phase of Research & Development Projects is charged to Statement of profit and loss in the year of incurrence.
- Expenditure incurred on Development including the expenditure during the development phase of Research & Development Project meeting the criteria as per Accounting Standard on Intangible Assets, is treated as intangible asset.
- c. Fixed assets acquired for purposes of research and development are capitalised.

6 Borrowing Costs

Borrowing costs that are attributable to the manufacture, acquisition or construction of qualifying assets, are included as part of the cost of such assets.

A qualifying asset is one that necessarily takes more than twelve months to get ready for intended use or sale.

Other borrowing costs are recognised as expense in the period in which they are incurred.

7 Depreciation

(i) Depreciation on fixed assets (other than

those used abroad under contract) is charged upto the total cost of the assets on straight-line method as per the rates prescribed in Schedule XIV of the Companies Act, 1956, except where depreciation is charged at rates determined on the basis of the technically assessed estimated useful lives shown hereunder:-

	Single Shift	Double Shift	Triple Shift
General Plant & Machinery	8%	12%	16%
Automatic / Semi-Automatic Machines	10%	15%	20%
Erection Equipment, Capital Tools & Tackles	20%		
Township Buildings			
Second Class	2.5%		
- Third Class	3.5%		
Railway Sidings	8%		
Locomotives & Wagons	8%		
Electrical Installations	8%		
Office & Other Equipments	8%		
Drainage, Sewerage & Water supply	3.34%		
Electronic Data Processing Equipment	20%		

In respect of additions to/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

- (ii) Fixed assets used outside India pursuant to long term contracts are depreciated over the duration of the initial contract.
- (iii) Fixed assets costing ₹ 10,000/- or less and those whose written down value as at the beginning of the year is ₹ 10,000/or less, are depreciated fully. In so far as township buildings are concerned, the

- cost per tenement is the basis for the limit of ₹ 10,000/-.
- (iv) At erection/project sites: The cost of roads, bridges and culverts is fully amortized over the tenure of the contract, while sheds, railway sidings, electrical installations and other similar enabling works (other than purely temporary erections, wooden structures) are so depreciated after retaining 10% as residual value.
- (v) Purely Temporary Erection such as wooden structures are fully depreciated in the year of construction.
- (vi) Leasehold Land and Buildings are amortised over the period of lease. Buildings constructed on land taken on lease are depreciated over their useful life or the lease period, whichever is earlier.

8 Investments

- Long-term investments are carried at cost. Decline, other than temporary, in the value of such investments, is recognised and provided for.
- (ii) Current investments are carried at cost or quoted/fair value whichever is lower. Unquoted current investments are carried at cost.
- (iii) The cost of investment includes acquisition charges such as brokerage, fees and duties.

Any reduction in the carrying amount & any reversals of such reductions are charged or credited to the Statement of Profit and Loss.

9 Inventory Valuation

- Inventory is valued at actual/estimated cost or net realisable value, whichever is lower.
- (ii) Finished goods in Plant and work in progress involving Hydro and Thermal sets including gas based power plants, boilers, boiler auxiliaries, compressors and industrial turbo sets are valued at actual/estimated factory cost or at 97.5% of the realisable value, whichever is lower.

- (iii) In respect of valuation of finished goods in plant and work-in-progress, cost means factory cost; actual/estimated factory cost includes excise duty payable on manufactured goods.
- (iv) In respect of raw material, components, loose tools, stores and spares cost means weighted average cost.
- (v) (a) For Construction contracts entered into on or after 01.04.2003:

Where current estimates of cost and selling price of a contract indicates loss, the anticipated loss in respect of such contract is recognised immediately irrespective of whether or not work has commenced.

- b) For all other contracts:
 - Where current estimates of cost and selling price of an individually identified project forming part of a contract indicates loss, the anticipated loss in respect of such project on which the work had commenced, is recognised.
- In arriving at the anticipated loss, total income including incentives on exports/deemed exports is taken into consideration.
- (vi) The components and other materials purchased / manufactured against production orders but declared surplus are charged off to revenue retaining residual value based on technical estimates.

10 Revenue Recognition

Sales are recorded based on significant risks and rewards of ownership being transferred in favour of the customer. Sales include goods dispatched to customers by partial shipment.

A. For construction contracts entered into on or after 1.4.2003

Revenue is recognised on percentage completion method based on the percentage of actual cost incurred upto the reporting date to the total estimated cost of the contract.



B. For all other contracts

- Recognition of sales revenue in respect of long production cycle items (Hydro and Thermal sets including gas-based power plants, boilers, boiler auxiliaries, compressors and industrial turbo sets) is made on technical estimates. When the aggregate value of shipments represents 30% or more of the realizable value, they are considered at 97.5% of the realisable value or in its absence, quoted price. Otherwise, they are considered at actual/ estimated factory cost or 97.5% of the realizable value, whichever is lower. The balance 2.5% is recognised as revenue on completion of supplies under the contract.
- (ii) Income from erection and project management services is recognised on work done based on:

Percentage of completion; or

The intrinsic value, reckoned at 97.5% of contract value, the balance 2.5% is recognised as income when the contract is completed.

- (iii) Income from engineering services rendered is recognised at realizable value based on percentage of work completed.
- (iv) Income from supply/ erection of non-BHEL equipment/ systems and civil works is recognised based on dispatches to customer/work done at project site.

11 Accounting for Foreign Currency Transactions

Transactions in foreign currencies are recorded at the exchange rates prevailing on the date of the transaction. Foreign currency monetary assets and liabilities are translated at year end exchange rates. Exchange difference arising on settlement of transactions and translation of monetary items are recognised as income or expense in the year in which they arise.

12 Translation of Financial Statements of Integral Foreign Operations

(i) Items of income and expenditure

- are translated at average rate except depreciation, which is converted at the rates adopted for the corresponding fixed assets.
- (ii) Monetary items are translated at the closing rate; non-monetary items carried at historical cost are translated at the rates in force on the date of the transaction; non-monetary items carried at fair value are translated at exchange rates that existed when the value were determined.
- (iii) All translation variances are taken to Statement of profit and loss.

13 Employee Benefits

Provident Fund and Employees' Family Pension Scheme contributions are accounted for on accrual basis. Liability for Earned Leave, Half Pay Leave, Gratuity, Travel claims on retirement and Post Retirement Medical Benefits are accounted for in accordance with actuarial valuation. Compensation under Voluntary Retirement Scheme is charged off in the year of incurrence on a pro-rata monthly basis.

14 Claims by/against the Company

- (i) Claims for liquidated damages against the Company are recognised in accounts based on management's assessment of the probable outcome with reference to the available information supplemented by experience of similar transactions.
- (ii) Claims for export incentives / duty drawbacks/ duty refunds and insurance claims etc. are taken into account on accrual.
- (iii) Amounts due in respect of price escalation claims and/or variations in contract work are recognised as revenue only when there are conditions in the contracts for such claims or variations and/or evidence of the acceptability of the same from customers. However, escalation is restricted to intrinsic value.

15 Provision for Warranties

i) For construction contracts entered into on

or after 01.04.2003:

The company provides warranty cost at 2.5% of the revenue progressively as and when it recognises the revenue and maintain the same through the warranty period.

(ii) For all other contracts:

Provision for contractual obligations in respect of contracts under warranty at the year end is maintained at 2.5% of the value of contract. In the case of contracts for supply of more than a single product 2.5% of the value of each completed product is provided.

(iii) Warranty claims / expenses on rectification work are accounted for against natural heads as and when incurred and charged to provisions in the year end.

16 Government Grants

Government Grants are accounted when there is reasonable certainty of their realisation.

Grants related to fixed depreciable assets are adjusted against the gross cost of the relevant assets while those related to non-depreciable assets are credited to capital reserve.

Grants related to revenue, unless received as compensation for expenses / losses, are recognised as revenue over the period to which these are related on the principle of matching costs to revenue.

Grants in the form of non-monetary assets are accounted for at the acquisition cost, or at nominal value if received free.

17 Taxes on Income

Current tax is determined on the basis of taxable income in accordance with the provisions of the Income Tax Act, 1961. Deferred tax liability/asset resulting from timing difference between accounting income and taxable income is recognised considering the tax rate and laws that have been enacted or substantively enacted as on the balance sheet date. Deferred tax asset is accounted for and carried forward only to the extent that there

is reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised. Deferred tax assets in respect of unabsorbed depreciation and carry forward of losses are recognised only if there is virtual certainty that there will be sufficient future taxable income available to realise such assets.

18 Impairment

The carrying amount of cash generating units is reviewed at each balance sheet date where there is any indication of impairment. An impairment loss is recognised in the Statement of Profit and Loss where the carrying amount exceeds the recoverable amount of the cash generating units. An impairment loss is reversed if there is change in the recoverable amount and such loss either no longer exists or has decreased.

19 Segment Reporting

Segment reporting is in line with the accounting policies of the company. Revenue and expenses are identified to segments on the basis of their relationship to the operating activities of the segment. Revenue, expenses, assets and liabilities which are not allocable to segments on a reasonable basis, are included under "Unallocated revenue / expenses / assets / liabilities".



31 - Other Notes on Financial Statements

S. No.	Des	Description				2012-2013
1	Capi	tal &	other commitments			
	a)	be e	mated amount of contracts, net of advances, remaining to xecuted on capital account and not provided for above includes for acquisition of intangible assets	₹ in Crore	327.92 9.80	323.89 1.65
	b)	has inco	stment in the Joint Venture entities for which the company restrictions for their disposal for five years from the date of rporation /commercial operation of the project/first unit of project/completion of first EPC contract, as the case may	₹ in Crore	406.50	381.25
	c)	restr	stment in the Subsidiary for which the company has rictions for their disposal for first four years after the stration of contract (19.01.2011)	₹ in Crore	5.36	5.36
	d)	Com entit	nmitments towards future investment in the joint venture ies.	₹ in Crore	137.50	25.00
	e)	cont mate	ew of the nature of business, being long term construction tracts there may be other commitments for purchase of erial etc., which has been considered as normal business tess, hence not been disclosed.			
2	Lanc	nd and buildings includes				
	a)	(i)	Acres of land for which formal transfer/ lease deed have not been executed	Acres	8939.61	8462.27
			Net Block of above	₹ in Crore	79.17	5.36
		(ii)	Number of flats for which formal transfer/ lease deed have not been executed	Nos.	12	12
			Net Block of above	₹ in Crore	1.51	1.55
		(iii)	Number of buildings for which formal transfer/ lease deed have not been executed	Nos.	1	1
			Net Block of above	₹ in Crore	5.07	5.21
		(iv)	Acres of land for which the cost paid is provisional; registration charges and stamp duty (net of provision already made), if any, would be accounted for on payment.	Acres	528.18	51.52
			Net Block of above	₹ in Crore	70.98	0.87
	b)	Acres of land leased to Ministry of Defence, Govt. of India Departments & others Acres of land being used by Ministry of Defence and for which further approval of the competent authority for continuance of licencing of this land is awaited.		Acres	30.60	31.27
	c)			Acres	180.00	180.00
	d)	Acre	es of land under adverse possession/encroachment.	Acres	598.78	527.94
	e)	(Cos	85 acres of land pending mutation at Haridwar st of land of 2(b), (c), (d) & (e) above mentioned is not erial)			



5

3	The impact on the profit of providing 100 percent depreciation on fixed assets upto ₹ 10,000/- each, without considering such impact of earlier years, is as under:					
	1009 year		reciation on assets upto ₹ 10,000/- charged off in the accounting	₹ in Crore	10.59	11.40
	Nor	mal d	epreciation on above.	₹ in Crore	3.21	3.33
	Exc	ess a	mount charged.	₹ in Crore	7.38	8.07
4	Reve	enue	from Operations			
	i)	a)	Includes based on provisional prices	₹ in Crore	154.02	261.87
		b)	includes for escalation claims raised in accordance with sales contracts, inclusive of escalation claims on accrual basis, to the extent latest indices were available;	₹ in Crore	1673.94	2136.62
		c)	includes despatches of equipment held on behalf of customers at their request for which payment has been received by Company; and	₹ in Crore	36.22	151.55
		d)	excludes for price reduction (net of refund) due to delay in delivery as per the terms of the contract.	₹ in Crore	57.66	201.19

ii) Terminal excise duty refund on deemed export contracts is accounted on dispatch of goods. Export subsidy/duty drawback claims on lodgement of claims and Insurance claims based on acceptance.

Claims against the company not acknowledged as debt :	
Claims against the company her dollhowloaged do dobt.	
i) a) Income Tax Pending Appeals ₹ in Crore 0.90	34.05
b) Against which paid under protest included under the head "Deposits " ₹ in Crore 0.00	0.00
ii) a) Sales Tax Demand ₹ in Crore 1343.70	76.47
b) Against which paid under protest included under the head "Deposits" ₹ in Crore 190.51	21.85
iii) a) Excise Duty demands ₹ in Crore 489.55 3	33.56
b) Against which paid under protest included under the head "Deposits" ₹ in Crore 17.75	8.52
iv) a) Custom Duty demands ₹ in Crore 3.14	0.21
b) Against which paid under protest included under the head "Deposits" ₹ in Crore 2.89	0.06
v) Court & Arbitration cases ₹ in Crore 1033.88	26.38
vi) a) Liquidated Damages ₹ in Crore 4347.41 33	76.67
b) Amount deducted by customers towards LD included in vi)a ₹ in Crore 2672.49 20	04.98
vii) Counter Claim by contractors ₹ in Crore 0.77	0.61
viii) a) Service Tax Demand ₹ in Crore 291.71	65.41
b) Against which paid under protest ₹ in Crore 0.61	0.01
ix) Others ₹ in Crore 65.31	56.54
x) Corporate Guarantee given on behalf of subsidiary company ₹ in Crore 0.00	6.56



(In view of the various court cases and litigations and claims disputed by the company financial impact as to outflow of resources is not ascertainable at this stage).

- 6 a) Cash credit limit from banks aggregating to ₹ 5000 Crore (previous year ₹ 5000 Crore) and Company's counter guarantee / indemnity obligations in regard to bank guarantee / letters of credit limit aggregating to ₹ 50000 Crore (previous year ₹ 50000 Crore) sanctioned by the consortium banks are secured by first charge by way of hypothecation of raw materials, components, work in progress, finished goods, stores, trade receivables and other current assets both present and future. The outstanding bank guarantees as at 31.03.2014 is ₹ 45007 Crore (previous year ₹ 41786 Crore).
 - b) Corporate Guarantees outstanding as on 31.03.2014 is ₹3312.07 Crore (Previous year ₹4717.71 Crore).
- 7 Other payable/ liabilities include a sum of ₹ 100.51 Crore (previous year ₹ 100.51 Crore) towards guarantee fee demanded by the Government of India in respect of foreign currency loans taken by the Company at the instance of the Government upto 1990-91. The matter for its waiver has been taken up with the Government since there was no stipulation for payment of such guarantee fee at the time the loans (guaranteed by Government) were taken. Vide BHEL letter dated 05.09.2013, Department of Heavy Industries (DHI) has been again requested for waiver of the guarantee fee.
- 8 Amorphous Silicon Solar Cell Plant (ASSCP), Gurgaon was taken on April 1, 1999 from Ministry of Non-conventional Energy Sources on lease for a period of 30 years. The formal lease agreement with the Ministry of Non-Conventional Energy Sources is yet to be finalised.
- 9 Balances shown under Long term Trade receivable, Trade Receivables, Trade payables, contractor's advances, deposits and stock/materials lying with sub-contractors/fabricators are subject to confirmation, reconciliation & consequential adjustment, if any. The reconciliation is carried out on ongoing basis as the Company is in the business of long term construction contracts & provisions, wherever considered necessary, have been made in line with the guidelines.

10	The	disclosure relating to Micro and Small Enterprises		2013-14	2012-13
	Tota	Outstanding at the end of the accounting year.	173.92	503.30	
	i)	The principal amount remaining unpaid to supplier as at the end of the accounting year.	₹ in Crore	173.85	492.83
	ii)	The interest due thereon remaining unpaid, to supplier as at the end of accounting year.	₹ in Crore	0.07	10.47
	iii)	The amount of interest paid, along with the amounts of the payment made to the supplier beyond appointed day during the year.	₹ in Crore	0.00	0.00
	iv)	The amount of interest paid in terms of section 18, along with the amounts of the payment made to the supplier beyond the appointed day during the year.	₹ in Crore	0.00	0.00
	v)	The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding interest specified under this Act.	₹ in Crore	0.38	5.67
	vi)	The amount of interest accrued during the year and remaining unpaid at the end of year.	₹ in Crore	0.45	8.07
	vii)	The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprises, for the purpose of disallowance as a deductible expenditure.	₹ in Crore	0.45	10.14



11 a) The disclosures relating to Construction Contracts entered on or after 01.04.2003 as per the requirement of Accounting Standard -7 (Revised) are as follows:

	2013-14	2012-13
Contract revenue recognised for the year	33109.49	41925.55
In respect of Contract in progress at the end of year :		
The aggregate amount of Cost incurred and recognised profits (less recognised losses)	240459.04	207339.17
Amount of advance received	7949.11	7899.17
Amount of retentions (deferred debts)	19009.06	16845.57
In respect of dues from customers after appropriate netting off		
Gross amount due from customer for the contract work as an asset	2903.39	2678.10
Gross amount due to customer for the contract work as a liability	2161.35	2648.75
Contingencies	-	-

- b) The estimates of total costs and total revenue in respect of construction contracts entered on or after 1st April, 2003 in accordance with Accounting Standard (AS) -7 (R) Construction Contracts are reviewed and updated periodically to ascertain the percentage completion for revenue recognition. However, it is impracticable to quantify the impact of change in estimates.
- 12 The operations of the Tishreen Syrian project site, Libyan project site, Afganistan, Vietnam, Belarus have been consolidated based on the unaudited accounts maintained at the regional headquarter at Noida.
- The details of Research & Development Expenditure incurred during the year which is deductible (other than land & building) under section 35 (2AB) of the Income Tax Act, 1961.

A.	A. Capital Expenditure on R&D		2013-14	2012-13
	Land	₹ in Crore	0.00	0.00
	Building	₹ in Crore	4.43	0.53
	Plant & Machinery & Other Equipments	₹ in Crore	49.05	66.89
	Total Capital Expenditure	₹ in Crore	53.48	67.42
B.	Revenue Expenditure on R & D			
	Salaries & Wages	₹ in Crore	198.56	187.56
	Material Consumables/spares	₹ in Crore	24.83	24.74
	Manufacturing & Other Expenses (Net of Income)	₹ in Crore	79.01	65.64
	Total Revenue Expenditure (Net of Income)	₹ in Crore	302.40	277.94

- **14** The disclosure relating to derivative instruments:
 - a) The derivative instruments that are hedged and outstanding as on 31.03.2014 is Nil (previous year Nil).
 - b) The foreign currency exposures that are not hedged by a derivative instrument or otherwise are as under:



In foreign currency	2013-14	2012-13
in US \$ in Crore	69.75	62.53
in EURO in Crore	57.05	60.61
in LYD in Crore	0.83	0.88
in RO in Crore	0.03	0.03
In Indian currency		
in US \$ ₹ in Crore	4136.82	3372.99
in EURO ₹ in Crore	4635.44	4160.17
in LYD ₹ in Crore	39.75	37.17
in RO ₹ in Crore	5.24	4.78
in Others ₹ in Crore	32.20	35.19
b) Liabilities		
In foreign currency		
in US \$ in Crore	26.53	36.21
in EURO in Crore	18.84	32.62
in LYD in Crore	1.42	1.42
In Indian currency		
in US \$ ₹ in Crore	1607.18	1987.81
in EURO ₹ in Crore	1575.57	2297.00
in LYD ₹ in Crore	69.36	61.00
in Others ₹ in Crore	210.24	151.22
		(₹ in Crore)
Remuneration paid/payable to Directors (including Chairman & Managing Director)*	2013-14	2012-13
Salaries & Allowances	2.39	2.12
Contribution to PF	0.11	0.12

*The above amount includes leave encashment on payment basis & excludes group insurance premium.

The CMD and functional directors have been allowed the use of staff car for both duty and non-duty journeys. The ceiling of non duty journey is 1000 kms p.m against recovery of prescribed amount in accordance with terms and condition of appointment. The monetary value of the perquisite for the use of car, if calculated in accordance with the provisions of I.T. Rules, 1962 would amount to ₹ 0.02 Crore (Previous Year ₹ 0.02 Crore).

(₹ in Crore)

0.09

0.23

0.33

0.19

16	a)	Expenditure on departmental repair & maintenance which are as under:	2013-14	2012-13
		Plant & Machinery	186.64	192.06
		Buildings	56.41	58.97

15

Others

Contribution to Gratuity Fund



	Others	51.13	31.30
b)	Agency Commission on exports included in expenses in connection with	44.4=	10.55
	exports	11.15	18.55
c)	Expenditure on research & development	311.38	337.18
d)	Rent Residential	50.96	59.12
e)	Payment to Auditors (Net of service tax)		
	As Auditors	0.52	0.50
	includes paid abroad	0.02	0.01
	Reimbursement of expenses	0.15	0.16
	Taxation matters (including certification)	0.14	0.12
	includes paid abroad	0.02	0.00
	Other services	0.35	0.33
f)	Payment to Cost Auditors	0.12	0.12
g)	Expenditure on entertainment	7.41	8.27
h)	Expenditure on foreign travel		
	No. of tours	734	891
	Expenditure in Rupees	15.82	19.46
i)	Expenditure on Publicity and Public Relations		
	Salaries allowances & other benefits	11.96	11.47
	Other expenses	17.52	15.00
j)	Director's Fees	0.08	0.12

17 The disclosure relating to AS-15 (R) – Employee Benefits

a) Gratuity Plan

The gratuity liability arises on account of future payments, which are required to be made in the event of retirement, death in service or withdrawal. The liability has been assessed using projected unit credit actuarial method.

Reconciliation of opening and closing balances of the present value of the defined benefit obligation as at the year ended are as follows:

1	Cha	ange in present value of obligation	2013-14	2012-13
	a)	Present value of obligation as at the beginning	1872.92	1828.21
	b)	Acquisition adjustment	-	-
	c)	Interest Cost	149.83	146.26
	d)	Past service cost	-	-
	e)	Current service cost	92.28	86.86
	f)	Curtailment cost / (Credit)	-	-
	g)	Settlement cost / (Credit)	-	-
	h)	Benefits paid	-241.55	-246.85
	i)	Actuarial (gain) / loss	30.79	58.45



	j)	Present value of obligation at the end of the period	1904.28	1872.92
2	Cha	ange in the fair value of plan assets		
	a)	Fair value of plan assets at the beginning	1872.92	1828.21
	b)	Acquisition Adjustments	-	
	c)	Expected return on plan assets	159.20	155.40
	d)	Contributions	-	
	e)	Benefits paid	-241.55	-246.85
	f)	Actuarial gain / (loss) on plan assets	-6.15	-5.92
	g)	Fair value of plan assets as at the end of the year	1784.42	1730.83
3	Fair	value of plan assets		
	a)	Fair value of plan assets at the beginning	1872.92	1828.21
	b)	Acquisition Adjustments	-	
	c)	Actual return on plan assets	153.05	149.48
	d)	Contributions	-	
	e)	Benefits paid	-241.55	-246.85
	f)	Fair value of plan assets at the year end	1784.42	1730.83
	g)	Funded status	-119.86	-142.09
	h)	Excess of actual over estimated return of plan assets	-6.15	-5.92
4	Actuarial gain / loss recognised			
	a)	Actuarial gain / (loss) for the period – obligation	-30.79	-58.45
	b)	Actuarial (gain) / loss for the period – plan assets	6.15	5.92
	c)	Total (gain) / loss for the period	36.94	64.37
	d)	Actuarial (gain)/ loss recognised in the period	36.94	64.37
	e)	Unrecognised actuarial (gains)/ losses at the end of the period	-	-
5	The	amount recognised in balance sheet and statement of profit and loss		
	a)	Present value of obligation as at end of the period	1904.28	1872.92
	b)	Fair value of plan assets as at the end of period	1784.42	1730.83
	c)	Funded status	-119.86	-142.09
	d)	Excess of actual over estimated	-6.15	-5.92
	e)	Unrecognised actuarial (gains)/ losses	-	
		Less: Pursuant to Amalgamation	-12.60	
	f)	Net asset/ (liability) recognised in balance sheet	-107.26	-142.09
6	Ехр	ense recognised in the statement of profit and loss		
	a)	Current service cost	92.28	86.86
	b)	Past service cost	-	-
	c)	Interest cost	149.83	146.26
	d)	Expected return on plan assets	-159.20	-155.40



	e)	Curtailment cost / (credit)	-	
	f)	Settlement cost / (credit)	-	-
	g)	Net actuarial (gain) / loss recognised in the period	36.94	64.37
	h)	Adjustment for reversal of liability	12.72	
	i)	Expenses recognized in the statement of profit & loss	107.13	142.09
		umptions- Discounting rate 8.50% (prev. year 8.00%), Future salary inc 0%)., Expected rate of return on plan assets 8.50% (prev. year 8.50%).	crease 6.50%	(prev. year
b)	Pos	t Retirement Medical Benefits Plan		₹ in Crore
1	Cha	nge in present value of obligation	2013-14	2012-13
	a)	Present value of obligation as at the beginning	1222.20	1069.10
	b)	Acquisition adjustment	0.00	0.00
	c)	Interest cost	97.78	85.53
	d)	Past service cost	0.00	0.00
	e)	Current service cost	23.40	21.32
	f)	Curtailment cost / (Credit)	0.00	0.00
	g)	Settlement cost / (Credit)	0.00	0.00
	h)	Benefits paid	-68.80	-63.66
	i)	Actuarial (gain) / loss	85.87	109.91
	j)	Present value of obligation as at the end of year	1360.44	1222.20
2	Cha	nge in the fair value of plan assets	-	
3	Fair	value of plan assets	-	_
	Fun	ded Status	-1360.44	-1222.20
4	Actu	uarial gain / loss recognised		
	a)	Actuarial gain / (loss) for the period - obligation	-85.87	-109.91
	b)	Actuarial (gain) / loss for the period – plan assets	-	
	c)	Total (gain) / loss for the year	85.87	109.91
	d)	Actuarial (gain)/ loss recognised in the period	85.87	109.91
	e)	Unrecognized actuarial (gains)/ losses at the end of the period	-	-
5	The	amount recognised in balance sheet and statement of profit and loss		
	a)	Present value of obligation as at the end of the year	1360.44	1222.20
	b)	Fair value of plan assets as at the end of the year	-	
	c)	Funded status	-1360.44	-1222.20
	d)	Net assets / (liability) recognised in balance sheet	-1360.44	-1222.20
6	Ехр	enses recognised in the statement of profit and loss		



a)	Current service cost	23.40	21.32
b)	Interest cost	97.78	85.53
c)	Net actuarial (gain) / loss recognised in the year	85.87	109.91
d)	Expenses recognised in the statement of profit & loss	207.04	216.75

c) Long Term Leave Liability (EL/NEL/HPL)

The company provides for earned leave benefit and half pay leave to the employees of the company which accrue half yearly at 15 days (maximum) and 10 days respectively. 73.33% of the earned leave is encashable while in service and upto a maximum of 300 days on retirement. Half pay leave is encashable within 3 months prior to superannuation or on separation beyond the age of 50 years subject to the overall ceiling of 480 days. The leave liability has been treated as other long term benefits and has been assessed using projected unit credit actuarial method.

1	Cha	ange in present value of obligation	2013-14	2012-13
	a)	Present value of obligation as at the beginning	1174.31	1199.22
	b)	Acquisition adjustment	-	-
	c)	Interest Cost	93.95	95.94
	d)	Past service cost	-	
	e)	Current service cost	48.75	40.58
	f)	Curtailment cost / (Credit)	-	
	g)	Settlement cost / (Credit)	-	
	h)	Benefits paid	-256.00	-335.00
	i)	Actuarial (gain) / loss	267.61	173.57
	j)	Present value of obligation at the end of the period	1328.62	1174.31
2	Cha	ange in the fair value of plan assets		
	a)	Fair value of plan assets at the beginning	-	-
	b)	Acquisition Adjustments	-	
	c)	Expected return on plan assets	-	
	d)	Contributions	-	
	e)	Benefits paid	-	-
	f)	Actuarial gain / (loss) on plan assets	-	-
	g)	Fair value of plan assets as at the end of the year	-	
3	Fair	value of plan assets		
	a)	Fair value of plan assets at the beginning	-	
	b)	Acquisition Adjustments	-	
	c)	Actual return on plan assets	-	
	d)	Contributions	-	
	e)	Benefits paid	-	

₹ in Crore

18.80

	f)	Fair value of plan assets at the year end	-	-
	g)	Funded status	-1328.62	-1174.31
	h)	Excess of actual over estimated return of plan assets	-	-
4	Actu	uarial gain / loss recognised		
	a)	Actuarial gain / (loss) for the period - obligation	-267.61	-173.57
	b)	Actuarial (gain) / loss for the period – plan assets	-	-
	c)	Total (gain) / loss for the period	267.61	173.57
	d)	Actuarial (gain)/ loss recognised in the period	267.61	173.57
	e)	Unrecognised actuarial (gains)/ losses at the end of the period	-	-
5	The	amount recognised in balance sheet and statement of profit and loss		
	a)	Present value of obligation as at end of the period	1328.62	1174.31
	b)	Fair value of plan assets as at the end of period	-	-
	c)	Funded status	-1328.62	-1174.31
	d)	Excess of actual over estimated	-	-
	e)	Unrecognised actuarial (gains)/ losses	-	-
	f)	Net asset/ (liability) recognised in balance sheet	-1328.62	-1174.31
6	Ехр	ense recognised in the statement of profit and loss		
	a)	Current service cost	48.75	40.58
	b)	Past service cost	-	-
	c)	Interest cost	93.95	95.94
	d)	Expected return on plan assets	-	-
	e)	Curtailment cost / (Credit)	-	-
	f)	Settlement cost / (credit)	-	-
	g)	Net actuarial (gain) / loss recognised in the period	267.61	173.57
	h)	Expenses recognised in the statement of profit & loss	410.31	310.09
d)	the	company has got the actuarial valuation of provident fund done in units/regions. As per the actuarial valuation certificate liability for likely spensated by the company to the PF trust, has been provided in the acc	y interest sho	
		vision made (withdrawal) for shortfall in PF interest liability ed on actuarial valuation for the year ₹ in Crore	-10.39	-2.95
	Acc	umulated provision for shortfall in PF interest liability based	40.00	00.40

18 Related Party Transactions:

on actuarial valuation

i) Related Parties where control exists (Joint Ventures):

Powerplant Performance Improvement Ltd.

29.19



BHEL-GE Gas Turbine Services Pvt. Ltd.

NTPC-BHEL Power Projects Pvt. Ltd.

Raichur Power Corporation Ltd.

Dada Dhuniwale Khandwa Power Ltd.

Latur Power Company Ltd.

ii) Other related parties (Key Management Personnel- Functional Directors: existing & retired):

S/Shri B.P. Rao, Atul Saraya (upto 30.11.2013), O.P. Bhutani (upto 31.05.2013), M.K. Dube (upto 31.07.2013), P.K. Bajpai, R. Krishnan, W.V.K. Krishnashankar (w.e.f. 01.08.2013) and Atul Sobti (w.e.f. 01.12.2013)

iii) Details of Transactions

Joint Ventures		2013-14	2012-13
Purchase of Goods and Services	₹ in Crore	39.96	86.70
Sales of Goods and services	₹ in Crore	1982.39	2757.14
Receiving of Services	₹ in Crore	40.60	0.00
Rendering of Services	₹ in Crore	289.86	303.63
Dividend income	₹ in Crore	16.90	16.66
Royalty income	₹ in Crore	1.29	0.90
Purchase of shares	₹ in Crore	25.00	0.00
Sale of Shares	₹ in Crore	0.00	64.00
Amounts due to BHEL at the end of the year	₹ in Crore	1034.17	978.18
Amounts due from BHEL (incl. advances) at the e	nd of the year ₹in Crore	466.79	588.65
Provision for Doubtful debts	₹ in Crore	10.81	4.39
Advances given	₹ in Crore	0.81	2.20
Note: Majority of transactions are with BGGTS, N	BPPL and Raichur Power	Corporation	Ltd.
Key Management Personnel (KMP)			
Payment of Salaries	₹ in Crore	3.02	2.53
Relatives of KMP			
Amounts due to BHEL at the end of the year	₹ in Crore	0.01	0.01
Payment of Salaries	₹ in Crore	0.24	0.25
Lease			
Details of assets taken on lease on or after 1st April 200	1 are as under:		
i) Finance Lease		2013-14	2012-13
a. Outstanding balance of Minimum Lease pay	ments		
not later than one year	₹ in Crore	83.67	90.12

19



	later than one year and not later than five years	₹ in Crore	121.43	150.43
	later than five years	₹ in Crore	0.23	0.00
	Total minimum lease payments at the balance sheet date	₹ in Crore	205.34	240.55
b.	Present Value of (a) above			
	not later than one year	₹ in Crore	67.68	75.24
	later than one year and not later than five years	₹ in Crore	104.56	129.20
	later than five years	₹ in Crore	0.20	0.00
	Total of Present Value at the balance sheet date	₹ in Crore	172.45	204.44
c.1	Finance charges	₹ in Crore	32.89	36.11
c.2	Present value of Residual value, if any	₹ in Crore	0.00	0.00

ii) The company is in the practice of taking houses for employees, office buildings and EDP equipments etc. on operating lease both as cancellable and non-cancellable.

iii)	Operating Lease		2013-14	2012-13
	The future minimum lease payments under non-cancellable	le operating lease	are as under	
	not later than one year	₹ in Crore	1.47	1.94
	later than one year and not later than five years	₹ in Crore	1.95	2.43
	later than five years	₹ in Crore	4.15	4.40

iv) Details regarding rentals in respect of assets taken on lease prior to 1.4.2001 are as given below:

Cost of Assets			
Land & Buildings	₹ in Crore	0.01	0.01
Computers & peripherals	₹ in Crore	0.00	0.00
Rentals payable over unexpired period of lease			
Land & buildings	₹ in Crore	0.02	0.02
Computers & peripherals	₹ in Crore	0.00	0.00
ninga nar Chara			

20 Earnings per Share:

Lamings per Snare.			
Weighted average number of Equity Shares outstanding during the year (A)	Nos. in Crore	244.760	244.760
Face Value of Equity Share	(₹)	2.00	2.00
Net Profit for the year (B)	₹ in Crore	3460.78	6614.73
Basic and Diluted Earnings Per Share (B)/(A)	(₹)	14.14	27.03

21 Joint Ventures

Pursuant to compliance of Accounting Standard-27 issued by the Institute of Chartered Accountants of India, relevant disclosures relating to Joint ventures are as follows:



2013-14 20

2012-13

a)	Names of Joint Ventures	Country of Incorpo- ration	Propor Owne	
	Power Plant Performance Improvement Ltd.	India	One share	One share
	BHEL-GE Gas Turbine Services Pvt Ltd.	India	less than 50%	less than 50%
	NTPC-BHEL Power Projects Pvt. Ltd.	India	50%	50%
	Latur Power Company Ltd.	India	50%	50%
	Raichur Power Corporation Ltd.	India	36.49%	42.73%
	Dada Dhuniwale Khandwa Power Ltd.	India	49.99%	49.99%

- b) The provision for diminution in value of investment in Powerplant Performance Improvement Ltd. has been made since the company is under liquidation and the amount paid as equity is not recoverable.
- c) Aggregate amount of company's interest in Joint Ventures as per accounts is as under:

BHEL-GE Gas Turbine Services Pvt. Ltd.		(₹ in Crore)
	2013-14	2012-13
Non Current Assets	10.86	6.99
Net Current Assets	86.17	72.42
Non Current Liabilities	4.10	3.45
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	3.87	2.73
Shareholders Funds	96.80	78.69
Income	399.04	413.55
Expenses	341.92	353.10
Contingent Liabilities	2.66	2.53
Capital Commitments	0.41	2.97
NTPC-BHEL Power Projects Pvt. Ltd.		(₹ in Crore)
	2013-14	2012-13
Non Current Assets	57.22	35.96
Net Current Assets	13.00	3.36
Non Current Liabilities	6.18	4.97
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	2.09	1.63
Shareholders Funds	66.13	35.99
Income	42.88	57.33

Expenses	34.98	53.61
Contingent Liabilities	37.75	0.00
Capital Commitments	17.13	28.85
		(₹ in Crore)
Raichur Power Corporation Ltd.	2013-14	2012-13
Non Current Assets	2397.69	1676.19
Net Current Assets	-195.81	-215.74
Non Current Liabilities	1856.97	1111.07
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	331.52	331.52
Income	0.50	0.00
Expenses	162.73	80.15
Figures of 2013-14 are based on provisional unaudited final results	ncial	
		(₹ in Crore)
Dada Dhuniwala Khandwa Power Ltd.	2013-14	2012-13
Non Current Assets	8.20	19.87
Net Current Assets	14.79	3.01
Non Current Liabilities	0.12	0.00
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	22.87	22.89
Income	0.00	0.38
Expenses	0.00	0.00
Contingent Liabilities	1.93	1.93
Figures of 2013-14 are based on unaudited financial results	5	
		(₹ in Crore)
Latur Power Company Ltd.	2013-14	2012-13
Non Current Assets	0.00	0.00
Net Current Assets	2.59	2.44
Non Current Liabilities	0.00	0.00



Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	2.59	2.74
Income	0.23	0.21
Expenses	0.02	0.01
Contingent Liabilities	0.00	0.00
Capital Commitments	0.00	0.00

Figures of 2013-14 are based on unaudited financial results

As per the listing agreement with the Stock Exchanges, the requisite details of loans and advances in the nature of loans, given by the Company are given below:

i)	In respect of Subsidiary Company:		(₹ in Crore)
	BHEL Electrical Machines Ltd.	2013-14	2012-13
	Loans and advances in the nature of loans outstanding	0.00	0.00
	Maximum amount of loans and advances in the nature of loans outstanding during the year	0.00	1.70

- ii) No loans have been given (other than loans to employees), wherein there is no repayment schedule or repayment is beyond seven years; and
- iii) There are no loans and advances in the nature of loans, to firms/companies, in which directors are interested.
- 23 The disclosure relating to Accounting Standard -29

(₹ in Crore)

2012-13

2013-14

	2013-14	2012-13
Liquidated Damages		
Opening	1320.46	1137.44
Add: Adjustment pursuant to amalgamation (Refer para 26 note 31)	39.61	
Additions	697.84	649.42
Usage/ Write off/payment	-61.67	-348.08
Withdrawal/adjustments	-267.47	-118.32
Closing Balance	1728.77	1320.46
Contractual Obligation		
Opening	4989.97	3850.91
Add: Adjustment pursuant to amalgamation (Refer para 26 note 31)	6.87	
Additions	1116.95	1786.05
Usage/ Write off/payment	-133.39	-154.31
Withdrawal/adjustments	-343.59	-492.68
Closing Balance	5636.81	4989.97

- b) Liquidated damages are provided in line with the Accounting Policy of the Company and the same is dealt suitably in the accounts on settlement or otherwise. Contingent liability relating to liquidated damages is shown in item No. 5 of Note no. 31
- c) The provision for contractual obligation is made at the rate of 2.5% of the contract revenue in line with significant Accounting Policy No.15 to meet the warranty obligations as per the terms and conditions of the contract. The same is retained till the completion of the warranty obligations of the contract. The actual expenses on warranty obligation may vary from contract to contract and on year to year depending upon the terms and conditions of the respective contract.
- 24 Assets and Liabilities are classified between Current and Non-current considering 12 months period as operating Cycle.
- 25 Item of expense and income less than ₹ One Lakh are not considered for booking under Prior Period Items.

26 Amalgamation of erstwhile Bharat Heavy Plate & Vessels Limited , Visakhapatnam with the Company

- a) The Board for Industrial and Financial Reconstruction (BIFR) vide its order dated August 29, 2013 sanctioned the Modified Draft Rehabilitation Scheme (MDRS) for envisaging merger of Bharat Heavy Plate & Vessels Limited (BHPV) (100 % subsidiary of BHEL) with the Company under Section 18(5) of Sick Industrial Companies (Special Provisions) Act, 1985 ("SICA") with effect from appointed date i.e. October 01, 2011.
- b) The Company has made necessary filings with the Registrar of Companies on August 30, 2013 (effective date). The scheme of merger has accordingly been given effect in these accounts.
- c) Pursuant to the merger the assets and liabilities of the erstwhile Bharat Heavy Plate & Vessels Limited (whose principle business was design, fabrication, supply and erection of heat exchanges, columns, storage spheres, reactors and related products)were transferred to and vested on going concern basis in the Company with effect from the appointed date i.e. October 01, 2011.
- d) In terms of the Accounting Standard (AS) 14 "Accounting for Amalgamations", the scheme of amalgamation has been accounted for under the "Pooling of Interests method" wherein all the assets, liabilities and reserves & surplus/losses of the erstwhile BHPV Limited have been taken over at their book values as appearing in the books of accounts as on October 01, 2011.
- e) On the amalgamation of the BHPV with the Company, the share capital of BHPV stand cancelled without any further act or deed or instrument, from the Appointed Date. Since the Company holds 100% (along with its nominees) of the issued, subscribed and paid-up capital of BHPV, neither allotment of any new shares nor any payment was made to any person whatsoever in consideration or in lieu of the transfer and vesting of the Undertaking/ Business of BHPV in the Company.
- f) The paid up Equity Share Capital of ₹ 33.80 Crore appearing in the books of account of BHPV and the corresponding Investments of ₹ 1 in respect thereof appearing in the books of account of the Company stand cancelled and the difference arising there from amounting to ₹ 33.80 Crore has been adjusted with capital reserves of the Company.
- g) Debit balance of Profit and Loss Account of the BHPV amounting to ₹ 278.05 Crore as on 01.10.2011 have been adjusted against surplus balance in Statement of Profit and Loss of the Company.
- h) All outstanding inter company balances totaling ₹273.67 Crore stand cancelled against corresponding balances in the books of the Company. Assets/liabilities as on appointed date (i.e. 01.10.2011) acquired on amalgamation are as follows:

Assets		(₹ in Crore)
Fixed Assets (net)	4.25	
Investment	0.01	
inventories	44.99	
Sundry Debtors	120.98	



Cash & Bank Balances	2.73	
Loans and advances	55.77	
		228.73
Liabilities		
Capital Reserve	0.02	
Unsecured Loans	9.62	
Current Liabilities	165.01	
Provisions	24.66	
		199.31
Net Assets-Liabilities acquired on amalgamation		29.42
Debit balance of Profit & Loss account	278.05	
Less: Inter company balances	273.67	4.38
Adjusted with Capital Reserve		33.80

- i) All the regular employees, who are in the service of BHPV, on the effective date, have become the employees of the Company and their services will be continuous and shall not be interrupted by reason of the amalgamation of BHPV.
- j) Adjustment against Surplus i.e. balance in statement of profit and loss on account of:

(₹ in Crore)

i) Debit balance of Profit & Loss account of the erstwhile BHPV as on appointed date (01.10.2011)

-278.05

ii) Profit before tax for the period from 01.10.2011 to 31.03.2013

Turnover

Less: Expenses 283.10 59.95

iii) Provision for tax including deferred tax

136.85

343.05

- 27 a) Revenue from operations and Profit before tax includes ₹ 105.04 Crore and ₹ (-)186.55 Crore respectively of HPVP Unit (erstwhile BHPV) for the current year 2013-14.
 - b) On account of amalgamation of Bharat Heavy Plate & Vessels Limited, the Company's wholly-owned subsidiary, with the company with effect from 01 October, 2011, the results pertaining to the year ended 31st March, 2014 are not comparable with that of the corresponding previous year.
 - c) Previous year's figures have been regrouped/rearranged wherever considered necessary.



28. Segment Information

(₹ in Crore)

		For the year ended 31.3.2014			For the year ended 31.3.2013			
A.	PRIMARY SEGMENT - BUSINESS SEGMENTS	S						
		Power	Industry	Total	Power	Industry	Total	
I.	SEGMENT REVENUE							
a.	Segment Revenue	32485.38	7852.54	40337.92	39552.48	10604.00	50156.48	
b.	Operating Revenue-External	32485.38	7852.54	40337.92	39552.48	10604.00	50156.48	
II.	SEGMENT RESULTS							
a.	Segment Results	5400.98	985.51	6386.49	8559.48	2196.57	10756.05	
b.	Unallocated expenses (Net of income)			1239.56			1198.34	
C.	Profit before finance cost & Income Tax (a) - (b)			5146.93			9557.71	
d.	Finance cost			132.63			125.27	
e.	Net Profit before Income Tax (c) - (d)			5014.30			9432.44	
f.	Income Tax			1553.52			2817.71	
g.	Net Profit after Income Tax			3460.78			6614.73	
Ш	ASSETS & LIABILITIES							
a.	Segment Assets	45469.32	11977.15	57446.47	46465.35	13038.33	59503.68	
b.	Unallocated Assets			15344.70			10624.98	
c.	Total Assets			72791.17			70128.66	
d.	Segment Liabilities	29294.73	6684.03	35978.76	29809.47	7182.77	36992.24	
e.	Unallocated Liabilities			3765.36			2692.32	
f.	Total Liabilities			39744.12			39684.56	
IV	OTHER INFORMATION							
a.	Cost incurred during the period to acquire fixed assets (Incl. CWIP)	337.34	273.59		694.74	203.27		
b.	Depreciation	755.29	186.19		709.65	191.91		
c.	Non Cash Expenses (other than depreciation)	2092.02	235.40		1361.49	354.30		
В.	SECONDARY SEGMENT - GEOGRAPHICAL	SEGMENTS	<u> </u>					
		Within India	Outside India	Total	Within India	Outside India	Total	
1	Net Sales / Income from Operations	38354.35	1983.57	40337.92	49261.01	919.73	50156.48	
2	Total Assets	72164.17	627.00	72791.17	69634.52	493.93	70128.66	
3	Cost incurred during the period to acquire Fixed Assets	713.85	-0.79	713.06	939.52	0.07	939.59	

The primary segments have been identified as 'Power' and 'Industry' based on the orders booked by the respective business sectors. The orders booked by International Operation Group is taken to Power or Industry as the case may be.



29. Other Information

a. Sales, Opening Stocks & Closing Stocks

Product	Unit	Sales during the year 2013-2014		Op. Stoo Goods 01	ck of Fin.	CI. Stock of Fin. Goods 31.3.2014	
		Qty.	Value	Qty.	Value	Qty.	Value
HEP, Bhopal SWITCHGEAR, CONTROLGEAR, RECTIFIER, CAPACITORS				•			
Switchgear-11 kv to 220 kv high	Nos.	5492	231.29	0	11.44	101	11.42
speed air blast circuit breakers	Nos.	(4119)	(287.08)	(16)	(0.67)	0	(11.44)
Control Panels	Nos.	970	35.73	0	2.41	12	2.42
	Nos.	(191)	(40.92)	0	(0.08)	0	(2.41)
Industrial controlgear	Nos.	0	6.80	0	0.00	0	0.00
	Nos.	0	(9.12)	0	0.00	0	0.00
Traction controlgear for AC, DC	Set	166	105.31	0	0.11	7	1.42
& diesel system	Set	(251)	(163.49)	0	(0.92)	0	(0.11)
Rectifiers with Electronics	Nos.	529	76.82	0	0.28	3	0.27
	Nos.	(135)	(96.93)	0	0.00	0	(0.28)
Capacitors	MVAR	2172	17.77	0	0.00	382	2.43
	MVAR	(1046)	(10.91)	(27)	(0.28)	0	0.00
Bushings		0	22.63	0	0.41		0.70
		0	(19.22)	0	(0.20)	0	(0.41)
TRANSFORMERS							
Power transformers upto 400 kv	MVA	21568	978.18	683	26.25	1398	68.93
	MVA	(21919)	(789.82)	(311)	(22.73)	(683)	(26.25)
Instrument, welding, transformers	MVA	552	15.33	0	0.06	36	1.31
and reactors	Nos.	468		1		0	
	MVA	0	(14.04)	0	(0.19)	(0)	(0.06)
	Nos.	(490)		(24)	0.00	(1)	
INDUSTRIAL AND TRACTION MACHINES							
Traction Motors for AC,DC & diesel	Nos.	3444	466.94	17	2.42	135	9.89
system,main/auxiliary generators	Nos.	(2121)	(558.83)	0	(10.79)	(17)	(2.42)
Industrial machines, AC motors	Nos.	819	193.48	131	14.46	63	11.88
upto 1000 HP, DC motors &	Nos.	(1071)	(259.32)	(108)	(12.18)	(131)	(14.46)
generators of all types							
HEAVY ROTATING PLANT & TURBINES							40.00
Large electrical machines	Nos.	217	337.30	17	14.17	16	12.82
above 1000 HP	Nos.	(386)	(451.59)	(30)	(17.42)	(17)	(14.17)
Water wheel alternators	Nos.	6	611.33	0	14.47	0	33.03
& water turbines & Mini	MW	742	100.10	0	40.00	0	44.00
micro turbines & generators	Nos.	2	183.10	0	10.68	0	14.88
	MW	220	(575.40)		(50.04)		(4.4.47)
	Nos.	(7)	(575.49)	0	(50.94)	0	(14.47)
	MW	(880)	(005.50)		(00.40)		(40.00)
	Nos.	(7)	(325.53)	0	(39.16)	0	(10.68)
Turks Altamatana 0	MW	(1310)	005.50	_	4404	^	15.00
Turbo Alternators &	Set	5	605.53	0	44.04	0	15.32
Steam turbines	Set	(2)	(476.24)	0	(4.05)	0	(44.04)
Heat Exchangers	Nos.	27	407.98	5	5.93	7	3.66
Others	Nos.	(52)	(259.09)	0	0.00	(5)	(5.93)
Others			6.70		0.39		0.00
	-	TO-1:	(164.73)		(0.35)		(0.39)
		TOTAL	4302.22		147.52		190.38

(₹ in Cro							(₹ in Crore)
Product	Unit		9		ck of Fin.	CI. Stock of Fin.	
		2013-2			1.04.2013	Goods 31.3.201	
		Qty.	Value	Qty.	Value	Qty.	Value
TP, Jhansi							
Power transformers and	Nos.	147	451.44	0	0	0	0
special transformers	Nos.	(131)	(471.07)	0	0.00	0	0
ESP Transformer	Nos.	1179	125.00	0	0.00	0	0
	Nos.	(1705)	(174.06)	(4)	(0.19)	0	0.00
ACEMU Transformer	Nos.	10	1.95	0	0.00	0	0.00
	Nos.	(97)	(18.81)	0	0.00	0	0.00
Freight Loco transformers	Nos.	94	85.17	3	1.60	10	4.85
	Nos.	(90)	(71.71)	(8)	(6.49)	(3)	(1.60)
Instrument transformers	Nos.	491	16.85	0	0.00	0	0.00
	Nos.	(395)	(14.07)	0	0.00	0	0.00
Bus Duct	Nos./ Set	0	0.23	0	0.00	0	0.00
	Nos./ Set	0	(0.25)	0	0.00	0	0.00
Dry Type Transformer	Nos.	61	28.38	0	0	0	0
	Nos.	(75)	(26.99)	0	0.00	0	0.00
Diesel Shunters	Nos.	11	39.39	0	0.00	0	0.00
	Nos.	(7)	(27.38)	0	(0.00)	0	0.00
AC LOCO	Nos.	32	286.53	0	0.00	0	0.00
	Nos.	(62)	(492.35)	0	0.00	0	0.00
New Product Loco	Nos.	1	7.94				
Others/Misc.	Nos.		18.08		0.02		
	Nos.	0	(18.86)	0	(0.31)	0	(0.02)
		TOTAL	1060.96		1.62		4.85
HEEP, Haridwar							
Electrical Machines	MW/ Nos.	0	0	1/2	0.22	1/2	0.11
		0	0	(1/2)	(0.22)	(1/2)	(0.22)
Industrial controls panels	Nos.	0	0	3	0.19	3	0.00
Turbo Sets	Nos.	0	0	(3.00)	(0.19)	(3.00)	(0.19)
Turbine Modules	MW/	8991/79		1131/19		1357/19	
	Nos.	(40040(404)	5004.74	(4.40.(0)	005.05	(4404 (40)	040.05
-	B 43 A / /	(13319/121)	5364.74	(148/3)	365.05	(1131/19)	313.05
Turbogenerator modules	MW/ Nos.	13740/28.5	(5940.28)	1350/4	(69.07)	1711/5.5	(365.05)
		(13670/31.5)		0		(1350/4)	
Hydro sets	MW/ Nos.	0	1.47	0	0	0	0
		0	(0.68)	0	0	0	0
Super Rapid Gun Mount	Nos.	0	0.00	0	0	0	0
		(2)	(77.50)	0	0	0	0
Gas Turbine	MW/ Nos.	400/4	852.74	0	0	0	0
		0	(0.02)	0	0	0	0
Others		0	639.57	0	28.72	0	36.78
		0	(506.02)	0	(22.70)	0	(28.72)
		TOTAL	6858.52		394.18		349.94
- 							



Product	Unit		Sales during the year 2013-2014		ock of Fin. 1.04.2013	Cl. Stock of Fin. Goods 31.03.2014	
		Qty.	Value	Qty.	Value	Qty.	Value
HPBP, Trichy		·			,		
Boilers	MT	311288	8466.15	25498	358.83	39042	445.06
		(515127)	(13852.06)	(16047)	(285.09)	(25498)	(358.83)
Valves	Nos.	130485	703.02	18964	42.13	17623	30.17
		(160367)	(870.34)	(2341)	(45.55)	(18964)	(42.13)
Income from testing & other services			10.59		0		0
			(4.75)		0		0
Seamless steel tubes	MT	187	2.46	97	1.73	79	1.01
		(286)	(4.09)	0	0	(97)	(1.73)
		TOTAL	9182.22		402.69		476.24
BAP, Ranipet							
Boiler auxiliaries	MT	129139	2018.80	40734	296.98	47304	311.03
		(227150)	(3704.91)	(37701)	(256.25)	(40734)	(296.98)
Income from testing & other services			2.58				
			(1.97)		0.00		0.00
Income from external erection & other services			5.68				
			(3.67)		0.00		0.00
		TOTAL	2027.06		296.98		311.03
HPEP, Hyderabad							
Utility Sets	Nos.	7+P	388.90	Р	24.41	Р	30.65
		(P)	(818.68)	(1P)	(12.11)	(P)	(24.41)
Small & Medium Sets	Nos.	11+P	354.47	2+P	11.70	Р	16.23
		(4P)	(408.32)	(1P)	(11.11)	(2+P)	(11.70)
Pumps and heaters	Nos.	31+P	1904.88	Р	2.09	Р	23.72
		(P)	(1560.63)	(7P)	(2.49)	(P)	(2.09)
Compressors	Nos.	11+P	116.82	1+P	3.45	Р	7.71
		(P)	(642.46)	(P)	(17.78)	(1+P)	(3.45)
Gas Turbine	Nos.	12+P	635.28	0	0.00	0	9.50
		(27P)	(1448.13)	(P)	(6.97)	0	0.00
Bowl Mills	Nos.	50+P	1235.44	0	0	0	0
		(1P)	(1374.67)	0	0	0	0
Heat Exchangers	Nos.		2.77	0	0	0	0
		(P)	(21.13)	0	0	0	0
Erection Income			37.03		0		0
			(18.34)		0		0
Castings			0.75		0	0	0
			(0.48)	0	0	0	0
Breakers	Nos.	3	12.46				
		(6)	(16.27)	0	0	0	0
Oil Rigs	Nos.	Р	513.44				
		(P)	(167.31)	0	0	0	0
		TOTAL	5202.24		41.65		87.81



Product	Unit	Sales du year 20			ck of Fin. 1.04.2013	Cl. Stock of Fin. Goods 31.3.2014	
		Qty.	Value	Qty.	Value	Qty.	Value
ISG, Bangalore							
Other Services			1024.82		0		0
			(1164.11)		0		0
		TOTAL	1024.82		0.00		0.00
EDN, Bangalore							
Power devices	Nos.	3540	1.32	82	0.08	125	0.14
		(6968)	(1.93)	(129)	(0.06)	(82)	(80.0)
Photovoltaics	KWs	33761	177.10	48	0.21	55	0.27
		(2348)	(21.18)	(1)	(0.01)	(48)	(0.21)
Control Equipments	Cubicles	3709	1274.53	266	17.45	276	20.36
		(4605)	(1610.09)	(176)	(26.49)	(266)	(17.45)
		TOTAL	1452.95		17.74		20.77
EPD, Bangalore							
Insulators & bushings	MT	7333	120.26	888	10.02	661	7.17
		(5678)	(91.13)	(513)	(5.25)	(888)	(10.02)
Ceralin	MT	3543	53.69	188	2.35	156	1.67
		(4190)	(101.26)	(28)	(0.35)	(188)	(2.35)
Control Panel	Nos.		42.12			56	1.31
		(76)	(4.11)				
Income from testing & other services			3.39		0.00		4>
			(4.31)		(0.00)		(0.00)
		TOTAL	219.46		12.37		10.15
Power Group Income from erection & Other services & spares			7449.24		0.19		-7.05
Spares			(8392.84)		(1.55)		(0.19)
		TOTAL	7449.24		0.19		(-7.05)
IP, Jagdishpur		101/12	7 1 1012 1		0.10		(1100)
Insulators	CMT	5767	81.07	1048	13.27	1215	16.77
		(6385)	(84.67)	(699)	(8.84)	(1048)	(13.27)
Ceralin	МТ	2945	53.58	83	1.55	269	4.18
		(4501)	(77.15)	(36)	(1.11)	(83)	(1.55)
		TOTAL	134.65		14.82		20.95
IVP Goindwal							
Industrial Valves	Nos.	0	0.00	1050	5.38	1220	5.80
		0	0.00	(364)	(1.07)	(1050)	(5.38)
Fuel Pipe Coupling	Nos.					84	0.04
				(16)	(0.01)	0	0.00
		TOTAL	0.00		5.38		5.84
CFP, Rudrapur							
Busduct Project	Sets	49	198.67	22	9.05	24	10.21
		(39)	(207.00)	(21)	(6.76)	(22)	(9.05)
		TOTAL	198.67		9.05		10.21



Product Unit	Sales during the year 2013-2014		Op. Stock of Fin. Goods 01.04.2013		Cl. Stock of Fin Goods 31.3.2014	
	Qty.	Value	Qty.	Value	Qty.	Value
HERP, Varanasi Spares & Repairs for Boiler/ Turbine & Auxiliaries		237.84		0.12		1.49
Adamaries		(192.01)	0.00	(0.22)	0.00	(0.12)
	TOTAL	237.84		0.12		1.49
Transmission Business Group						
Spares (Including Services)		554.69		16.66		8.66
		(631.41)		(4.22)		(16.66)
	TOTAL	554.69		16.66		8.66
FP, Jagdishpur		0.04		0.00		0.00
Fabricated Items		0.04		0.00		0.00
	TOTAL	0.00		0.00		0.00
EMRP, Mumbai	TOTAL	0.04		0.00		0.00
Repair & Project work		19.29		0.00		0.07
		(46.96)		0.00		0.00
	TOTAL	19.29		0.00		0.07
International Operations Income from Sales (Revenue Recognition Adjustment)		-13.15		0.00		-1.18
•		(-12.46)		0.00		0.00
	TOTAL	-13.15		0.00		-1.18
Industry Sector Income from Sales (Revenue Recognition Adjustment)		70.94		-0.14		-1.44
/ Agustinomy		(26.58)		0.00		(-0.14)
	TOTAL	70.94		-0.14		-1.44
PE&SD				,		
Industrial sets		74.98				
		(190.84)				
Gas Turbine		62.53				
		(81.50)				
Thermal sets		0.03				
	TOTAL	137.54				
RMSG		444.05				
DG Sets & Erection services	TOTAL	111.25 111.25				
HPVP	IOIAL	111.25				
Boilers	4845	60.30	164	1.11*	438.00	9.90
Cryogenics	1767	43.23			100100	0.00
Others	16	1.51				
	TOTAL	105.04		1.11		9.90
CFFP, Haridwar						
Steel Casting	14	1.14			4.70	0.18
NF Castings MT	1	0.27				
	0	(0.22)				
	TOTAL	1.41				0.18
Adjustment		0.00		-0.94		
		(-20.30)		0		(-0.94)
GRAND TOTAL		40337.92		1361.00		1498.80
* Op Stock pursuant to amalgamation		50156.48)		(952.42)		(1359.89)



(₹ in Crore)

		For the year ended 31.03.2014	For the year ended 31.03.2013
b.	Value of imports	53333233	
	CIF basis		
	Raw materials	2248.67	3042.51
	Components and spare parts	4013.10	3245.41
	Capital goods	85.30	319.86
c.	Expenditure in foreign currency		
	Royalty	112.06	112.86
	Know-how	1.58	0.88
	Professional & Consultancy fees	14.28	12.72
	Interest and others (incl. on foreign sites)	282.69	248.25
	Dividend : @		
	a) number of non-resident shareholders	9339	9334
	b) number of shares held	361310807	338319525
	c) gross amount of dividend	118.87	124.5
	d) year to which dividend relates	2012-13	2011-12
		(Final Dividend)	(Final Dividend)
	Interim Dividend : @		
	a) number of non-resident shareholders	8725	8908
	b) number of shares held	393383985	367614071
	c) gross amount of dividend	51.53	77.93
	d) year to which dividend relates	2013-14	2012-13
		(Interim Dividend)	(Interim Dividend)
	@ The company has not made any remittance of dividend in foreing Indian Rupees to the Bankers/Power of Attroney holders of non-re		nts have been made in
d.	Value of consumption of raw materials, components, stores & spare parts.		
	#Imported (including custom duty)	6954.22	7752.76
	Indigenous	10752.48	15874.97
	Percentage of total consumption		
	Imported	39	33
	Indigenous	61	67
e.	Earnings in foreign exchange		
	Export of goods (FOB basis)	1358.41	438.68
	Interest	0	(
	Erection & other services	250.16	143.12
	FE in Deemed Exports (incl. domestic contracts and SEZ)	7169.17	11774.79
	# Includes canalised items wherever ascertained.		

ANNUAL ACCOUNTS STANDALONE



(₹ in Crore)

					For the year ended 31.03.2013		
Statement for raw materials and components consumed							
	nits	Quantity	Value	Quantity	Value		
·		•		,			
Ferrous materials	MT	252360		359639			
Met		5894301		12455008			
	los.	2744341		4484045			
	q.M	201723		16181			
	Kg.	36344557		65601635			
Oth		680		461			
Out	1013	000	2522.14	401	4517.6		
Non-ferrous materials			LULLIIT		4017.0		
	МТ	13253		10757			
Met		1316512		2628311			
	los.	195572		338013			
	i.M.	327		4285			
	Kg.	5749753		7896378			
	RL	14680		23838			
Oth		29781		34565			
	1010	20.0.	425.72	0.1000	597.1		
Insulating materials			420112		007.1		
Met	ters	39478186		55491713			
	MT	14031		23715			
	los.	208777		898553			
	.M.	3681993		2749575			
	Kg	674542		711885			
	LT	6729480		5410250			
	RL	80972		235629			
	M2	163327		190245			
	KL	6748		3493			
	ST	112		237			
Oth		7660		112034			
			277.08		305.7		
Insulated cables and Magnet wires							
Met	ters	6015498		2777834			
	los.	129112		459681			
	Kg	8163		12504			
Oth		4	86.27		45.6		
Components			8967.26		12635.2		
Others			4859.04		4942.5		
			17137.51		23043.8		

Directors' Report

BHEL Electrical Machines Limited

Dear Members,

Your Directors have pleasure in presenting the third Annual Report of your company for financial year ending 2013-14. The Company has achieved a turnover of ₹ 3702.97 Lakh which is an increase of 39.56% over the previous financial year 2012-13.

The overall working of your company for the financial year ended 31 March 2014 has recorded a net loss of ₹ 106.16 Lakh.

Financial Performance

The salient features of Financial Performance of the Company for the year are as follows:

(₹ in Lakh)

		,
	2013-2014	2012-2013
Revenue from Operations (Gross)	3702.97	2653.38
Consumption of material, erection and engineering expenses	2656.26	1811.23
Employee benefit expenses	692.61	563.25
Depreciation and amortization	94.04	100.48
Profit/(Loss) before tax and exceptional items	-131.11	-130.46
Profit/(Loss) for the period from continuing operations	-106.16	-54.96

Management Discussion and Analysis

A report on Management Discussion and Analysis is placed at **Annexure -1.**

Board of Directors

Appointment and Cessation

Mrs. Sanyukta Samaddar (Director, Department)

- of Heavy Industry) appointed as part-time Official Director on the Board of BHEL EML for a Period of three years, or till further orders, with effect from 20-01-2014.
- Shri Shashi Ranjan Prasad (Executive Director, BHEL, Bhopal) appointed as Part Time Chairman of BHEL EML for a period of three years or till further orders, with effect from 14-03-2014.
- Shri Somak Basu (AGM, BHEL) appointed as Managing Director, in Place of Shri L. Gopalakrishnan, for a period of five years or till further orders, with effect from 14-03-2014.

Directors' Responsibility Statement

In compliance with the provisions of Sec 217 (2AA) of the Companies Act, 1956, it is hereby confirmed:

- In the preparation of Annual Accounts for the Financial Year ended 31st March, 2014, the applicable Accounting Standards have been followed along with proper explanation relating to material departures;
- II. The Directors have followed Accounting Policies and applied them consistently and made judgments and estimates that were reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at the end of the Financial Year 2013-14 and of the Profit of the Company for that period;
- III. The Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- IV. The Directors have prepared the Annual Accounts for the Financial Year ended 31st March, 2014 on a 'going concern' basis.

Share Capital

There is no change in the share capital during the



year under reporting period. As your company has not bought back any shares during the period under report, the information relating to Section 217(2B) is not applicable to the Company.

Personnel

There were no employees drawing remuneration in excess of the limits specified under Section 217(2A) of the Companies Act during the year under report.

Corporate Governance

A report on the Corporate Governance along with certificate on Corporate Governance is enclosed as Annexure-II to the Directors' Report

Other Disclosures

Place: New Delhi Dated: August 6, 2014

Information in accordance with the provisions of Section 217(1) (e) of the Companies Act, 1956 read with Companies (Disclosure of particulars in the Report of the Board of Directors) Rules, 1988 regarding conservation of energy, technology absorption and foreign exchange earnings and outgo:

Your company will not come within the list of industries which has to compulsorily disclose the steps taken for conservation of energy, technology absorption, etc. However, all steps are being taken to minimize and optimize the energy consumption and to reduce the cost of operation. The Research & Development wing is being strengthened so that

the company can develop new products. There is no foreign exchange inflow during the period under report. The total foreign exchange outflow for purchase of raw materials was equivalent to ₹ 38.39 Lakh during the period under report.

Auditors

M/s. Jacob Isack & Associates, Chartered Accountants, Kanhangad, having branch at Mangalore, PIN- 575001, was appointed as Auditors of the company by the Comptroller and Auditor General for the reporting period.

Comments of C&AG

The company has received Nil comments report from Comptroller & Auditor General of India, under Sec. 619 (4) of the Companies Act, 1956 on the accounts of the Company for the year ended 31st March, 2014, are placed as Annexure to this report.

Acknowledgement

Your Directors wishes to place on record their sincere appreciation and thanks for the assistance rendered by the holding company, State Government and local body authorities, State Bank of India, Company's Vendors and Company's Customers and all others connected with the Company. The Board also places on record their sincere appreciation for the whole-hearted cooperation extended by the Officers and other staff members of the company.

For and on behalf of the Board of Directors

(S.R. Prasad)

(S.R. Prasad) Chairman



Annexure-I

Management Discussion and Analysis Report

The Company was incorporated on 19th January, 2011 based on the Joint Venture agreement between Bharat Heavy Electricals Limited (BHEL) and Government of Kerala (GoK), made on 8th September, 2010 by equity participation of 51% and 49% respectively. The company was categorized as Schedule 'C' company under Department of Heavy Industry, vide Departments Order No.20 (24)/2010-PE.XI dated 06.12.2012. Financial Year 2013-14 was the third year of continuing operations of the Company.

i. Industry Structure and Development

The Company is an engineering industry in field of Manufacture, Marketing and Servicing of Brushless AC Generators, Rectifier Regulator Units, Induction Motors and DG Sets.

The company has achieved progressive turnover in the previous years, only with the existing infrastructure and facilities which were available at the time of acquisition of Kasaragod Unit of Kerala Electrical & Allied Engineering Co. Ltd.

Particulars	31-03-2012	31-03-2013	31-03-2014
Turnover (₹ in Lakh)	2113.76	2653.38	3702.97
% growth over previous year	First Year	25.53	39.56
Consumption of material, erection and engineering expenses (₹ in Lakh)	1295.35	1783.40	2615.02
Administration, selling and distribution (₹ in Lakh)	119.58	149.60	156.52
Employees benefits expenses (₹ in Lakh)	498.59	563.25	692.21
Depreciation and amortization (₹ in Lakh)	92.93	100.48	94.04
Profit/(Loss) before Interest and tax (₹ in Lakh)	-37.52	-130.46	-131.11
Profit/Loss (₹ in Lakh)	-37.52	-54.96	-106.16

The company has achieved growth in turnover, however there was increase in Net Losses mainly due to following reasons:

- 1. Change in product mix involving high percentage of bought out items resulting in increase in materials cost.
- 2. Increase in employees' expenses mainly due to hike in provisioning for gratuity and leave benefits assessed by the actuaries in line with the revised RBI rates and inflation indices.

ii. Strengths and weaknesses

Strengths	Weaknesses
Proven Product ProfileExperienced workforceQuality Product	 Old Plant Machinery Low Margin Products; high RM cost being old design Long Term Planning difficult; the products being short-cycled Low Human Resources in key areas/positions Low Motivations factors to employees



iii. Opportunities and Threats

Opportunities	Threats
 Projected High Demand of High Capacity Power Cars for railways with expansion plan of railways 	Stiff competition by private parties in the field of Railway Equipment
 Proposed PMG Alternators for Railway applications for which Company is geared up 	Rising raw material prices
 To contribute for renewable energy sector, proposed Wind Electric Generators can be manufactured 	
 Capability of manufacture of various types of Traction Alternators for Indian Railways, proposed through BHEL Units (BHOPAL/ JHANSI) 	

iv. Segment-wise or product-wise performance

	201	3-14	2012-13		
ITEM	QTY (Nos)	VALUE	QTY (Nos)	VALUE	
		(₹ in Lakh)		(₹ in Lakh)	
BAGP upto 110 KVA	107.00	113.00	128	91.85	
BAGP above 110 KVA	30.00	67.80	49	117.98	
25 KW Train lighting Alternators	363.00	742.00	153	317.52	
320 KVA U/S D G Sets	4.00	223.54	0	0.00	
Special Alternators/Aux Alternators	24.00	70.68	42	132.94	
DG Sets	2.00	52.19			
DG Set for SPART	20.00	355.20	16	281.60	
570 KVA DG Set for Power Car	27.00	756.88	1	82.37	
Induction Motors	42.00	54.40	25	710.59	
RRU	156.00	115.34	68	136.82	
General Spares		48.70		119.67	
Services & Installation		206.51		63.33	
GSOS		645.75		417.51	
ED		250.98		181.20	
Gross turnover	775.00	3702.97	482	2653.38	

v. Outlook

Company is operating in highly competitive environment with low margin products. Considering all the measures for improvement of performance of the Company, management has a target to achieve turnover of ₹ 5259.53 Lakh and Profit before Tax of ₹ 92.71 Lakh for financial year 2014-15.

vi. Risk and Concerns

- Modernization of Plant/Machinery is required for the higher targets set for the Company
- High yield products envisaged in Business Plan (like traction alternators/wind electric generators) not materialized.



Product diversification is essential for achieving set targets

vii. Internal control systems and their adequacy

Internal Audit of the Company had been taken up by BHEL, Bangalore Internal Audit team and internal audit report had been submitted to Management. Statutory Auditors have reviewed the internal audit report and confirmed the adequacy of Internal Control System for the year.

viii. Financial performance with respect to operational performance

(₹ in Lakh)

		2013-14	2012-13
1	Turnover	3702.97	2653.38
2	Value Added	853.64	706.66
3	Profit Before Tax	-131.11	-130.46
4	Profit After Tax	-106.16	-54.96
5	Finance Cost (Interest)	24.74	23.79
6	Extraordinary Income	-	-
7	Capital Employed	1203.83	1215.89
8	Gross Block	1065.44	1062.57
9	Net Block	777.99	869.16
10	Capital (WIP)	-	-
11	Working Capital	514.23	567.79
12	Net Worth	851.36	957.52

Ratio:

		2013-14	2012-13
1	PBDIT as a percentage of Turnover	0.34%	2.61%
2	PAT as percentage of Turnover	-2.87%	-2.07%
3	Value Added as a % of GTO (net of ED)	25%	29%

ix. Material developments in Human Resources, Industrial Relations front, including number of people employed

The total number of employees, as at the end of March 2014, was 177 as against 178 at the beginning of the year. For Human Resource Development and as a part of welfare measures, training programs are organized, as per Company Training Calendar.

SI.	Particulars		In position									
No.		Strength	Male	Female	Total	SC	ST	ОВС	General	Total	PH	Vacant
1	2	3	4	5	6 (4+5)	7	8	9	10	11 (7 to 10)	12	13
Α	Regular Employees											
1	Executives	20	17	2	19	1	0	11	7	19	1	1



	1			Γ	ı			l			1	
2	Assistants/ Supervisors	5	4	0	4	0	0	3	1	4	0	1
3	Staff and workmen	169	148	6	154	10	5	107	32	154	1	15
4	Total (1 to 3)	194	169	8	177	11	5	121	40	177	2	17
В	Contractual workers	30	25	2	27	1	0	3	23	27	0	3
С	Re- employed retired employees of the CPSE	0	0	0	0	0	0	0	0	0	0	0
D	Consultants against regular posts other than retired employees of the same CPSE	0	0	0	0	0	0	0	0	0	0	0

x. Corporate Social Responsibility

BHEL EML will not come within the guidelines issued by the Department of Public Enterprises, Ministry of Heavy Industries and Public Enterprises, Govt. of India regarding mandatory spending on Corporate Social Responsibility. BHEL EML is a Loss making CPSE and as per guidelines loss-making companies are not mandated to earmark specific funding for CSR activities.



Annexure-II

Corporate Governance Report

The Department of Public Enterprises has issued guidelines on Corporate Governance. These guidelines were made mandatory vide OM No-18(8) 2005 GM Dt. 14-05-2010. The quarterly report on compliance with the Corporate Governance requirements prescribed by DPE is also sent to Administrative Ministry (DHI) regularly. Certificate on corporate governance issued by the Company's statutory auditors is attached with Report.

Board of Directors

Composition of Board as on 14-03-2014	Date of Appointment	Designation
Shri S. R. Prasad	14-03-2014	Chairman
Shri S. Basu	14-03-2014	Managing Director
Smt. Sanyukta Samaddar	20-01-2014	Part time Official Director, DHI
Shri Cdr. (Retd.) K. Shamsuddin)	19-01-2014	Part time Official Director, GoK

Board of Directors is yet to be reconstituted with independent Directors as mandated in the Guidelines on Corporate Governance for Central Public Enterprises issued by Ministry of Heavy Industries

and Public Enterprises. Various committees will be constituted on expansion of the Board.

Board Procedure

The Board meets at regular intervals in accordance with the Companies Act and Articles of Association of the company. Advance notices convening the Board Meetings are given to all the Directors along with detailed agenda items and all relevant information. Members of the Board have complete access to all information and are free to call any senior officials during the meeting for additional information/clarification.

Board reviews the performance of the Company and is responsible for directions and guidance to management for development and smooth functioning of the Company. The Board periodically reviews the compliance status of all the applicable laws. All the decisions are taken after detailed deliberations by the Board Members at the meetings.

Board Meetings and Attendance

During the financial year 2013-2014, five meetings of the Board of Directors were held. The Board meetings were held on 23/04/2013, 24/07/2013, 21/10/2013, 20/01/2014 and 14/03/2014. Details of attendance of the Directors at the Board Meetings, Annual General Meeting and the number of other Directorships held by them during 2013-14 etc. are furnished below:

SI. No.	Name of Directors	Particulars	No. of Board Meetings held during tenure	Meetings Attended	Whether attended AGM	No. of other Director- ships held
1	Shri Anil Ahuja	Chairman	2	2	-	
2	Shri S.R. Prasad	Chairman (Appointed on 14.03.2014 at 14 th Board Meeting)	1	1	-	1
3	Cdr. (Retd.) K. Shamduddin	Director (Nominee Govt. of Kerala)	5	4	-	1



4	Shri L. Gopalkrishnan	Managing Director (up to 14.03.2014)	5	5	Yes	Nil
5	Smt. Sanyukta Samaddar	Part time Official (Govt. Director) (Appointed on 20.01.2014 at 13 th Board Meeting)	2	2	-	1
6	Shri Somak Basu	Managing Director (Appointed on 14.03.2014 at 14 th Board Meeting)	1	1	-	Nil

Audit Committee

Pursuant to Section 292 A of the Companies Act 1956, Audit Committee was reconstituted on 14-03-2014 at 14th Board Meeting of the Company. For discussion, approval and adoption of Annual Accounts of the financial year-2013-14, the meeting of Audit Committee was held on 29-04-2014. Audit Committee shall be reconstituted with Independent Directors, in line with the Companies Act, 2013 and DPE Guidelines after the appointment of Independent Directors on the Board.

General Body Meetings

Details of AGM/EGM held since incorporation:

Financial Year	Date and Time	Location
2010-2011 (1 st EGM)	23.02.2011 at 4:30 PM	BHEL House, Siri Fort New Delhi
2011-2012 (2 nd EGM)	24.06.2011 at 12:30 PM	BHEL Industry Section, Lodhi Road, New Delhi
2011-2012 (1 st AGM)	07.09.2012 at 11.00 AM	Registered Office, Bedradka, Kasaragod, Kerala
2012-2013 (2 nd AGM)	17.08.2013 at 11:00 AM	Registered Office, Bedradka, Kasaragod, Kerala

Code of Conduct

In line with the DPE Guidelines for CPSEs, Board has approved and adopted "Code of Conduct for Board Members and Senior Management" at its 13th Board Meeting held on 20.01.2014. Code was circulated to Board Members and Senior Management for compliance. All Board Members

and Senior Management officials of the Company have affirmed their compliance with the code.

Training of Board of Directors

Board recognized the importance of the training for new Board Members and in line with DPE guidelines, Board has approved and adopted "Policy on Training Requirement of the Board Members", at its 13th Board Meeting held on 20/01/2014.

Disclosures

There was no materially related party transactions of the Company with its Directors or the Management or his relative, a firm in which such a Director or relative is a partner etc. that may have conflict with the interests of the Company attracting the provisions of Sec. 297 of the Companies Act. The Company is ensuring to make appropriate disclosures and comply with various laws to maintain ethical standards.

Means of Communication

Company maintains all the means of communication with its stakeholders including electronic media. Website of the Company is hosted on internet. Company and its stakeholders can interact with e-mail, telephone and fax and also with all other traditional means of communication.



Auditors' Certificate on Corporate Governance

The Members, M/s BHEL Electrical Machines Limited, Kasaragod

We have examined the compliance of the conditions of the Corporate Governance by M/s BHEL Electrical Machines Limited for the year ended 31-03-2014 as stipulated in the Department of Public Enterprises (DPE) Guidelines and Corporate governance issued dated 14-05-2010 for the central Public Sector Enterprises (CPSE's) and Annexes thereof.

The compliance of the conditions of the Corporate Governance is the responsibility of the Management. Our examination was limited to the procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the company.

In our opinion and to the best of information and according to the explanations given to us, subject to the following:

As per the Corporate Governance guidelines for a non listed CPSE, at least one third of the Board Members should be independent Directors and two third of the members of the Audit Committee shall be independent directors. As the full Board is yet to be constituted by the Government, the company could not meet the conditions. Thus the company did not have Independent Directors on its Board or in the audit committee.

We certify that the Company has complied with the conditions of Corporate Governance as stipulated in the above mentioned guidelines.

We further state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency of the effectiveness with which the Management has conducted the affairs of the Company.

For Jacob & Isack Associates.

See

Chartered Accountants K.P. Mohammed Isack, B.Com, FCA

Partner FRN007675S

Member No: 204171

Place: Mangalore Dated: April 30, 2014



Independent

Auditors' Report

To the members of BHEL Electrical Machines Limited

Report on the Financial Statements

We have audited the accompanying financial statements of BHEL ELECTRICAL MACHINES LIMITED, which comprise the Balance Sheet as at March 31, 2014, and the Statement of Profit and Loss and Cash Flow Statement for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation of these financial statements that give a true and fair view of the financial position, financial performance and cash flows of the Company in accordance with the Accounting Standards referred to in sub-section (3C) of section 211 of the Companies Act, 1956 ("the Act"). This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or

error. In making those risk assessments, the auditor considers internal control relevant to the Company's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, the financial statements give the information required by the Act in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:

- a) in the case of the Balance Sheet, of the state of affairs of the Company as at March 31, 2014;
- b) in the case of the Profit and Loss Account, of the loss for the year ended on that date; and
- c) in the case of the Cash Flow Statement, of the cash flows for the year ended on that date.

Report on other legal and regulatory requirements

- As required by the Companies (Auditor's Report) Order, 2003 ("the Order") issued by the Central Government of India in terms of sub-section (4A) of section 227 of the Act, we give in the Annexure a statement on the matters specified in paragraphs 4 and 5 of the Order.
- 2. As required by section 227(3) of the Act, we report that:
 - we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;

50 Years of Engineering Excellence

SUBSIDIARY COMPANY

- in our opinion proper books of account as required by law have been kept by the Company so far as appears from our examination of those books
- the Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement dealt with by this Report are in agreement with the books of account.
- d) in our opinion, the Balance Sheet, Statement of Profit and Loss, and Cash Flow Statement comply with the

- Accounting Standards referred to in subsection (3C) of section 211 of the Companies Act, 1956;
- e) on the basis of written representations received from the directors as on March 31, 2013, and taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2014 from being appointed as a director in terms of clause (g) of sub-section (1) of section 274 of the Companies Act, 1956.

For Jacob & Isack associates
Chartered Accountants
FRN:007675S



K.P. Mohammad Isack, B.Com. FCA

Partner

Membership No.: 204171

Place: Mangalore Date: 30-04-2014



Annexure to Independent Auditors' Report

The Annexure referred to in paragraph 1 of the Our Report of even date to the members of BHEL Electrical Machines Limited, on the accounts of the company for the year ended 31st March, 2014.

On the basis of such checks as we considered appropriate and according to the information and explanation given to us during the course of our audit, we report that:

- (a) The company has maintained proper records showing full particulars including quantitative details and situation of its fixed assets.
 - (b) As explained to us, fixed assets have been physically verified by the management at reasonable intervals; no material discrepancies were noticed on such verification.
 - (c) In our opinion and according to the information and explanations given to us, no fixed asset has been disposed during the year and therefore does not affect the going concern assumption.
- 2. (a) As explained to us, inventories have been physically verified during the year by the management at reasonable intervals.
 - (b) In our opinion and according to the information and explanations given to us, the procedures of physical verification of inventories followed by the management are reasonable and adequate in relation to the size of the company and the nature of its business.
 - (c) In our opinion and on the basis of our examination of the records, the Company is generally maintaining proper records of its inventories. No material discrepancy was noticed on physical verification of stocks by the management as compared to book records.
- 3. (a) According to the information and explanations given to us and on the basis of our examination of the books of account, the Company has not granted any loans, secured or unsecured, to companies, firms or other parties listed in the register maintained under Section 301 of the

- Companies Act, 1956. Consequently, the provisions of clauses iii (b), iii(c) and iii (d) of the order are not applicable to the Company.
- (b) According to the information and explanations given to us and on the basis of our examination of the books of account, the Company has not taken loans from companies, firms or other parties listed in the register maintained under Section 301 of the Companies Act, 1956. Thus sub clauses (f) & (g) are not applicable to the company.
- 4. In our opinion and according to the information and explanations given to us, there is generally an adequate internal control procedure commensurate with the size of the company and the nature of its business, for the purchase of inventories & fixed assets and payment for expenses & for sale of goods. During the course of our audit, no major instance of continuing failure to correct any weaknesses in the internal controls has been noticed.
- 5. a) Based on the audit procedures applied by us and according to the information and explanations provided by the management, the particulars of contracts or arrangements referred to in section 301 of the Act have been entered in the register required to be maintained under that section.
 - b) As per information & explanations given to us and in our opinion, the transaction entered into by the company with parties covered u/s 301 of the Act does not exceeds five lakh rupees in a financial year therefore requirement of reasonableness of transactions does not arises.
- 6. The Company has not accepted any deposits from the public covered under section 58A and 58AA of the Companies Act, 1956.
- 7. As per information & explanations given by the management, the company has adequate internal audit system commensurate with its size and nature of its business.
- 8. As per information & explanation given by the management, maintenance of cost records has

Years of **Engineering Excellence**

SUBSIDIARY COMPANY

- been prescribed by the Central Government under clause (d) of sub-section (1) of section 209 of the Act and we are of the opinion that prima facie the prescribed accounts and records have been made and maintained.
- 9. (a) According to the records of the company, undisputed statutory dues including Provident Fund, Investor Education and Protection Fund, Employees' State Insurance, Income-tax, Sales-tax, Wealth Tax, Service Tax, Custom Duty, Excise Duty, cess to the extent applicable and any other statutory dues have generally been regularly deposited with the appropriate authorities. According to the information and explanations given to us there were no outstanding statutory dues as on 31st of March, 2014 for a period of more than six months from the date they became payable.
 - (b) According to the information and explanations given to us, there is no amounts payable in respect of income tax, wealth tax, service tax, sales tax, customs duty and excise duty which have not been deposited on account of any disputes.
- 10. This clause requires us to report accumulated losses and cash losses when the company is registered for more than 5 years. Since the company is only 3 years old, no comment is given under this clause.
- 11. Based on our audit procedures and on the information and explanations given by the management, we are of the opinion that, the Company has not defaulted in repayment of dues to a financial institution, bank or debenture holders.
- 12. According to the information and explanations given to us, the Company has not granted loans and advances on the basis of security by way of pledge of shares, debentures and other securities.
- 13. The Company is not a chit fund or a nidhi / mutual benefit fund/society. Therefore, the provision of this clause of the Companies (Auditor's Report) Order, 2003 (as amended) is not applicable to the Company.
- 14. According to information and explanations given to us, the Company is not trading in Shares, Securities, Debentures & other Investments. Hence, not applicable.

- 15. According to the information and explanations given to us, the Company has not given any guarantees for loan taken by others from a bank or financial institution.
- 16. Based on our audit procedures and on the information given by the management, we report that the company has not raised any term loans during the year.
- 17. Based on the information and explanations given to us and on an overall examination of the Balance Sheet of the Company as at 31st March, 2014, we report that no funds raised on short-term basis have been used for long-term investment by the Company.
- 18. Based on the audit procedures performed and the information and explanations given to us by the management, we report that the Company has not made any preferential allotment of shares during the year.
- 19. The Company has no outstanding debentures during the period under audit.
- 20. The Company has not raised any money by public issue during the year.
- 21. Based on the audit procedures performed and the information and explanations given to us, we report that no fraud on or by the Company has been noticed or reported during the year, nor have we been informed of such case by the management.

For Jacob & Isack associates **Chartered Accountants** FRN:007675S



K.P. Mohammad Isack, B.Com. FCA

Partner

Membership No.: 204171

Place: Mangalore Date: 30-04-2014



COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA UNDER SECTION 619(4) OF THE COMPANIES ACT, 1956 ON THE ACCOUNTS OF BHEL ELECTRICAL MACHINES LIMITED, KASARAGOD FOR THE YEAR ENDED 31st MARCH 2014.

The preparation of financial statements of BHEL ELECTRICAL MACHINES LIMITED for the year ended 31 March 2014 in accordance with the financial reporting framework prescribed under the Companies Act, 1956 is the responsibility of the management of the company. The statutory auditor appointed by the Comptroller and Auditor General of India under Section 619(2) of the Companies Act, 1956 is responsible for expressing opinion on these financial statements under Section 227 of the Companies Act, 1956 based on independent audit in accordance with the Standards on Auditing prescribed by their professional body, the Institute of Chartered Accountants of India. This is stated to have been done by them vide their Audit Report dated **30-04-2014**.

I, on behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 619(3) (b) of the Companies Act, 1956 of the financial statements of BHEL ELECTRICAL MACHINES LIMITED, Kasaragod, for the year ended 31st March 2014. This supplementary audit has been carried out independently without access to the working papers of the Statutory Auditor and is limited primarily to inquiries of the statutory auditor and company personnel and a selective examination of some of the accounting records. On the basis of my audit, nothing significant has come to my knowledge which would give rise to any comment upon or supplement to Statutory Auditor's report under Section 619(4) of the Companies Act, 1956.

For and on the behalf of the Comptroller and Auditor General of India

(G. SUDHARMINI)

PRINCIPAL DIRECTOR OF COMMERCIAL AUDIT & EX-OFFICIO MEMBER AUDIT BOARD, CHENNAI

Place : Chennai Date : 30 May, 2014

Balance Sheet

Balance Sheet as at 31.03.2014

(₹ in Lakh)

	Particulars	Note No.	As a	t 31.03.2014	As at	31.03.2013
I.	Equity and Liabilities					
(1)	Share holder's Fund					
	a. Share Capital	1	1050.00		1050.00	
	b. Reserves and Surplus	2	198.64_	851.36	-92.48	957.52
(2)	Non-current liabilities					
	(a) Long-term borrowings					
	(b) Deferred tax liabilities (Net)					
	(c) Other long term liabilities					
	(d) Long term provisions	3	352.47	352.47	258.37	258.37
(3)	Current Liabilities					
	(a) Short-term borrowings	4	193.62		317.78	
	(b) Trade payables	5	1070.12		891.83	
	(c) Other current liabilities	6	149.15		172.64	
	(d) Short-term provisions	7	47.93	1460.82	21.41	1403.66
	TOTAL			2664.65		2619.55
II.	ASSETS					
(1)	Non Current Assets					
	(a) Fixed Assets					
	(i) Tangible assets	8	777.99		869.16	
	(ii) Intangible assets					
	(iii) Capital work-in-progress			777.99		869.16
	(b) Non Current Investments					
	(c) Deferred tax assets	9	100.42		75.37	
	(d) Long term loans & advances	10	4.81		21.35	
	(e) Other non current assets			_ 105.23		96.72
(2)	Current assets					
	(a) Current investments					
	(b) Inventories	11	432.62		417.49	
	(c) Trade receivables	12	1260.50		1156.64	
	(d) Cash and cash equivalents	13	50.20		56.65	
	(e) Short term loans and advances	14	38.11		22.89	
	(f) Other current assets			1781.43		1653.67
	TOTAL			2664.65		2619.55
	Significant accounting policies					
	Other notes to financial statements	26				

The accompanying Notes 1 to 26 and significant accounting policies form an integral part of the financial statements.

(Ram Kumar Mishra) **Company Secretary**

Place: Mangalore

Date: April 30, 2014

Manager (Finance)

(K. Bharath Kumar Shetty) (Cdr. (Retd) K. Shamsuddin)

Director

For and on behalf of Board of Directors

(S. Basu) **Managing Director**

As per our report of even date attached

For Jacob & Isack Associates

Chartered Accountants FRN No.: 007675S

(K.P. Mohammad Isack)

Partner M. No.: 204171



Statement of Profit & Loss

for the year ended 31.03.2014

(₹ in Lakh)

	Particulars	Note No.	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
I.	Revenue from operations (Gross)	15	3702.97	2653.38
	Less: Excise duty		243.79	181.20
	Less: Service Tax		7.19	
			3451.99	2472.18
II.	Other operational income	16	13.16	13.08
III.	Other income	17	3.51	4.80
	TOTAL REVENUE (I to III)		3468.66	2490.06
IV.	Expenses			
	Consumption of material, erection and engineering expenses	18	2656.26	1811.23
	Accretion/(decretion) to WIP & FG	19	-41.24	-27.83
	Employees benefits expenses	20	692.61	563.25
	Other expenses of manufacture, administration, selling and distribution	21	156.52	149.60
	Provisions (net)	22	16.84	
	Finance costs	23	24.74	23.79
	Depreciation & amortisation expense	8.1	94.04	100.48
	Less: Cost of jobs done for internal use			
	Total expenses		3599.77	2620.52
V.	Profit /(loss) before prior period adjustments, exceptional items and tax		-131.11	-130.46
	Prior period adjustments (Net)	24	-0.10	0.13
	Less tax expenses/(Tax Income)	25	25.05	75.37
VI.	Profit/(loss) for the period from continuing operations		-106.16	-54.96
	Significant accounting policies			
	Other notes to financial statements	26		

The accompanying Notes 1 to 26 and significant accounting policies form an integral part of the financial statements.

(Ram Kumar Mishra) Company Secretary

(K. Bharath Kumar Shetty) Manager (Finance)

(Cdr. (Retd) K. Shamsuddin)

Director

For and on behalf of Board of Directors

(S. Basu) Managing Director

As per our report of even date attached

For Jacob & Isack Associates **Chartered Accountants**

FRN No.: 007675S

(K.P. Mohammad Isack)

Partner M. No.: 204171

Place: Mangalore

Date: April 30, 2014

Cash Flow Statement

for the year ended 31.03.2014

(₹ in Lakh)

		2013-2014	2012-2013
Α.	CASH FLOW FROM OPERATING ACTIVITIES		
	Net profit (loss)	-131.21	-130.33
	adjustment for		
	Depreciation	94.04	100.48
	Provision for doubtful debts		
	Provisions (Long term)	94.10	21.43
	Interest Expenditure		
	Total	56.93	-8.42
	Adjustments for		
	(Increase)/decrease in trade & other receivables	-102.54	-631.58
	(Increase)/decrease in inventories	-15.13	-34.61
	Increase/(decrease) in Trade and other payments	181.32	585.13
	Net cash flow from operating Activities	63.65	-81.06
В.	CASH FLOW FROM INVESTING ACTIVITIES		
	Sale of assets		
	Interest received		
	(Purchase of fixed assets)	-2.87	-6.34
	Net Cash from investing Activities	-2.87	-6.34
C.	CASH FLOW FROM FINANCING ACTIVITIES		
	Increase/(Decrease) in long term borrowing		
	Increase/(Decrease) in short term borrowing	-124.16	131.38
	Net cash from financing activities	-124.16	131.38
	Net Increase /(Decrease) in cash /Cash equivalents	-6.45	35.56
	Opening Cash balance	56.65	21.09
	Cash /Cash equivalents at the end of the period	50.20	56.65

(Ram Kumar Mishra) **Company Secretary**

(K. Bharath Kumar Shetty) (Cdr. (Retd) K. Shamsuddin) Manager (Finance)

Director

(S. Basu) Managing Director

For and on behalf of Board of Directors

As per our report of even date attached

For Jacob & Isack Associates **Chartered Accountants**

FRN No.: 007675S

(K.P. Mohammad Isack)

Partner M. No.: 204171



Note 1 - Share Capital

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Authorised		
15000000 numer of shares @ ₹ 10/- each	1500.00	1500.00
Issued, subscribed and paid up capital	1050.00	1050.00
10500000 shares @ ₹ 10/- fully paid up		
(BHEL and its nominees holding - 5355000 shares @ ₹10/- each - 51% - (Previous year 5355000 shares @ ₹10/- each)		
Government of Kerala and its nominees holding - 5145000 shares @ ₹10 each - 49% - (Previous year Government of Kerala and its nominees holding 5145000 shares @ ₹10/- each)		
	1050.00	1050.00

Note 2 - Reserves & surplus

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Profit / Loss for the year		
(Statement of Profit & Loss)	-106.16	-54.96
Balance of profit (loss) brought forward from last year	-92.48	-37.52
Foreign project reserves written back		
Profit available for appropriation	-198.64	-92.48

Note 3 - Long-term provisions

	As at 31	.03.2014	Asa	at 31.03.2013
Contractual Obligation - Long term				
Provision for employees benefits				
Leave benfits accrued - Long term	23.25		15.06	
Gratuity accrued - Long term	329.22		243.31	
Other long-term provisions				
		352.47		258.37



Note 4 - Short-term borrowings

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Secured		
Loans & advances from banks		
Cash credit (Cr. balance) (secured by hypothecation of fixed assets, raw materials, components, stores & spares, work-in-progress, finished goods, trade receivables and other current assets)	193.62	317.78
Unsecured		
- from Companies - Nil		
	193.62	317.78

Note 5 - Trade payables

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Trade Payables Includes stale cheques for ₹ 14320/-	1070.12	891.83
(Disclosure on micro and small enterprises is		
Given in item No. 2(b) of Note No.26	1070.12	891.83

Note 6 - Other current liabilities

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Advances received from customers & others	60.19	84.32
Deposits from Contractors & others	14.63	1.02
Other payables/ liabilities	74.33	87.30
(Other liabilities in 2012-2013 is inclusive of ₹ 29.63 Lakh Towards employee benefits. Other employee benefits is brought under Note No.7 this year)		
	149.15	172.64

Note 7 - Short-term provisions

	As at 31.03.2014		As at 31.03.201	
Provision for employee benefits				
Leave encashment	2.06		1.52	
Gratuity	14.74		13.93	
Other Employee Benefits	30.12	46.92		15.45
Other short term provision				
Unrealised margin on Sale		1.01		5.96
(As per AS 9)		47.93		21.41



Note 8 - Fixed assets

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Tangible assets		
Gross block	1065.43	1062.57
Less: Accumulated depreciation	-287.44	-193.41
Less: Accumulated impairement		
Less: Lease adjustment account		
Net Block	777.99	869.16

Refer for details in Note No. 8.1

Note 8.1 - Fixed assets

as on 31.03.2014

SI. No.	DESCRIPTION		GROS	SS BLOCK			DEPRE	CIATION		NET B	BLOCK
		Cost as on 01.04.13	Additions/ Adjust- ments during the year	Deductions/ Adjustments during the year	Total Cost as on 31.03.2014	Depreciation as on 01.04.13	Depreciation During the year	Deductions/ Adjustments during the year	Depreciation upto 31.03.14	As on 31.03.2014	As on 31.03.2013
1	Freehold land (including develop-ment expenses)	31.15	0.00	0.00	31.15	0.00	0.00		0.00	31.15	31.15
2	Buildings	337.43	0.00	0.00	337.43	22.80	11.40		34.20	303.23	314.63
3	Plant & Machinery	638.20	2.33	-6.41	646.94	153.22	77.66	6.41	237.29	409.65	484.98
4	Electronic Data Processing Equipment	5.43	0.00	0.00	5.43	1.74	1.15		2.89	2.54	3.69
5	Electrical Installations	33.19	0.00	-0.64	33.83	5.36	2.65	0.64	8.65	25.18	27.83
6	Vehicles	0.44	0.00	0.00	0.44	0.06	0.04		0.10	0.34	0.38
7	Furniture & fixtures	0.12	0.00	0.00	0.12	0.01	0.01		0.02	0.10	0.11
8	Office and Other equipments	7.31	0.00	0.00	7.31	0.92	0.59		1.51	5.80	6.39
9	Fixed Assets costing upto ₹10,000/-	9.30	0.54	7.05	2.79	9.30	0.54	-7.05	2.79	0.00	0.00
	Total	1062.57	2.87	0.00	1065.44	193.41	94.04	0.00	287.45	777.99	869.16

Note 9 - Deferred tax assets

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Provisions	75.37	75.37
Addition for the year*	25.05	
*Refer workings in Note No. 25	100.42	75.37_

Note 10 - Non-current assets

(₹ in Lakh)

As at 31.03.2014	As at 31.03.2013
	19.37
	1.20
4.81	0.78
4.81	21.35
	4.81

Note 11 - Inventories

	As at 31.03.2014		As at 31.03.20	
Stores & spare parts				
Production	2.19		2.17	
Fuel stores				
Miscellaneous		2.19		2.17
Raw material & components	171.65		199.95	
Material-in-transit	2.17	173.82		199.95
Scrap (at estimated realisable value)				
Finished goods		119.61		90.59
Work-in-progress @ Valued as per Significant Accounting Policy No. 6		137.00		124.78
		432.62		417.49



Note 12 - Trade receivables

(₹ in Lakh)

	As at 31.03.2014	As at 31.03.2013
Debts outstanding for a period exceeding six months	192.32	76.55
Other debts	1085.02	1080.09
	1277.34	1156.64
Less: Provision for bad & doubtful debts and automatic price reduction adjustment	16.84	
	1260.50	1156.64
Trade receivables includes		
Deferred Debts: ₹53.51 Lakh		
Goods despatched pending billing ₹1.99 Lakh		
Particular of trade receivables		
Secured considered good		
Unsecured considered good	1260.50	1156.64
Doubtful	16.84	
	1277.34	1156.64

Note 13 - Cash & cash equivalents

	As	at 31.03.2014	As at 31.03.2013
Cash & Stamps in on hand		0.31	0.28
Cheques, Demand Drafts on hand			
Remittances in transit			
Balances with Scheduled Banks			
Current Account		0.70	0.27
Deposit Account			
Margin money on LC	48.30		
Accrued interest (Previous year ₹55.67 Lakh and ₹0.43 Lakh)	0.89	49.19	56.10
Deposits more than 12 months maturity period			
		50.20	56.65



Note 14 - Short-term loans and advances

(₹ in Lakh)

	As	at 31.03.2014	As	at 31.03.2013
Advances (Recoverable in cash or in kind or for value	to be received)			
To subsidiaries				
To employees	9.39		2.80	
For purchases	0.22		0.17	
To Others	5.54	15.15	7.92	10.89
Deposits				
Balance with customs, Port Trust and other Govt Authorities	0.03		0.03	
Others	22.93		11.97	
Advance Tax/TDS (Net of Provision for Taxation)		22.96		12.00
		38.11		22.89
Particulars of Loans and advances:-				
Secured, considered good				
Unsecured, considered good		38.11		22.89
Doubtful				

Note 15 - Revenue from operations

(₹ in Lakh)

	For the year ended 31.03.2014	For the year ended 31.03.2013
Sales less returns	3462.40	2570.75
Income from external erection & other services	240.57	82.63
Revenue from Works Contract		
Assets given on Finance lease		
	3702.97	2653.38

Note 16 - Other operational income

	For the year ended 31.03.2014	For the year ended 31.03.2013
Export Incentives		
Rental income on leased assets		
Lease equalisation account		
Finance income on assets given on finance lease		
Exchange variation (Cr. Balance)		
Scrap sale	13.16	12.79
Others		0.29
Receipt from sale/transfer of surplus stock		
	13.16	13.08



Note 17 - Other income

(₹ in Lakh)

	For the year ended 31.03.2014	For the year ended 31.03.2013
From customers		
From employees		
From banks- Interest on TDR - (TDS ₹ 0.51 L)	3.51	2.40
Interest on Advance tax/TDS		1.20
From Investments (Current- Other than trade)		
Misc receipts		1.20
	3.51	4.80

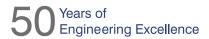
Note 18 - Consumption of material, erection & engineering expense

(₹ in Lakh)

	For the year ended 31.03.2014	For the year ended 31.03.2013
Consumption of raw material & components	2412.49	1714.39
Consumption of stores & spares	16.69	14.44
Erection and Engineering exppayment to subcontractors	227.08	82.40
	2656.26	1811.23

Note 19 - Accretion/(Decretion) to WIP & FG

	For th	e year ended 31.03.2014	For th	e year ended 31.03.2013
Work-in-progress				
Closing Balance	137.00		124.78	
Opening Balance	124.78	12.22	63.84	60.94
Finished Goods				
Closing Balance	119.61		90.59	
Opening Balance	90.59	29.02	123.70	-33.11
		41.24		27.83
NOTE: Element of Excise duty in Finished Goods				
Closing Balance		11.17		9.96
Opening Balance		9.96		13.61



Note 20 - Employee benefits

(₹ in Lakh)

	For the year ended 31.03.2014	For the year ended 31.03.2013
Salaries, wages, bonus, allowances & other benefits	568.12	452.19
Contribution to gratuity fund		
Contribution to provident and other funds	54.86	49.68
Staff welfare expenses	69.63	61.38
	692.61	563.25

Note 21 - Other expenses of manufacturing, administration, selling and distribution

(₹ in Lakh)

For the year ended 31.03.2014	For the year ended 31.03.2013
1.90	1.99
2.65	-2.23
50.21	43.91
4.26	8.51
1.83	0.49
1.99	1.91
12.00	11.22
18.84	18.88
15.15	17.96
47.69	46.91
	0.05
156.52	149.60
	31.03.2014 1.90 2.65 50.21 4.26 1.83 1.99 12.00 18.84 15.15 47.69

Note 22 - Provisions

	For the year ended 31.03.2014	For the year ended 31.03.2013
Doubtful debts, Liquidated Damages and Loans & advances		
Created during the year	16.84	
Less written back during the year	16.84	
Contracutal Obligations		
Created during the year		
Less written back during the year		
Others		
Created during the year		
Less written back during the year	0.00	0.00
	16.84	0.00



Note 23 - Finance cost

(₹ in Lakh)

	For the year ended 31.03.2014	For the year ended 31.03.2013
Debentures/Bonds, Central and State Govt. Loan		
Banks/Financial Institutions borrowings	24.74	7.67
Deferred Credits		
Others (on WCL from BHEL of ₹ 170 Lakh in 2012-2013)		16.12
Other Borrowing Costs		
Less: Borrowing Cost capitalised		
	24.74	23.79

Note 24 - Prior period adjustments

(₹ in Lakh)

	For th	e year ended 31.03.2014	For th	ne year ended 31.03.2013
Income				
Interest			0.08	
Others	0.88	0.88	0.61	0.69
Less				
Expense				
Other expenses	0.98	0.98		0.56
Net		-0.10		0.13

Note 25 - Deferred Tax Income/Asset

	For the year ended 31.03.2014	
Profit/(Loss) as per the Profit and loss account	-131.21	
Add		
Depreciation as per accounts	94.04	
Less Depreciation as per Income tax Rules	103.11	
Net Loss		-140.28
Less provisions in the Books of accounts - Timing difference		
Provision for bad debts	16.84	
Provision related to PL encashment	25.31	
Employee related provisions (bonus)	20.91	63.06
Income as per Income tax		-77.22
Tax Income/Deferred tax Asset		-25.05

Significant Accounting Policies

1 Basis of Preparation of Financial Statements

The financial statements have been prepared as of a going concern on historical cost convention and on accrual method of accounting in accordance with the generally accepted accounting principles and the provisions of the Companies Act, 1956 as adopted by the Company.

2 Use of Estimates

The preparation of the financial statements in conformity with generally accepted accounting principles requires the management to make estimates and assumptions that affect the income and expenditure during the reporting period and the assets and liabilities including contingent liabilities at the date of financial statements. The difference between the actual results and estimates are recognised in the period in which the results are known.

3 Fixed Assets

Fixed assets are carried at the cost of acquisition or construction or book value less accumulated depreciation. Cost includes value of internal transfers for capital works, taken at actual/estimated factory cost/market price, whichever is lower. Effects of extraordinary events such as devaluation/revaluation in respect of long term liabilities/loans utilized for the acquisition of fixed assets is added to/reduced from the cost.

4 Intangible Assets

- A. Intangible assets are capitalized at cost if
 - a. It is probable that the future economic benefits attributable to the asset will flow to the company and
 - b. The company will have control over the assets and
 - c. The cost of these assets can be measured reliably and is more than ₹10000/intangible assets are amortised over their estimated useful lives not exceeding three years in case of software and not

- exceeding ten years in case of others on a straight line pro-rata monthly basis.
- B. a. Expenditure on research including the expenditure during the research phase of Research & Development Projects is charged to Statement of profit and loss in the year of incurrence.
 - b. Expenditure incurred on development including the expenditure during the development phase of Research and Development Project meeting the criteria as per the Accounting standard on intangible assets is treated as intangible asset.
 - c. Fixed assets acquired for purposes of research and development are capitalised.

5 Depreciation

Depreciation on fixed assets is charged up to total cost of the assets on straight line method as per the rates prescribed in Schedule XIV of the companies Act, 1956, except where depreciation is charged at rates determined on the basis of the technically estimated useful lives shown hereunder:-

	Single Shift	Double Shift	•
General Plant & Machinery	8%	12%	16%
Buildings (Third class)	3.5%		
Electrical installations	8%		
Office and other equipment	s 8%		
Electronic data processing equipments	20%		

In respect of additions/deductions from the fixed assets, depreciation is charged on prorata monthly basis.

Fixed assets costing ₹10000/- or less or whose written down value as at the opening of the year is ₹10000/- or less, are depreciated fully.

6 Inventory Valuation

 i) Inventory is valued at actual/estimated cost or net realisable value, whichever is lower.



- ii) Finished goods in Plant and work in progress are valued at actual/estimated factory cost or 97.5% of the realisable value, whichever is lower
- iii) In respect of valuation of finished goods in plant and work-in-progress, cost means factory cost, actual/estimated factory cost includes excise duty payable on manufactured goods.
- iv) In respect of raw material, components, loose tools, stores and spares, cost means weighted average cost.
- The component and material purchased/ manufactured against production orders but declared surplus are charged off to revenue retaining residual value based on technical estimates.

7 Revenue Recognition

Sales are recorded based on significant risks and rewards of ownership being transferred in favour of the customer. Sales include goods dispatched to customers by partial shipment.

8 Employee Benefits

Provident fund and Employees' Family pension scheme contributions are accounted for on accrual basis. Liability for Earned leave, Half pay leave, Gratuity are accounted for in accordance with actuarial valuation. Liability towards contributory medical scheme is accounted based on the salary at the commencement of the calendar year.

9 Borrowing Costs

Borrowing costs that are attributable to the manufacture, acquisition or construction of qualifying assets, are included as part of cost of such assets.

A qualifying asset is one that takes more than twelve months to get ready for intended use or sale.

Other borrowing costs are recognised as expense in the period in which they are incurred.

10 Claims by/Against the Company

 Claims for liquidated damages against the Company are recognised in accounts based on management's assessment of the probable

- outcome with reference to the available information supplemented by experience of similar transactions.
- ii) Claims for export incentives/duty drawbacks/ duty refunds and insurance claims etc are taken into account on accrual.
- iii) Amounts due in respect of price escalation claims and/or variation in contract work are recognised as revenue only when there are conditions in the contracts for such claims or variation and/or evidence of the acceptability of the same from customers. However, escalation is restricted to intrinsic value.

11 Taxes on Income

Current tax is determined on the basis of taxable income in accordance with the provisions of the Income Tax Act. 1961. Deferred tax liability/asset resulting from timing difference between accounting income and taxable income is recognised considering the tax rate and laws that have been enacted or substantively enacted as on the balance sheet date. Deferred tax asset is accounted for and carried forward only to the extent that there is reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised. Deferred tax assets in respect of unabsorbed depreciation and carry forward of losses are recognised only if there is virtual certainty that there will be sufficient future taxable income available to realise such assets.

12 Impairment

The carrying amount of cash generating assets is reviewed at each balance sheet date where there is any indication of impairment. An impairment loss is recognised in the statement of profit and loss where the carrying amount exceeds the recoverable amount of the cash generating assets. An impairment loss is reversed if there is change in the recoverable amount and such loss either no longer exists or has decreased.

Note - 26

- Employee gratuity and leave encashment dues are evaluated through actuarial valuation in line with AS -15.
- 2. Trade payable includes
 - a. Stale cheques: ₹ 14320/-
 - b. Amount due to SSI Unit: ₹ 270291/-
 - c. Retention from vendors as per contractual requirements: ₹ 725709/-
- 3. The company has come into existence during the year 2011-2012. Hence the age of all the raw materials held as on 31-03-2014 is less than 3 years old. The stock of slow/non moving items has duly been assessed and the valuation is done in line with the significant accounting policy of the company
- 4. As per the significant accounting policy sales are recorded based on the significant risks and rewards of ownership being transferred in favour of the customer. An amount of ₹ 5.96 Lakh, being the unrealised margin during the year 2012-2013, is realised during this year. Unrealised margin against sales, booked for the year 2013-2014 is ₹ 1.01 Lakh.
- 5. The impact on the profit of providing 100 percent depreciation on fixed assets up to ₹10000/- each, without considering such impact of earlier years is as under

	2013-2014	2012-2013
100% depreciation on assets up to ₹ 10000/- charged off in the accounting year	₹ 183669.00	₹ 856819.00
Normal depreciation on the above	₹ 25500.00	₹ 91223.00
Excess amount charged off	₹ 158169.00	₹ 765596.00

6. As per the significant accounting policy, fixed assets whose written down value as at the beginning of the year is ₹ 10000/- or less are depreciated fully. However, during the year 2012-2013, these assets (overall value of ₹ 704817) were removed from the list under the

- appropriate block and were classified under "Fixed assets costing ₹ 10000/- or less". This is rectified by reclassifying them under their respective heads to which they belongs to. This does not have any impact neither on the overall value of fixed assets nor on the profitability.
- 7. Balances under debtors, creditors, deposits, materials lying with sub-contractors/fabricators are reconciled and letter of confirmation has been obtained where ever possible. In all other cases, reconciliation is carried out on an ongoing basis & provisions wherever considered necessary have been made in line with the guidelines.
- 8. Travelling expenses to Directors (Including the Managing Director)

Year	2013-2014	2012-2013
Managing director	₹ 306865.00	₹ 543393.00
Other Directors	₹ 53348.00	₹ 28968.00

- 9. Contingent liabilities:
 - a. Claims against the company not acknowledged as debt/deductible.

(₹ in Lakh)

		2013-2014	2012-2013
1	Retention on account of liquidated damages	102.40	51.39
2	Retention on account of price fall clause	-	6.72
3	Retention by various Railways on statutory rate variation clause	-	8.57
4	Amount of ad hoc recoverable advance paid to workmen.	6.67	-
	Total	109.07	66.68

 Earnest efforts are being taken by the Management to realise the maximum amount possible from the customers against serial number 1 of the above.



Since a reliable estimate of the amount of obligation cannot be made now, in line with the AS 29 these items are classified as contingent liabilities.

- ii) Discussion with the trade Unions are in progress for the wage revision of workmen. In the absence of any indication on the mode of final settlement, and as the adhoc advance sanctioned is conditional, no specific provision is made for wage arrears. Hence the amount of advance paid is shown under contingent liability as per AS 29
- b. Details of letter of credit established in favour of suppliers pending clearance as on 31-03-2014 is ₹ 254.35 Lakh. Supplies against these Letters of credits were received, accounted and reflected in the trade payable account.
- c. Details of bank guarantees issued, pending as on 31-03-2014 is ₹ 66.88 Lakh.
- Bills routed through bank by suppliers pending clearance as on 31-03-2014 is nil.
- 10. Details of misc receipts
 - a. Others (including rounding off): ₹ 72.05
- 11. Related party transactions as per AS 18
- A. Related party where control exists

Name of related party:- **Bharat Heavy Electricals Limited**

Nature of relationship:- Holding company

- B. Other related parties (Key management personnel)
 - 1. Shri. L. Gopalakrishnan Managing Director (Nominee of BHEL) till 14-03-2014
 - 2. Shri. S. Basu Managing Director (Nominee of BHEL) from 14-03-2014

Transactions with the related party

(₹ in Lakh)

SI. No.	Nature of transaction	Holding company	Key Management personnel
1	Sale of goods	676.40	-
2	Amount due from	363.85	-
3	Advance against orders	46.24	-

2 engineer trainees and 1 engineer from BHEL are working in the company on deputation from BHEL.

- 12. Details of prior period expenses and income
- A. Prior period expense: ₹ 98447/-

a. Reversal of excess availed cess: ₹ 8265.00
b. Travelling expenses : ₹ 1427.00
c. Freight on Sales : ₹ 50988.00
d. Attendance bonus to employee : ₹ 3989.00
e. Medical expenses : ₹ 33610.00
f. Cess KVAT : ₹ 168.00

B. Prior period Income: ₹ 87514.35

a. Recovery of stipend paid :₹ 536.35
b. Interest on TDR :₹ 12273.00
c. Transit Insurance claims :₹ 74705.00

13. Miscellaneous expenses furnished under note 21 includes.

Α.	Payment to Auditors	2013-2014	2012-2013
a.	Statutory audit fees	₹ 31000.00	₹ 25000.00
b.	Tax audit fees	₹ 12500.00	₹ 2500.00
c.	VAT audit fees	₹ 7500.00	₹ 4000.00
В.	Others		
a.	Guest / Guest house expenses	₹ 134868.00	₹ 126632.00

14. Expenditure on Rent:-

Location	2013-2014	2012-2013
a. Guest House (Net)	₹ 165840-00	₹ 167718-00
b. Recreation Club	₹ 24000-00	₹ 31200-00

15. Break up details on repairs and maintenance

Item	2013-2014	2012-2013
a. Building	₹ 143030-00	₹ 184952-00
b. Plant & Machinery	₹ 855522-00	₹ 578209-00
c. Others	₹ 201468-00	₹ 267280-00

16. Disclosure as per AS 7 - Nil

50 Years of Engineering Excellence

- 17. Remuneration paid to the Directors (including the Managing Director)
 - a. Salaries and allowances :- ₹ NIL
 - b. Contribution to PF :- ₹ NIL
 - c. Contribution to Gratuity :- ₹ NIL

The Managing Director is permitted to avail the company's vehicle for his private use on chargeable basis as per the rules of the company subject to DPE guidelines The Managing Director is provided with the bachelor accommodation in the company guest house on recoverable monthly rates fixed by the company.

18. As no separate gratuity fund exists in the company, the gratuity accruals (expenses for the year as per the valuation under AS 15) are grouped under the general heading salary and other allowances.

19. Quantitative Details - Production, Sales and Closing Stock

	OP S	tock	Production		Sales		CL Stock	
Item	Qty (Nos)	Value	Qty (Nos)	Value	Qty (Nos)	Value	Qty (Nos)	Value
BAGP upto 110 KVA	4	2.15	105.00	112.25	107.00	113.00	2.00	1.40
BAGP above 110 KVA	5	18.28	30.00	69.06	30.00	67.80	5.00	19.54
25 KW Train lighting Alternators			381.00	776.70	363.00	742.00	18.00	34.70
320 KVA U/S D G Sets			4.00	223.54	4.00	223.54		
Special Alternators/Aux Alternators	9	31.04	28.00	78.42	24.00	70.68	13.00	38.78
DG Sets			2.00	52.19	2.00	52.19		
DG Set for SPART			20.00	355.20	20.00	355.20		
570 KVA DG Set for Power Car			27.00	756.88	27.00	756.88		
Induction Motors			48.00	63.04	42.00	54.40	6.00	8.64
RRU	64	29.15	102.00	91.56	156.00	115.34	10.00	5.37
General Spares				48.70		48.70		
Services & Installation				206.51		206.51		
GSOS				645.75		645.75		
ED		9.97		252.18		250.98		11.17
Gross turnover	82.00	90.59	747.00	3731.98	775.00	3702.97	54.00	119.60



20. Consumption of Important Raw Materials

(₹ in Lakh)

		OP Sto	ock	Purcha	ses	Closing Stock		Consumption	
Item	Unit	Qty	Value	Qty	Value	Qty	Value	Qty	Value
Lamination	Kgs	48345.60	66.41	120785.06	156.30	31027.00	40.15	138103.66	182.56
Diesel Engine	Nos	0.00	0.00	42.00	695.78		0.00	42.00	695.78
Copper	Kgs	10813.25	25.03	54670.86	148.00	8341.00	22.58	57143.11	150.45
Steel & Aluminium	Kgs	25572.13	13.27	117634.69	60.39	19635.00	10.08	123571.82	63.58
Casting	Bulk		18.96		184.11		16.45	0.00	186.62
Bearings & Others	Bulk		10.32		175.68		14.43	0.00	171.57
Control Panel	Nos		0.00	1.00	66.52		0.00	1.00	66.52
Generators	Nos		0.00	23.00	524.52		0.00	23.00	524.52
Torroidal Core			7.67	1306.00	30.72	0.00	0.00	1620.00	38.39
Others	Nos	314.00	60.47		358.87		70.15	0.00	349.19
			202.13		2400.89		173.84		2429.18

21. Consumption of Imported and Indigenous Materials

	For the year 2013-2014	For the year 2012-2013
Raw Materials:		
Imported	1.41% 38.39	2.77% 24.24
Indigenous	98.59% 2374.10	97.23% 1690.15
Total	2412.49	1714.39
Stores And Spare Parts		
Imported	0.00	0.00
Indigenous	16.69	14.44
Total	16.69	14.44
Total Consumption	2429.18	1728.83
CIF Value of Imports		
Raw Materials	30.72	31.91



Independent

Auditors' Report

To the Board of Directors of Bharat Heavy Electricals Limited

Report on the Consolidated Financial Statements

We have audited the accompanying consolidated financial statements of **Bharat Heavy Electricals Limited** (the "Company") and its subsidiary and joint ventures (collectively referred to as "the Group"), which comprise the Consolidated Balance Sheet as at March 31, 2014, the Consolidated Statement of Profit and Loss and the Consolidated Cash Flow Statement for the year then ended and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation of these consolidated financial statements that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows of the Group in accordance with accounting principles generally accepted in India including Accounting Standards notified under the Companies Act, 1956 ("the Act") read with the General Circular 15/2013 dated 13th September 2013 of the Ministry of Corporate Affairs in respect of section 133 of the Companies Act, 2013. This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the consolidated financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with the Standards on Auditing issued by the Institute of Chartered Accountants of India. Those Standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable

assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Group's preparation and presentation of the consolidated financial statements that give a true and fair view in order to design audit procedures that are appropriate in the circumstances but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of the accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion and to the best of our information and according to the explanations given to us, and based on consideration of the individual reports of the other auditors on the financial statements as stated in para 1 below and provisional financial statements as stated in para 2 below, the consolidated financial statements give a true and fair view in conformity with the accounting principles generally accepted in India:

- (a) in the case of the Consolidated Balance Sheet, of the state of affairs of the Group as at March 31, 2014;
- (b) in the case of the Consolidated Statement of Profit and Loss, of the profit of the Group for the year ended on that date and

CONSOLIDATED FINANCIAL STATEMENTS



- (c) in the case of the Consolidated Cash Flow Statement, of the cash flows of the Group for the year ended on that date.
- The audit of the following entities in BHEL group has been carried out by the other auditors whose report has been furnished to us, and our opinion, in so far as it relates to Assets, Revenue and Net Cash Flows for the entities, is based solely on the reports of the other auditors.

(₹ in Crore)

Name of the Company	Assets	Revenue	Net Cash Flows
A. Subsidiaries			
BHEL Electrical Machines Limited	26.65	37.20	-0.06
B. Joint Ventures			
BHEL- GE Gas Turbine Services Private Limited	190.23	399.05	11.44

 In respect of the following Joint Ventures we did not carry out the audit. These unaudited financial statements have been compiled by the management, and our opinion, in so far as it relates to the assets and revenues included in respect of these Joint Ventures, is based solely on these compiled financial statements as furnished to us by the management. Since the financial statement of these joint ventures for the financial year ended March 31, 2014 were not audited, any subsequent adjustment to the balances could have consequential effects on the attached consolidated financial statements.

(₹ in Crore)

Name of the Company	Assets	Revenue	Net Cash Flows
Dada Dhuniwale Khandwa Power Ltd.	23.08	-	11.59
Raichur Power Corporation Ltd.	2397.85	0.50	0.03
NTPC BHEL Power Projects Limited	230.62	87.68	31.56
Latur Power Company Limited	2.78	0.24	0.13

3. The accounts of Powerplant Performance Improvements Ltd. a Joint Venture of BHEL have not been consolidated as the said company is under liquidation and full amount of equity investment has been provided.

For Wahi & Gupta Chartered Accountants FRN 002263N

have ben for

 Date : May 29, 2014
 (Y.K. Gupta)

 Place : New Delhi
 M.No 016020

For S. N. Dhawan & Co. Chartered Accountants FRN 000050N

> (S.K. Khattar) M.No 084993



Consolidated Balance Sheet

(As at March 31, 2014) (₹ in Crore)

Par	ticulars	Note No.	Figures as a	t 31.03.2014	Figures as a	t 31.03.2013
T.	EQUITY AND LIABILITIES					
(1)	Shareholders' Funds					
	(a) Share capital	1	489.52		489.52	
	(b) Reserves & surplus	2	32667.35	33156.87	30043.21	30532.73
(2)	Share application money pending allotment			13.36		15.64
(3)	Minority Interest			4.18		4.70
(4)	Non-current liabilities					
	(a) Long-term borrowings	3	1961.33		1233.03	
	(b) Other long term liabilities	4	6600.18		5795.79	
	(c) Long term provisions	5	7510.46	16071.97	5973.63	13002.45
(5)	Current liabilities					
	(a) Short-term borrowings	6	2659.34		1389.54	
	(b) Trade payables	7	8833.10		9753.74	
	(c) Other current liabilities	8	11662.75		14027.16	
	(d) Short-term provisions	9	2841.00	25996.19	3026.95	28197.39
	TOTAL			75242.57		71752.91
II.	ASSETS					
(1)	Non current assets					
	(a) Fixed assets					
	(i) Tangible assets	10	4561.52		4337.28	
	(ii) Intangible assets		167.81		329.74	
	(iii) Capital work-in-progress		2907.22		2427.26	
	(iv) Intangible assets under development		21.44	7657.99	39.42	7133.70
	(b) Non-current investments	11	5.91		5.94	
	(c) Deferred tax assets (net)	12	1975.92		1555.80	
	(d) Long-term loans and advances	13	1315.00		929.99	
	(e) Other non-current assets	14	11892.72	15189.55	10716.66	13208.38
(2)	Current assets					
	(a) Inventories	15	9808.69		11869.03	
	(b) Trade receivables	16	28198.55		29370.29	
	(c) Cash and bank balances	17	12019.97		7852.50	
	(d) Short term loans and advances	18	2113.48		2116.28	
	(e) Other current assets	19	254.34	52395.03	202.73	51410.83
	TOTAL			75242.57		71752.91
Sig	nificant Accounting Policies					

The accompanying Notes 1 to 32 & significant accounting policies form an integral part of the consolidated financial statements.

32

For and on behalf of Board of Directors

(I.P. Singh) Company Secretary

Other notes to financial statements

(P.K. Bajpai)
Director (Finance)

(B. Prasada Rao) Chairman and Managing Director

As per our report of even date attached

For S.N. Dhawan & Co. Chartered Accountants FRN-000050N For Wahi & Gupta Chartered Accountants FRN-002263N

(S.K. Khattar)

(Y.K. Gupta)
Partner
M. No. 016020

Place: New Delhi Date: May 29, 2014 Partner M.No. 084993



Consolidated Statement of Profit and Loss

For the year ended 31st March, 2014

(₹ in Crore)

I. Revenue from operations (Gross) 20 40801.99 50672 Less: Excise duty 1344.70 1930 Less: Excise duty 609.00 636 Revenue from operations (Net) 38848.29 48100 II. Other operational income 21 721.12 800 III. Other operational income 22 1623.02 1128 Total revenue (I to III) 41192.43 50044 IV. Expenses 23 22461.52 28177 (Increase)/Decrease in work in progress & finished goods 24 1057.14 127 Employee benefits expense 25 5956.57 5824 Employee benefits expense 25 5956.57 5824 Finance costs 26 133.46 127 Depreciation & amortisation expense 10.1 985.36 95 Other expenses of manufacture, administration, selling and distribution 27 3323.86 3808 Provisions (net) 28 2260.83 1583 Less: Cost of jobs done for internal use 69.99 75 Total expenses 36108.75 40517 VI. Add/less: Prior period adjustments, exceptional items and tax 5083.68 9527 VII. Add/less: Prior period adjustments (net) 29 -6.00 -2.00 VIII. Profit before tax for the year 31 40.632 187 IX. Less: Tax expense 31 1934.68 -359.34 1575.34 -6.32 2837 VI. Profit after minority interest -0.52 -0.52 -0.52 Less: Minority interest -0.52 -0.52 -0.52 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27 14.31	Particulars		Note No.	Figures for	the current 31.03.2014	Figures for the	ne previous 31.03.2013
Less: Excise duty Less: Service tax Revenue from operations (Net) II. Other operational income 21 721.12 800 III. Other income 22 1623.02 1128 Total revenue (I to III) VExpenses Cost of material consumption, erection and engineering expenses 23 22461.52 28171 (Increase)/Decrease in work in progress & finished goods 24 1057.14 121 Employee benefits expense 25 5956.57 5824 Finance costs Depreciation & amortisation expense 10.1 985.36 955 Other expenses of manufacture, administration, selling and distribution 27 3323.86 955 Cots of jobs done for internal use 69.99 75 Total expenses VI. Add/less: Prior period adjustments, exceptional items and tax VI. Add/less: Prior period adjustments (net) 29 6.00 6.00 VIII. Profit before tax for the year IX. Less: Tax expense 31 1934.68 950 X. Profit for the year before minority interest Less: Minority interest for the year Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 225		Revenue from operations (Gross)		your ondou		your ondou	50672.84
Revenue from operations (Net) 38848.29 48106 II. Other operational income 21 721.12 805 III. Other income 22 1623.02 1128 Total revenue (I to III) 41192.43 50044 IV. Expenses Cost of material consumption, erection and engineering expenses 23 22461.52 28171 (Increase)/Decrease in work in progress & finished goods 24 1057.14 121 Employee benefits expense 25 5956.57 5824 Employee benefits expense 26 133.46 122 Depreciation & amortisation expense 10.1 985.36 95 Other expenses of manufacture, administration, selling and distribution 27 3323.86 3806 Provisions (net) 28 2260.83 1583 Less: Cost of jobs done for internal use 69.99 75 Total expenses 36108.75 40517 V. Profit before prior period adjustments, exceptional items and tax 5083.68 9527 VII. Add/Less: Exceptional items 30 0.00 -2 VIII. Profit before tax for the year 31 1934.68 2843.93 D) Deferred tax 1934.68 -359.34 1575.34 -6.32 2837 V. Profit for the year before minority interest Less: Minority interest 1934.68 -359.34 1575.34 -6.32 2837 V. Profit after minority interest -0.52 -0.52 -0.52 V. Profit after minority interest -0.52 -0.52 -0.52 V. Profit after minority interest for the year 2500.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹		• • • • •			1344.70		1930.15
II. Other operational income		Less: Service tax			609.00		636.38
III. Other income		Revenue from operations (Net)			38848.29		48106.31
Total revenue (I to III) 41192.43 50044 IV. Expenses 23 22461.52 28177 Cost of material consumption, erection and engineering expenses 23 22461.52 28177 (Increase)/Decrease in work in progress & finished goods 24 1057.14 127 Employee benefits expense 25 5956.57 5824 Finance costs 26 133.46 127 Depreciation & amortisation expense 10.1 985.36 985.36 995.36 Other expenses of manufacture, administration, selling and distribution 27 3323.86 3808 Provisions (net) 28 2260.83 1583 Less: Cost of jobs done for internal use 69.99 75 Total expenses 36108.75 40517 V. Profit before prior period adjustments, exceptional items and tax 5083.68 9952 VI. Add/Less: Prior period adjustments	II.	Other operational income	21		721.12		809.53
IV. Expenses	III.	Other income	22		1623.02		1128.76
Cost of material consumption, erection and engineering expenses (Increase)/Decrease in work in progress & finished goods 24 Employee benefits expense 25 Finance costs Depreciation & amortisation expense Other expenses of manufacture, administration, selling and distribution Provisions (net) Less: Cost of jobs done for internal use Total expenses V. Profit before prior period adjustments, exceptional items and tax VI. Add/Less: Prior period adjustments (net) VIII. Profit before tax for the year IX. Less: Tax expense a) Currrent tax b) Deferred tax X. Profit after minority interest Less: Minority interest Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 23 22461.52 28171 24 1057.14 121 122 133.46 133.46 123 142 1985.36 133.46 127 132.38 26 133.46 127 133.23.86 3806 3806 3806 3806 3806 3806 3806 38		Total revenue (I to III)			41192.43		50044.60
engineering expenses (Increase)/Decrease in work in progress & finished goods (Employee benefits expense 25 5956.57 5824	IV.	Expenses					
goods			23		22461.52		28171.38
Finance costs 26 133.46 127 128 129			24		1057.14		121.20
Depreciation & amortisation expense 10.1 985.36 95 Other expenses of manufacture, administration, selling and distribution 27 3323.86 3808 Provisions (net) 28 2260.83 1583 Less: Cost of jobs done for internal use 69.99 75 Total expenses 36108.75 40517 V. Profit before prior period adjustments, exceptional items and tax 5083.68 9527 VI. Add/Less: Prior period adjustments (net) 29 -6.00 -6.00 VII. Add/ Less: Exceptional items 30 0.00 -6.00 -6.00 VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 1934.68 2843.93 a) Currrent tax 1934.68 2843.93 -6.32 2833 X. Profit for the year before minority interest 359.34 1575.34 -6.32 2833 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27		Employee benefits expense	25		5956.57		5824.00
Other expenses of manufacture, administration, selling and distribution 27 3323.86 3808 Provisions (net) 28 2260.83 1583 Less: Cost of jobs done for internal use 69.99 75 Total expenses 36108.75 40517 V. Profit before prior period adjustments, exceptional items and tax 5083.68 9527 VII. Add/less: Prior period adjustments (net) 29 -6.00 -6.00 VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 9527 a) Currrent tax 1934.68 2843.93 b) Deferred tax 1934.68 2843.93 Less: Minority interest 3502.34 -6.32 2837 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27		Finance costs	26		133.46		127.61
selling and distribution 27 3323.86 3808 Provisions (net) 28 2260.83 1583 Less: Cost of jobs done for internal use 69.99 75 Total expenses 36108.75 40517 V. Profit before prior period adjustments, exceptional items and tax 5083.68 9527 VI. Add/less: Prior period adjustments (net) 29 -6.00 -0 VII. Add/ Less: Exceptional items 30 0.00 -0 VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 9530 a) Currrent tax 1934.68 2843.93 b) Deferred tax -359.34 1575.34 -6.32 2837 X. Profit for the year before minority interest 3502.34 6693 Less: Minority interest -0.52 -0.52 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27		Depreciation & amortisation expense	10.1		985.36		957.18
Less: Cost of jobs done for internal use 75 75 75 75 75 75 75 7			27		3323.86		3808.31
Total expenses 36108.75 40517 V. Profit before prior period adjustments, exceptional items and tax 5083.68 9527 VI. Add/less: Prior period adjustments (net) 29 -6.00 -0 VII. Add/ Less: Exceptional items 30 0.00 -0 VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 1934.68 2843.93 a) Currrent tax 1934.68 2843.93 -6.32 2837 X. Profit for the year before minority interest 359.34 1575.34 -6.32 2837 XI. Profit after minority interest -0.52 -0.52 -0.52 -0.52 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27		Provisions (net)	28		2260.83		1583.76
V. Profit before prior period adjustments, exceptional items and tax 5083.68 9527 VI. Add/less: Prior period adjustments (net) 29 -6.00 -0 VII. Add/ Less: Exceptional items 30 0.00 -0 VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 2843.93 a) Currrent tax 1934.68 2843.93 b) Deferred tax -359.34 1575.34 -6.32 2837 X. Profit for the year before minority interest 3502.34 6693 Less: Minority interest -0.52 -0.52 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27		Less: Cost of jobs done for internal use			69.99		75.86
exceptional items and tax 5083.68 9527 VI. Add/less: Prior period adjustments (net) 29 -6.00 -0 VII. Add/ Less: Exceptional items 30 0.00 -6.00 -6.00 VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 -6.32 2843.93 a) Currrent tax 1934.68 2843.93 -6.32 2837 X. Profit for the year before minority interest 3502.34 6693 6693 Less: Minority interest 3502.86 6693 6693 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27		Total expenses			36108.75		40517.58
VII. Add/ Less : Exceptional items 30 0.00 4 VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 a) Currrent tax 1934.68 2843.93 b) Deferred tax -359.34 1575.34 -6.32 2837 X. Profit for the year before minority interest 3502.34 6693 Less: Minority interest -0.52 -0.52 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27	V.	Profit before prior period adjustments, exceptional items and tax			5083.68		9527.02
VIII. Profit before tax for the year 5077.68 9530 IX. Less: Tax expense 31 a) Currrent tax 1934.68 2843.93 b) Deferred tax -359.34 1575.34 -6.32 2837 X. Profit for the year before minority interest 3502.34 6693 Less: Minority interest -0.52 -0.52 XI. Profit after minority interest for the year 3502.86 6693 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 27	VI.	Add/less: Prior period adjustments (net)	29		-6.00		-0.45
IX. Less: Tax expense 31 a) Currrent tax 1934.68 2843.93 b) Deferred tax -359.34 1575.34 -6.32 2837 X. Profit for the year before minority interest Less: Minority interest 3502.34 6693 XI. Profit after minority interest for the year Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 3502.86 6693	VII.	Add/ Less : Exceptional items	30		0.00		4.14
a) Currrent tax b) Deferred tax 7. Profit for the year before minority interest Less: Minority interest 7. Profit after minority interest for the year Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 1934.68 2843.93 2693 2843.93 2693 2893 2893 2893 2893 2893 2893 2893 28	VIII.	Profit before tax for the year			5077.68		9530.71
b) Deferred tax X. Profit for the year before minority interest Less: Minority interest Less: Minority interest XI. Profit after minority interest for the year Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ Earnings before minority interest for the year 14.31 2837 3502.34 6693 6693	IX.	Less: Tax expense	31				
X.Profit for the year before minority interest Less: Minority interest3502.34 -0.526693 -0.52XI.Profit after minority interest for the year Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹3502.866693		a) Currrent tax		1934.68		2843.93	
Less: Minority interest-0.52-0.52XI. Profit after minority interest for the year3502.866693Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹14.3127		b) Deferred tax		-359.34	1575.34	-6.32	2837.61_
XI. Profit after minority interest for the year Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31 Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹	Χ.	Profit for the year before minority interest			3502.34		6693.10
Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹ 14.31							-0.27
point no. 15 of Note 32) in ₹ 14.31 27	XI.				3502.86		6693.37
Face Value per Share (Refer point no. 15 of Note 32) in 2.00 €		Earnings per share (Basic & Diluted) (Refer point no. 15 of Note 32) in ₹			14.31		27.35
		Face Value per Share (Refer point no. 15 of Note 32) in $\overline{\xi}$			2.00		2.00
Significant Accounting Policies Notes to Financial Statements 32		<u> </u>	32				

The accompanying notes 1 to 32 & significant accounting policies form an integral part of the consolidated financial statements. Total Revenue includes ₹ 446.54 Crore (previous year ₹ 470.48 Crore) share of jointly controlled entities. Total Expenses includes ₹ 373.11 Crore (previous year ₹ 405.75) share of jointly controlled entities.

> For and on behalf of Board of Directors 100

(I.P. Singh) Company Secretary

(P. K. Bajpai) Director (Finance)

(B. Prasada Rao) Chairman and Managing Director

As per our report of even date attached

For S.N. Dhawan & Co. **Chartered Accountants** FRN-000050N

For Wahi & Gupta **Chartered Accountants** FRN-002263N

(S.K. Khattar) Partner

M.No. 084993

(Y.K. Gupta) Partner

how him for

Place: New Delhi Date: May 29, 2014 M. No. 016020



Consolidated Cash Flow Statement

for the year ended March 31, 2014

(₹ in Crore)

	2013-2014	2012-2013		
A. CASH FLOW FROM OPERATING ACTIVITIES				
Net Profit Before Tax as per Statement of Profit and Loss	5077.68	9530.71		
Adjustment for				
Depreciation/Amortisation	991.39	957.95		
Lease Equalisation	0.51	0.29		
Provisions (Net)	1629.68	438.03		
Bad Debts & LD & investment written off	68.90	378.87		
Profit on sale of Fixed assets	-0.06	-3.42		
Profit on sale of Long Term Investments	0.00	-31.50		
Profit on sale of short Term Investments	-0.02	0.00		
Finance costs	133.49	127.61		
Interest/Dividend Income	-661.70	-632.59		
Operating Profit before Working Capital changes	7239.87	10765.95		
Adjustment for				
Trade & Other Receivables	-1135.33	-4639.08		
Inventories	2039.05	1767.62		
Trade Payable & Advances	-1473.09	-3021.89		
Cash generated from operations	6670.50	4872.60		
Direct Taxes Paid (Net of refund)	-2158.50	-3113.97		
NET CASH INFLOW / (OUTFLOW) FROM OPERATING ACTIVITIES	4512.00	1758.63		
B. CASH FLOW FROM INVESTING ACTIVITIES				
Purchase of Fixed Assets	-1604.13	-1755.30		
Sale and Disposal of Fixed Assets	233.52	29.01		
Sale and Disposal of short term Investments	0.02	0.00		
Sale of Investment in Subsidiary & Joint Ventures	0.02	31.50		
Pursuant to Amalgamation	-108.20	0.00		
Interest & Dividend income	610.91	581.85		
NET CASH USED IN INVESTING ACTIVITIES	867.86	1112.94		
C. CASH FLOW FROM FINANCING ACTIVITIES				
Short-term & Long-term borrowings (Net)	1990.45	2267.45		
Share application money pending allotment	-2.28	0.00		
Dividend Paid (including tax on dividend)	-1335.31	-1673.50		
Finance costs	-129.53	-121.48		
NET CASH USED IN FINANCING ACTIVITIES	-523.33	-472.47		
D. NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS	4167.47	1118.17		
Opening Balance of Cash and Cash Equivalents	7852.50	6734.33		
Closing Balance of Cash and Cash Equivalents (Refer note no. 17)	12019.97	7852.50		
Note 1 - Cook 9 Cook Equivalents consists of cook and healt belongs margin denocit 9 denocits with healts				

Note 1: Cash & Cash Equivalents consists of cash and bank balance, margin deposit & deposits with banks.

2 : Previous year's figures have been regrouped/rearranged where ever necessary.

3 : Cash & Cash Equivalents includes ₹ 3.87 Crore (₹ 3.52 Crore) unclaimed dividend lying in designated bank accounts.

For and on behalf of Board of Directors

(I.P. Singh) Company Secretary

(P. K. Bajpai) Director (Finance)

(B. Prasada Rao) Chairman and Managing Director

As per our report of even date

For S.N. Dhawan & Co. **Chartered Accountants** FRN-000050N

For Wahi & Gupta Chartered Accountants FRN-002263N

(S.K. Khattar) Partner M.No. 084993

how him p. " (Y.K. Gupta) Partner

Place : New Delhi Date: May 29, 2014 M. No. 016020



1 - Share Capital

	Figures as at	31.03.2014	Figures as at	31.03.2013
Authorised				
1000,00,00,000 equity shares of ₹ 2 each (previous year 1000,00,00,000 equity shares of ₹ 2 each)		2000.00		2000.00
Issued, Subscribed & Paid up Capital		489.52		489.52
244,76,00,000 fully paid equity shares of ₹ 2 each (previous year 244,76,00,000 equity shares of ₹ 2 each)				
 The reconciliation of the number of equity shares outstanding is set out below: 				
	Number	Amount	Number	Amount
Shares outstanding at the beginning of the year	2447600000	489.52	2447600000	489.52
Shares bought back during the year	-	-	-	-
Shares outstanding at the end of the year	2447600000	489.52	2447600000	489.52
b) Details of shares held by shareholders holding more than 5% shares at the year end	No. of shares	% age of holding	No. of shares	% age of holding
President of India (POI) alongwith nominees	1543452000	63.06%	1657552000	67.72%
Life Insurance Corporation of India	242890195	9.92%	141433662	5.78%
Face Value per share (₹)		2.00		2.00

- c) Terms / rights attached to the equity shares: The company has only one class of equity shares having a par value of ₹ 2 per share (previous year ₹ 2 per share). Each holder of the equity shares is entitled to one vote per share.
- d) 4.66% of BHEL's total paid up equity share capital (11,41,00,000 shares) were sold by Government of India through Block Deal to Life Insurance Corporation of India on 03.03.2014.



2 - Reserves & surplus

(₹ in Crore)

	Figures as a	t 31.03.2014	Figures as at	31.03.2013
Capital reserve				
Opening Balance	2.74		2.74	
Add: Addition pursuant to amalgamation	0.02			
Add: Adjustment on amalgamation	33.80			
Add: Additions			-	
Less: Deductions		36.56		2.74
General reserve				
Opening balance	28875.91		23871.82	
Add: transfer from surplus of profit & loss	2503.79		5004.09	
Less: Deductions	-		-	
		31379.69		28875.91
Surplus i.e. balance in statement of profit & loss				
Opening balance	1164.56		1038.98	
pursuant to amalgamation (Refer para no. 19 of note 32)	-218.10			
pursuant to amalgamation (Refer para no. 19 of note 32)	136.85			
Add: net profit for the year	3502.86		6693.37	
Less: Adjustments	-1.12		-0.46	
Profit available for appropriation	4585.05		7731.89	
Less: Appropriation-				
-General reserve	2503.79		5004.09	
-Dividend (including interim dividend of ₹ 337.53 Crore, previous				
year ₹ 535.55 Crore)	709.57		1339.66	
Corporate dividend toy (including # 57.26 Crore provious year				
-Corporate dividend tax (including ₹ 57.36 Crore, previous year	120.59	1251.10	223.58	1164.56
₹ 86.92 Crore)	120.59	1251.10	223,30	1104.30
		20667.25		20042.01
		32667.35		30043.21

3 - Long-term borrowings

	Figures as at 31.03.2014	Figures as at 31.03.2013
Secured		
Loans from banks	494.79	304.22
(Loan from Banks First pari passu charge on the moveable assets present and future comprising of moveable plant and machinery spares fitting furniture spare parts tools and accessories and stores and other moveables including operating cashflows, treasury income, book debts, receivables, cost commissions and revenue present and future along with a first charge of any other bank account wherever maintained of 2*800 MW Yermurus Thermal power station. First pari passu charge is in favour of Power Finance Corporation and the banks) Loans from Power Finance Corporation Ltd. (All the moveable and immovable property of RPCL 2*800 MW	1361.56	799.31
(All the moveable and immovable property of RPCL 2*800 MW Yermarus Thermal Power Station including all Plant and Machinery and other assets as specified in MoU and deed of hypothecatin dated 14th July 2011 shall be subject to a first charge in favour of PFC)		
	1856.35	1103.53
Unsecured		
Long term maturities of finance lease obligations	104.98	129.50
	104.98	129.50
	1961.33	1233.03



4 - Other long-term liabilities

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Trade payables	764.91	756.09
Advances received from customers & others	5759.89	4964.99
Deposits from contractors & others	75.38	74.71
	6600.18	5795.79
Includes ₹ NIL Crore (previous year ₹ NIL Crore) share of jointly	controlled entities.	

5 - Long-term provisions

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013		
Provision for employee benefits	2443.46	2196.52		
Contractual Obligation	4701.04	3632.52		
Other long-term provisions	365.96	144.59		
	7510.46	5973.63		
Includes ₹ 10.51 Crore (previous year ₹ 6.13 Crore) share of joinlty controlled entities.				

6 - Short-term borrowings

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Secured		
Loans from banks*		
Amount payable to KPCL	107.40	100.35
Cash credit	1.94	3.18
*(secured by hypothecation of raw materials, components, stores & spares, work in progress, finished goods, Trade Receivables and other current assets)		-
Rupee export packing credit (secured by first charge by way of hypothecation of raw materials, components, work-in-progress, finished goods, stores, Trade Receivables and other current assets both present and future)	2550.00	1286.00
Unsecured		
From companies	0.00	0.01
	2659.34	1389.54
Repayable within a period of 9 months at interest rate 7%		

Includes ₹ 107.40 Crore (previous year ₹ 100.36 Crore) share of jointly controlled entities.



7 - Trade payables

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Trade Payables	8758.77	9678.61
Acceptances	74.33	75.13
	8833.10	9753.74
Includes ₹ 107 Crore (previous year ₹ 144.81 Crore) share of ioi	nlty controlled entities.	

8 - Other current liabilities

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Current maturities of finance lease obligation	67.88	75.53
Advances received from customers & others	9016.39	11310.84
Deposits from Contractors & others	539.85	485.15
Unclaimed dividend	3.87	3.52
Other payables/ liabilities*	2010.31	2131.63
Bonds	1.00	1.00
Interest accrued but not due	7.22	5.38
Interest accrued and due on:		
Bonds	5.52	4.65
Packing credit	2.89	0.00
State Government Loans	2.33	2.33
Finance lease	5.49	7.13
	11662.75	14027.16

Advances received from customers & others include valuation adjustment

Includes ₹ 217.56 Crore (previous year ₹ 37.64 Crore) share of jointly controlled entities.

9 - Short-term provisions

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013
Provision for employee benefits	570.83	488.71
Proposed dividend	376.80	808.87
Corporate dividend tax	64.04	137.47
Contractual obligation	944.83	1380.10
Other short-term provisions	884.50	211.80
	2841.00	3026.95

Includes ₹ 10.92 Crore (previous year ₹ 9.01 Crore) share of jointly controlled entities.

^{- ₹} **4025.65 Crore** (previous year ₹ 5759.02 Crore)

^{*} includes Employees dues and Statutory dues



10 - Fixed assets

		Figures as at 31.03.2014	Figures as at 31.03.2013
(i)	Tangible assets		
	Gross block	11696.98	10555.85
	Less: Accumulated depreciation	7138.30	6221.92
	Less: Lease adjustment account	-2.84	-3.35
	Net Block	4561.52	4337.28
(ii)	Intangible assets		
	Gross block	405.89	528.05
	Less: Accumulated depreciation/amortisation	238.08	198.31
	Net block	167.81	329.74
(iii)	Capital work in progress		
	Construction work-in-progress-Civil	233.97	309.47
	Construction work-in-progress-Others	247.40	97.78
	Construction stores (including in transit)	8.95	11.27
	Plant & machinery and other equipments		
	- Under Erection/ Fabrication/awaiting erection	2270.87	1731.32
	- In transit	146.03	277.30
	Leased assets under erection	0.00	0.12
		2907.22	2427.26
(iv)	Intangible assets under development	21.44	39.42
	·	21.44	39.42
	Total	7657.99	7133.70
	Refer to details in Note no. 10.1		
	Includes ₹ 2315.26 Crore (previous year ₹ 1295.91 Crore) share of jointly controlled er	ntities.



Note 10.1

Fixed assets - consolidated

		Gross	Block		Depreciation/Amortisation			Net Block			
	Cost As at 01.04.2013	Additions/ adjustments during the year	Deductions/ adjustments during the year	Cost As at 31.03.2014	Accumulated Depreciation/ Amortisation as at 01.04.2013	Depreciation for the year	Depreciation Adjustment	Lease Adjustment Account as at 31.03.2014	Accumulated Depreciation/ Amortisation as at 31.03.2014	As at 31.03.2014	As at 31.03.2013
Factory/ Office Complex											
(i) Tangible assets											
Freehold land (incl. development exp.)	18.28	7.33		25.61						25.61	18.28
Leasehold land (incl. development exp.)	6.20	67.42	4.86	68.76	0.41	0.63			1.04	67.72	5.79
Roads, bridges and culverts	26.60	4.20	0.20	30.60	5.34	0.42	0.07		5.83	24.77	21.26
Buildings	1605.07	209.04	11.59	1802.52	603.28	106.38	-9.86		699.80	1102.72	1001.79
Leashold buildings	3.12			3.12	1.39	0.05			1.44	1.68	1.73
Drainage, sewerage and water supply	25.17	4.94		30.11	12.03	0.65	0.10		12.78	17.33	13.14
Railway siding	16.61	0.09		16.70	9.25	0.73			9.98	6.72	7.36
Locomotives and wagons	44.48	8.11		52.59	21.03	2.70			23.73	28.86	23.45
Plant & Machinery	6580.16	742.59	4.81	7317.94	4051.40	682.44	1.22		4735.06	2582.88	2528.76
Electronic data processing equipments	148.00	33.45	4.15	177.30	140.82	1.92	28.29		171.03	6.27	7.18
Electrical installations	302.30	36.48	0.20	338.58	121.29	20.04	0.14		141.47	197.11	181.01
Construction Equipment	253.63	20.52	6.84	267.31	168.59	32.71	-6.62		194.68	72.63	85.04
Vehicles	19.12	1.59	0.59	20.12	16.65	0.55	-0.56		16.64	3.48	2.47
Furniture & fixtures	54.32	4.31	2.15	56.48	17.25	3.84	-1.79		19.30	37.18	37.07
Office & other equipments	170.23	15.11	1.35	183.99	82.04	10.92	0.57		93.53	90.46	88.19
Fixed assets costing upto ₹ 10000/-	106.11	9.63	4.55	111.19	106.11	8.09	-3.01		111.19		
Capital expenditure	0.44			0.44	0.44				0.44		
Assets Given on Lease	497.15			497.15	493.79			2.84	493.79	3.36	6.71
Assets taken on Lease											
Plant & Machinery	0.16			0.16	0.16				0.16		
EDP Equipment taken on lease	401.32	34.37	39.03	396.66	233.55	64.10	-36.56		261.09	135.57	167.77
Office & other equipment taken on lease	3.84	0.33	0.00	4.17	0.74	0.30			1.04	3.13	3.10
Other assets taken on lease	3.14	0.11	0.33	2.92	2.65	0.33	-0.30		2.68	0.24	0.49
Total Tangible Assets- Factory	10285.45	1199.64	80.65	11404.44	6088.21	936.80	-28.30	2.84	6996.71	4407.73	4200.59
(ii) Intangible Assets											
Goodwill on consolidation	185.87		185.87								185.87
- Internally developed											
Software	0.66		0.01	0.65	0.61		-0.01		0.60	0.05	0.05
Others	40.10	19.78		59.88	23.45	11.25			34.70	25.18	16.65



(₹ in Crore)

		Gross	Block			Depre	ciation/Amortis	ation		Net	Block
	Cost As at 01.04.2013	Additions/ adjustments during the year	Deductions/ adjustments during the year	Cost As at 31.03.2014	Accumulated Depreciation/ Amortisation as at 01.04.2013	Depreciation for the year	Depreciation Adjustment	Lease Adjustment Account as at 31.03.2014	Accumulated Depreciation/ Amortisation as at 31.03.2014	As at 31.03.2014	As at 31.03.2013
- Others											
Software	140.69	10.19	1.05	149.83	120.30	12.02	-0.29		132.03	17.80	20.39
Technical Know- how	151.88	19.40	0.00	171.28	45.10	15.57			60.67	110.61	106.78
Others	8.85	15.40		24.25	8.85	1.23			10.08	14.17	
Total intangible Assets-Factory	528.05	64.77	186.93	405.89	198.31	40.07	-0.30		238.08	167.81	329.74
Total of Factory Assets	10813.50	1264.41	267.58	11810.33	6286.52	976.87	-28.60	2.84	7234.79	4575.54	4530.33
Township/ Residential											
Tangible assets											
Freehold land (incl. development exp.)	2.17	0.22		2.39						2.39	2.17
Leasehold land (incl. development exp.)	2.04	9.67	0.28	11.43	0.62	0.12	-0.08		0.66	10.77	1.42
Roads, bridges and culverts	5.88	1.34		7.22	3.11	0.09			3.20	4.02	2.76
Buildings	176.01	2.35		178.36	68.08	4.19	0.14		72.41	105.95	107.94
Leasehold buildings	0.27			0.27	0.21	0.06			0.27		0.06
Drainage, sewerage and water supply	17.58	2.36		19.94	14.72	0.38			15.10	4.84	2.86
Plant and Machinery	19.81	3.95		23.76	12.56	1.54			14.10	9.66	7.25
Electronic Data Processing Equipment		0.03		0.03						0.03	
Electrical installations	19.00	0.53		19.53	15.35	0.53			15.88	3.65	3.65
Vehicles	1.07		0.07	1.00	1.02	0.01	-0.07		0.96	0.04	0.05
Furniture & fixtures	1.03	0.27		1.30	0.45	0.13			0.58	0.72	0.58
Office & other equipments	22.93	2.11	0.77	24.27	14.98	1.04	-0.62		15.40	8.87	7.95
Fixed assets costing upto ₹ 10000/-	2.61	0.42	0.00	3.03	2.61	0.41	0.01		3.03	0.00	
Total Tangible Assets- Township	270.40	23.26	1.12	292.54	133.71	8.50	-0.62		141.59	150.95	136.69
Total of Township Assets	270.40	23.26	1.12	292.54	133.71	8.50	-0.62		141.59	150.95	136.69
Total of Tangible Assets	10555.85	1222.90	81.77	11696.98	6221.92	945.30	-28.92	2.84	7138.30	4561.52	4337.28
Total of Intangible Assets	528.05	64.77	186.93	405.89	198.31	40.07	-0.30		238.08	167.81	329.74
Total of Factory & Township	11083.90	1287.67	268.70	12102.87	6420.23	985.36	-29.22	2.84	7376.38	4729.33	4667.02
Previous year	10017.15	1132.66	65.91	11083.90	5502.14	957.18	-39.09	3.35	6420.23	4667.02	4518.65

Gross Block as at 31.03.2014 includes assets condemned and retired from active use ₹ 85.29 Crore (Previous year ₹ 61.57 Crore)

Net Block as at 31.03,2014 includes assets condemned and retired from active use $\mathbf{\ref{0.02}}$ Crore (Previous year $\mathbf{\ref{0.14}}$ Crore)

Gross Block excludes cost of assets purchased out of grant received from Govt of India for research as executing agency since the property does not vest with the Company.

₹ in Crore **42.04** 30.81

2012-13

There is no impairment loss in fixed assets during the year.

Gross Block includes ₹ 41.70 Crore (previous year ₹ 21.12 Crore) share of joint controlled entities



11 - Non-current investments

	Figures as at	31.03.2014	Figures as at	31.03.2013
Long Term Investments (at cost)				
Unquoted Shares(Fully paid up):				
TRADE:				
1892 (previous year 1402) Equity shares of ₹ 10/- each (Previous year ₹ 10 each) of Engineering Projects (India) Ltd.	*		0.01	
728960 (previous year 728960) Equity shares of ₹ 10/- each of AP Gas Power Corporation Ltd.	0.91		0.91	
5000000 (Previous year 5000000) Equity shares of $\stackrel{?}{ extsf{7}}$ 10/- each of Neelachal Ispat Nigam Ltd.	5.00	5.91	5.00	5.93
Joint Ventures Companies				
1999999 (previous year 1999999) Equity Shares of ₹ 10/- each of Powerplant Performance Improvement Ltd.	2.00		2.00	
Less: Provision for dimunition in value	2.00	0.00	2.00	0.00
OTHER THAN TRADE				
3 shares of ₹ 100/- each of BHEL House Building Cooperative Society Ltd., Hyderabad	*		*	
250 shares of ₹ 10/- each of BHPV Employees Consumers Cooperative Stores Ltd.	*		*	
10 shares of ₹ 50/- each of Cuffe Parade Persopolis Premises Cooperative Society Ltd., Mumbai	*		*	
20 shares of ₹ 50/- each of Hill View Cooperative Housing Society Ltd., Mumbai	*		*	0.01
Share Money paid in advance				
M/s. Rita Enterprises, Mumbai for allotment of 50 shares of ₹ 10 each	*			*
M/s. Asish Enterprises, Mumbai for allotment of 50 shares of ₹ 10 each	*			*
* Value of less than ₹ 1 lakh				
		5.91		5.94
Aggregate value of Unquoted Investments		5.91		5.94
Aggregate provision in diminution in value of Investments		2.00		2.00



12 - Deferred tax assets (Net)

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013			
Provisions	1323.32	1091.82			
Statutary dues	609.47	484.03			
Modvat Adjustment	50.05	60.79			
Others	41.66	34.18			
	2024.50	1670.82			
Deferred Tax Liabilities					
Depreciation	48.58	115.02			
Deferred tax assets (net)	1975.92	1555.80			
Includes ₹ 5.97 Crore (previous year ₹ 4.36 Crore) share of jointly controlled entities.					

13 - Long-term loans and advances

	Figures as at	31.03.2014	Figures as at	31.03.2013
Loans to employees	0.11		1.47	
Loans to Public Sector Undertakings	8.00		12.00	
Interest accrued and or due on loans	0.32	8.43	0.56	14.03
Advances (Recoverable in cash or in kind or for value to be received)				
For purchases	413.29		104.48	
Capital advance	179.02		325.67	
To Others	58.86	651.17	70.04	500.19
Deposits				
Balance with customs, Port Trust and other Govt Authorities		55.60		42.54
Other Deposits		67.39		54.30
Advance Tax/TDS (Net of Provision for Taxation)		565.76		341.94
		1348.35		953.00
Less: Provisions		33.35		23.01
		1315.00		929.99
Sub classification:-				
Secured, considered good		8.09		12.16
Unsecured, considered good		1306.91		917.83
Doubtful		33.35		23.01
		1348.35		953.00
Includes:				
Due from Officers		0.01		0.01
Includes ₹ 147.79 Crore (previous year ₹ 264.67 Crore) share of	jointly controlled	d entities.		



14 - Other non-current assets

(₹ in Crore)

	Figures as	at 31.03.2014	Figures as a	at 31.03.2013		
Long term trade receivables	14870.40		13099.34			
Less: Provision for bad & doubtful debts	2403.34		1804.85			
Less: Automatic price reduction adjustment a/c	574.34	11892.72	577.83	10716.66		
		11892.72		10716.66		
Sub classification: Long term trade receivables						
Secured, considered good		-		-		
Unsecured, considered good		11892.72		10716.66		
Doubtful		2977.68		2382.68		
		14870.40		13099.34		
Long term trade receivables include deferred debts-						
- (₹ 11619.96 Crore (previous year ₹ 9859.62 Crore)						
Includes ₹ 11.67 Crore (previous year ₹ 9.34 Crore) share of jointly controlled entities.						

15 - Inventories

(₹ in Crore)

	Figures as	Figures as at 31.03.2014		at 31.03.2013
Raw material & components	3708.30		4516.79	
Material-in-transit	594.74	4303.04	708.70	5225.49
Work-in-progress (including items with sub-contractors)		3011.24		4202.73
Finished goods	1501.49		1361.39	
Inter division transfers in transit	295.84	1797.33	297.06	1658.45
Stores & spare parts				
Production	210.57		243.40	
Fuel stores	17.06		24.22	
Miscellaneous	47.46	275.09	48.15	315.77
Materials with fabricators/contractors		197.34		234.95
Loose tools		31.14		44.58
Scrap (at estimated realisable value)		65.47		67.21
Non moving inventory	214.78		185.30	
Less: Provision for non-moving inventory	86.74	128.04	65.45	119.85
		9808.69		11869.03

Refer to Significant Accounting Policy No. 9 regarding mode of valuation

Includes ₹ 6.82 Crore (previous year ₹ 44.30 Crore) share of jointly controlled entities.



16 - Trade receivables

(₹ in Crore)

	Figures as at 31.03.2014	Figures as at 31.03.2013					
Debts outstanding for a period exceeding six months	15063.71	11781.57					
Other debts	14332.69	18668.74					
	29396.40	30450.31					
Less: Provision for bad & doubtful debts & automatic							
price reduction adjustment	1197.85	1080.02					
	28198.55	29370.29					
Trade receivables include deferred debts-							
-(₹ 6345.85 Crore (previous year ₹ 7243.93 Crore)							
Trade receivables include goods despatched pending billing-							
-(₹ 1328.75 Crore (previous year ₹ 1705.16 Crore)							
Trade receivables include valuation adjustment-							
-(₹ 1342.28 Crore (previous year ₹ 1274.42 Crore)							
Particulars of current trade receivables :							
Secured, considered good		-					
Unsecured, considered good	28198.55	29370.29					
Doubtful	1197.85	1080.02					
	29396.40	30450.31					
Includes ₹ 117.66 Crore (previous year ₹ 116.03 Crore) share of jointly controlled entities.							

17 - Cash & Bank Balances

	Figures as at 31.03.2014	Figures as at 31.03.2013				
Cash & Cash equivalents						
Balances with Banks*	2460.83	2680.72				
Fixed Deposits having maturity less than 3 months	17.50	-				
Cheques, Demand Drafts on hand	200.80	420.03				
Cash & Stamps in on hand	0.93	1.19				
Remittances in transit	0.06	-				
Other Bank Balances						
Margin money deposit	0.00	0.56				
Fixed Deposit having maturity more than 3 months & less than 12 months	9339.85	4750.00				
	12019.97	7852.50				
*Includes						
Earmarked against unclaimed dividend	3.87	3.52				
Non-repatriable account	5.87	13.16				
Includes ₹ 146.56 Crore (previous year ₹ 91.94 Crore) share of jointly controlled entities.						



18 - Short-term loans and advances

(₹ in Crore)

	Figures as at 31.03.2014		Figures as at 31.03.2013	
Loans				
Loans to Employees	0.17		0.15	
Materials Issued on loan	0.00		9.74	
Loans to others	0.00		0.01	
Loans to Public Sector Undertakings	8.00		4.00	
Interest accrued and or due on loans	1.95	10.12	2.65	16.55
Advances (Recoverable in cash or in kind or for value to be received)				
To subsidiaries	0.05		0.55	
To employees	39.76		32.30	
For purchases	584.50		721.90	
To Others	1055.32	1679.63	1028.05	1782.80
Deposits				
Balance with customs, Port Trust and other Govt. Authorities		439.27		342.07
Others		87.10		56.94
		2216.12		2198.36
Less: Provision for doubtful loans & advances		102.64		82.08
		2113.48		2116.28
Particulars of Loans and advances:-				
Secured, considered good		8.14		6.19
Unsecured, considered good		2105.34		2110.09
Doubtful		102.64		82.08
		2216.12		2198.36
Includes:				
Due from Officers		0.15		0.11
Includes ₹ 89.69 Crore (previous year ₹ 62.27 Crore) share	of jointly control	led entities.		

19 - Other current assets

	Figures as at 31.03.2014	Figures as at 31.03.2013			
Interest Accrued on Banks Deposits	253.00	201.27			
Other Current Assets	1.34	1.46			
	254.34	202.73			
Includes ₹ 1.81 Crore (previous year ₹ 2.44 Crore) share of iointly controlled entities.					



20 - Revenue from operations

(₹ in Crore)

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Sales less returns	33484.92	43271.23
Income from external erection & other services & revenue from works contract	7317.07	7401.61
	40801.99	50672.84
Includes ₹ 434 02 Crore (previous year ₹ 465 01 Crore) sha	are of jointly controlled entities	

21 - Other Operational Income

(₹ in Crore)

	Figures for the ende	current year d 31.03.2014		the previous ed 31.03.2013
Export Incentives		27.93		24.27
Rental income on leased assets	0.93		0.93	
Lease equalisation account	-0.51	0.42	-0.29	0.64
Scrap sale		285.00		283.94
Receipt from sale/transfer of surplus stock		0.05		0.07
Others		407.72		500.61
		721.12		809.53

Includes ₹ 0.98 Crore (previous year ₹ 0.07 Crore) share of jointly controlled entities.

22 - Other Income

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
A. Other income		
Profit on sale of Long Term Investments	-	31.50
Profit on sale of Short Term Investments	0.02	0.00
Profit from sale of fixed assets & capital stores (net)	0.06	3.42
Dividend	21.38	19.00
Exchange variation (net)	656.50	141.57
Others (including grants of ₹ Nil (previous year ₹ 0.33 Crore) from Govt. of India for R & D Projects)	304.74	319.68
Total (A	982.70	515.17
B. Interest Income		
From customers	0.09	0.03
From banks	623.11	542.63
Others	17.12	70.93
Total (B	640.32	613.59
Total Other Income Total (A+B	1623.02	1128.76



23 - Cost of material consumption, erection and engineering expenses

(₹ in Crore)

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Consumption of raw material & components	17459.09	23239.40
Consumption of stores & spares	573.52	590.59
Erection and Engineering exp payment to sub-contractors	4428.91	4341.39
	22461.52	28171.38
Includes ₹ 341.15 Crore (previous year ₹ 371.88 Crore) sha	are of jointly controlled entities.	

24 - Increase/(Decrease) in work in progress & finished goods

(₹ in Crore)

	Figures for the current year ended 31.03.2014			Figures for the previous year ended 31.03.2013	
Work-in-progress					
Closing Balance	3012.63		4204.10		
Opening Balance	4204.10	-1191.47	4842.50	-638.40	
Finished Goods					
Closing Balance	1500.20		1362.15		
Opening Balance	1362.15	138.05	954.27	407.88	
Inter-division transfer in transit		-3.72		109.32	
		-1057.14		-121.20	
NOTE:					
Element of Excise duty in Finished Goods					
Closing Balance		130.73		126.59	
Opening Balance		126.59		99.97	
Includes ₹ 0.17 Crore (previous year ₹ 0.46 Crore) share o	f jointly controlled	entities.			

25 - Employee benefits expense

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Salaries, wages, bonus, allowances & other benefits	5038.01	4910.26
Contribution to gratuity fund	107.27	144.76
Contribution to provident and other funds	329.85	302.17
Group insurance	10.63	11.80
Staff welfare expenses	470.81	455.01
	5956.57	5824.00
Includes ₹ 15.86 Crore (previous year ₹ 14.04 Crore) share	e of jointly controlled entities.	



26 - Finance cost (₹ in Crore)

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Interest expenses	104.20	43.67
Interest on income tax	4.47	
Other Borrowing Costs	24.79	83.94
	133.46	127.61
Less: Borrowing Cost capitalised	0.00	0.00
	133.46	127.61
Includes ₹ 0.59 Crore (previous year ₹ 1.14 Crore) share o	f jointly controlled entities.	

27 - Other expenses of manufacture, administration, Selling & distribution

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Royalty, technical, Resident consultant's charges & other		
consultancy charges	136.76	126.76
Rent	83.10	86.18
Excise duty	285.64	307.28
Power & Fuel	605.54	562.18
Rates & taxes	75.04	72.96
Service tax	8.26	13.22
Insurance	119.39	125.95
Repairs:		
Buildings	84.06	97.17
Plant & machinery	44.93	38.97
Others	136.11	153.41
Other expenses in connection with exports	23.30	28.28
Losses written off	0.05	1.06
Preliminary expenses written off	0.31	-
Bad debts written off	8.59	28.13
Carriage outward	382.59	574.16
Travelling & conveyance	189.75	200.72
Miscellaneous expenses	1033.57	1004.22
Liquidated damages charged off	60.26	349.68
Donations	0.06	0.03
Corporate social responsibility & sustainability development expenses	46.55	37.95
	3323.86	3808.31



28 - Provisions (net)

(₹ in Crore)

	•	the current 31.03.2014	Figures for the previou year ended 31.03.201	
Doubtful debts, Liquidated Damages and Loans & advances				
Created during the year	1470.10		1209.26	
Less written back during the year	713.86	756.24	819.57	389.69
Contracutal Obligations				
Created during the year	1119.53		1793.43	
Less written back during the year	488.38	631.15	647.70	1145.73
Others				
Created during the year	947.41		87.59	
Less written back during the year	73.97	873.44	39.25	48.34
		2260.83		1583.76

Includes ₹ 1.96 Crore (previous year ₹ 1.41 Crore) share of jointly controlled entities.

29 - Prior period adjustments (net)

(₹ in Crore)

	Figures for th year ended 3			igures for the previous year ended 31.03.2013	
INCOME					
Sales less returns	0.00		1.97		
Other income	0.04	0.04	0.13	2.10	
EXPENDITURE					
Payment to Subcontractors	0.14		0.06		
Consumption of Raw material & components	0.40		0.47		
Depreciation	6.03		0.77		
Interest Cost	0.03		0.00		
Misc. Expenses	-0.56	6.04	1.25	2.55	
		-6.00		-0.45	

Includes ₹ Nil Crore (previous year ₹ 0.02 Crore) share of jointly controlled entities.

30 - Exceptional items

(₹ in Crore)

	Figures for the current year ended 31.03.2014	Figures for the previous year ended 31.03.2013
Waiver of interest		4.14_
	0.00	4.14_
Includes ₹ NiI (previous year ₹ NiI) share of jointly controlled en	itities.	

31 - Tax expense

(₹ in Crore)

	_	Figures for the current year ended 31.03.2014		ne previous 31.03.2013
a) Current tax				
for current year	1923.63		3063.78	
for earlier years	11.05	1934.68	-219.85	2843.93
b) Deferred tax charge / (credit)				
for current year	-316.96		-165.14	
for earlier years	-42.38	-359.34	158.82	-6.32
		1575.34		2837.61

Includes ₹ 22.08 Crore (previous year ₹ 20.65 Crore) share of jointly controlled entities.



Significant Accounting Policies

(Consolidated Financial Statements)

1. Basis of preparation of Financial Statements

The financial statements have been prepared as of a going concern on historical cost convention and on accrual method of accounting in accordance with the generally accepted accounting principles and the provisions of the Companies Act, 1956 as adopted consistently by the Company.

2. Use of estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires the Management to make estimates and assumptions that affect the income and expenditure during the reporting period and the assets and liabilities including contingent liabilities at the date of financial statements. The differences between actual results and estimates are recognised in the period in which results are known.

3. Fixed Assets

- (a) Fixed assets (other than land acquired free from State Government) are carried at the cost of acquisition or construction or book value less accumulated depreciation and impairment, if any.
- (b) Cost includes value of internal transfers for capital works, taken at actual / estimated factory cost or market price, whichever is lower. Effect of extraordinary events such as devaluation / revaluation in respect of long term liabilities / loans utilized for acquisition of fixed assets is added to / reduced from the cost.
- (c) Land acquired free of cost from the State Government is valued at ₹ 1/- except for that acquired after 16th July 1969, in which case the same is valued at the acquisition price of the State Government concerned, by corresponding credit to capital reserve.

4. Leases

Finance Lease

A) i) Assets Given on Lease Prior to 1st April, 2001

Assets manufactured and given on finance lease are capitalised at the normal sale price / fair value/ contracted price and treated as sales.

Depreciation on the same is charged at the rate applicable to similar type of fixed assets as per Accounting Policy on 'Depreciation'. Against lease rentals, matching charge is made through Lease Equalization Account.

Finance income is recognised over the lease period.

(ii) Assets Given on Lease on or after 1st April, 2001

Assets manufactured and given on finance lease are recognised as sales at normal sale price / fair value / NPV.

Finance income is recognised over the lease period.

Initial direct costs are expensed at the commencement of lease.

B) Assets Taken on Lease on or after 1st April, 2001

Assets taken on lease are capitalised at fair value / NPV / contracted price.

Depreciation on the same is charged at the rate applicable to similar type of fixed assets as per Accounting Policy on 'Depreciation'. If the lease assets are returnable to the lessor on expiry of lease period, the same is depreciated over its useful life or lease period, whichever is shorter.

Lease payments made are apportioned between finance charges and reduction



of outstanding liability in relation to assets taken on lease.

Operating Lease

A) Assets Given on Lease

Assets manufactured and given on operating lease are capitalised. Lease income arising there from is recognised as income over the lease period.

B) Assets Taken on Lease

Lease payments made for assets taken on operating lease are recognised as expense over the lease period.

5. Intangible Assets

- A. Intangible assets are capitalised at cost if
 - it is probable that the future economic benefits that are attributable to the asset will flow to the company, and
 - b. the company will have control over the assets, and
 - c. the cost of these assets can be measured reliably and is more than ₹ 10,000/-

Intangible assets are amortized over their estimated useful lives not exceeding three years in case of software and not exceeding ten years in case of others on a straight line pro-rata monthly basis.

- B. a. Expenditure on research including the expenditure during the research phase of Research & Development Projects is charged to statement of profit and loss in the year of incurrence.
 - Expenditure incurred on Development including the expenditure during the development phase of Research & Development Project meeting the criteria as per Accounting Standard on Intangible Assets, is treated as intangible asset.
 - Fixed assets acquired for purposes of research and development are capitalised.

6. Borrowing Costs

Borrowing costs that are attributable to the manufacture, acquisition or construction of qualifying assets, are included as part of the cost of such assets.

A qualifying asset is one that necessarily takes more than twelve months to get ready for intended use or sale.

Other borrowing costs are recognised as expense in the period in which they are incurred.

7. Depreciation

(i) Depreciation on fixed assets (other than those used abroad under contract) is charged up to the total cost of the assets on straight-line method as per the rates prescribed in Schedule XIV of the Companies Act, 1956, except where depreciation is charged at rates determined on the basis of the technically assessed estimated useful lives shown hereunder:-

	Single Shift	Double Shift	Triple Shift
General Plant & Machinery	8%	12%	16%
Automatic/Semi- Automatic Machines	10%	15%	20%
Erection Equipment, Capital Tools Tackles	20%		
Township Buildings			
- Second Class	2.5%		
- Third Class	3.5%		
Railway Sidings	8%		
Locomotives & Wagons	8%		
Electrical Installations	8%		
Office & Other Equipments	8%		



Drainage, Sewerage &

Water supply 3.34%

Electronic Data

Processing Equipment 20%

In respect of additions to/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

- (ii) Fixed assets used outside India pursuant to long term contracts are depreciated over the duration of the initial contract.
- (iii) Fixed assets costing ₹ 10,000/- or less and those whose written down value as at the beginning of the year is ₹ 10,000/- or less, are depreciated fully. In so far as township buildings are concerned, the cost per tenement is the basis for the limit of ₹ 10,000/-.
- (iv) At erection/project sites: The cost of roads, bridges and culverts is fully amortized over the tenure of the contract, while sheds, railway sidings, electrical installations and other similar enabling works (other than purely temporary erections, wooden structures) are so depreciated after retaining 10% as residual value.
- (v) Purely Temporary Erection such as wooden structures are fully depreciated in the year of construction.
- (vi) Leasehold Land and Buildings are amortized over the period of lease. Buildings constructed on land taken on lease are depreciated over their useful life or the lease period, whichever is earlier.

In the case of BGGTS (50% JV)

Depreciation on fixed assets is provided using the straight line method over the useful life of the assets as estimated by the management. The rates of depreciation prescribed in Schedule XIV to the Companies Act, 1956 are considered the minimum rates. If the management's estimate of the useful life of a fixed asset at the time of acquisition of the asset or of the remaining useful life on a subsequent review is shorter than the envisaged in the aforesaid schedule, depreciation is provided at a higher rate based on the management's estimate of the useful life/ remaining useful life. Pursuant to this policy, depreciation on assets has been

provided at the rates based on the following useful lives of fixed assets as estimated by management.

Asset category	Estimated useful life
Plant and machinery	2-15
Electrical Installations	3-10
Civil Structures	5-10
Furniture and fixtures	1-8
Computers	3
Office equipment	3-5

Depreciation is calculated on a pro-rata basis from/ up to the month the assets are purchased/ sold. Individual assets costing less than ₹ 5000/- each are depreciated in full in the year of purchase.

In the case of Raichur Power Corporation Limited (36.49% JV)

Depreciation is provided on straight line method at the rates prescribed in the Electricity Supply Act, 1948. In respect of assets for which rates are not specified in the Electricity Supply Act, 1948, depreciation is provided at the rates specified under schedule XIV of the Companies Act, 1956.

Assets are depreciated to the extent of 90% of the cost and 10% is retained as residual value.

Depreciation on additions to assets is provided for the full year irrespective of the date of addition.

Depreciation is not charged on assets sold/ dismantled in the year of sale/discard/ dismantling.

Individual assets costing up to ₹ 5000 are fully depreciated in the year in which they are put to use.

In the case of NTPC BHEL Power Projects Pvt. Ltd.

Depreciation on fixed assets is charged on straight line method as per the rates prescribed in Schedule XIV of the Companies Act, 1956.

In the case of Dada Dhuniwale Khandwa Power Limited

Depreciation on fixed assets is provided on straight line basis at the rates and in the manner prescribed in schedule XIV to the Companies Act, 1956.

In respect of individual assets costing less than ₹ 5000/-, full depreciation has been provided in the year of addition.

8. Investments

- Long-term investments are carried at cost. Decline, other than temporary, in the value of such investments, is recognised and provided for.
- (ii) Current investments are carried at cost or quoted / fair value whichever is lower. Unquoted current investments are carried at cost.
- (iii) The cost of investment includes acquisition charges such as brokerage, fees and duties.

Any reduction in the carrying amount & any reversals of such reductions are charged or credited to the Statement of Profit and Loss.

9. Inventory Valuation

- Inventory is valued at actual / estimated cost or net realizable value, whichever is lower.
- (ii) Finished goods in Plant and work in progress involving Hydro and Thermal sets including gas based power plants, boilers, boiler auxiliaries, compressors and industrial turbo sets are valued at actual / estimated factory cost or at 97.5% of the realizable value, whichever is lower.
- (iii) In respect of valuation of finished goods in plant and work-in-progress, cost means factory cost; actual / estimated factory cost includes excise duty payable on manufactured goods.
- (iv) In respect of raw material, components, loose tools, stores and spares cost means weighted average cost.
- (v) a) For Construction contracts entered into on or after 01.04.2003:

Where current estimates of cost and selling price of a contract indicates loss, the anticipated loss in respect of such contract is recognised immediately irrespective of whether or not work has commenced.

b) For all other contracts:

Where current estimates of cost and selling price of an individually identified project forming part of a contract indicates loss, the anticipated loss in respect of such project on which the work had commenced, is recognised.

- In arriving at the anticipated loss, total income including incentives on exports / deemed exports is taken into consideration.
- (vi) The components and other materials purchased / manufactured against production orders but declared surplus are charged off to revenue retaining residual value based on technical estimates.

In the case of BGGTS (50% JV)

Traded stock is valued at the lower of cost and net realizable value. Cost is determined under the first-in-first-out method.

10. Revenue Recognition

Sales are recorded based on significant risks and rewards of ownership being transferred in favour of the customer. Sales include goods dispatched to customers by partial shipment.

A. For construction contracts entered into on or after 1.4.2003

Revenue is recognised on percentage completion method based on the percentage of actual cost incurred up to the reporting date to the total estimated cost of the contract.

B. For all other contracts

(i) Recognition of sales revenue in respect of long production cycle items (Hydro and Thermal sets including gas-based power plants, boilers, boiler auxiliaries, compressors and industrial turbo sets) is made on technical estimates. When the aggregate value of shipments represents 30% or more of the realisable value, they are considered at 97.5% of the realisable value or in its absence, quoted price.



Otherwise, they are considered at actual/ estimated factory cost or 97.5% of the realisable value, whichever is lower. The balance 2.5% is recognised as revenue on completion of supplies under the contract.

(ii) Income from erection and project management services is recognised on work done based on:

Percentage of completion; or

The intrinsic value, reckoned at 97.5% of contract value, the balance 2.5% is recognised as income when the contract is completed.

- (iii) Income from engineering services rendered is recognised at realisable value based on percentage of work completed.
- (iv) Income from supply / erection of non-BHEL equipment / systems and civil works is recognised based on dispatches to customer / work done at project site.

11. Accounting for Foreign Currency Transactions

Transactions in foreign currencies are recorded at the exchange rates prevailing on the date of the transaction. Foreign currency monetary assets and liabilities are translated at year end exchange rates. Exchange difference arising on settlement of transactions and translation of monetary items are recognised as income or expense in the year in which they arise.

12. Translation of Financial Statements of Integral Foreign Operations

- (i) Items of income and expenditure are translated at average rate except depreciation, which is converted at the rates adopted for the corresponding fixed assets.
- (ii) Monetary items are translated at the closing rate; non-monetary items carried at historical cost are translated at the rates in force on the date of the transaction; non-monetary items carried at fair value are translated at exchange rates that existed when the value were determined.

(iii) All translation variances are taken to statement of Profit and Loss.

13. Employee Benefits

Provident Fund and Employees' Family Pension Scheme contributions are accounted for on accrual basis. Liability for Earned Leave, Half Pay Leave, Gratuity, Travel claims on retirement and Post Retirement Medical Benefits are accounted for in accordance with actuarial valuation. Compensation under Voluntary Retirement Scheme is charged off in the year of incurrence on a pro-rata monthly basis.

14. Claims by / against the Company

- (i) Claims for liquidated damages against the Company are recognised in accounts based on management's assessment of the probable outcome with reference to the available information supplemented by experience of similar transactions.
- (ii) Claims for export incentives / duty drawbacks / duty refunds and insurance claims etc. are taken into account on accrual.
- (iii) Amounts due in respect of price escalation claims and / or variations in contract work are recognised as revenue only when there are conditions in the contracts for such claims or variations and / or evidence of the acceptability of the same from customers. However, escalation is restricted to intrinsic value.

15. Provision for Warranties

 For construction contracts entered into on or after 01.04.2003;

The company provides warranty cost at 2.5% of the revenue progressively as and when it recognises the revenue and maintain the same through the warranty period.

ii) For all other contracts:

Provision for contractual obligations in respect of contracts under warranty at the year end is maintained at 2.5% of the

value of contract. In the case of contracts for supply of more than a single product 2.5% of the value of each completed product is provided.

(iii) Warranty claims/ expenses on rectification work are accounted for against natural heads as and when incurred and charged to provisions in the year end.

16. Government Grants

Government Grants are accounted when there is reasonable certainty of their realisation.

Grants related to fixed depreciable assets are adjusted against the gross cost of the relevant assets while those related to non-depreciable assets are credited to capital reserve.

Grants related to revenue, unless received as compensation for expenses / losses, are recognised as revenue over the period to which these are related on the principle of matching costs to revenue. Grants in the form of non-monetary assets are accounted for at the acquisition cost, or at nominal value if received free.

17. Taxes on Income

Current tax is determined on the basis of taxable income in accordance with the provisions of the Income Tax Act, 1961. Deferred tax liability / asset resulting from timing difference between accounting income and taxable income is recognised considering the tax rate and laws that have been enacted or substantively enacted as on the balance sheet date. Deferred tax asset is accounted for and carried forward only to the extent that there is reasonable certainty that sufficient future taxable income will be available against which such deferred tax assets can be realised. Deferred tax assets in respect of unabsorbed depreciation and carry forward of losses are recognised only if there is virtual certainty that there will be sufficient future taxable income available to realise such assets.

18. Impairment

The carrying amount of cash generating units is reviewed at each balance sheet date where there is any indication of impairment. An impairment loss is recognised in the Statement of Profit and Loss where the carrying amount exceeds the recoverable amount of the cash generating units. An impairment loss is reversed if there is change in the recoverable amount and such loss either no longer exists or has decreased.

19. Segment Reporting

Segment reporting is in line with the accounting policies of the company. Revenue and expenses are identified to segments on the basis of their relationship to the operating activities of the segment. Revenue, expenses, assets and liabilities which are not allocable to segments on a reasonable basis, are included under "Unallocated revenue/expenses/assets/liabilities".



32 - Other notes to consolidated financial statements

1 The Consolidated Financial Statements relate to Bharat Heavy Electricals Limited (the company), its Subsidiary and its interest in Joint Venture entities. The consolidated Financial Statements have been prepared on the following basis:-

Basis of Accounting:

- i) The financial statements of the subsidiary company and interest in joint ventures in the consolidation are drawn upto the same reporting date as of the parent company.
- ii) The consolidated financial statements have been prepared in accordance with Accounting Standard-21 on "Consolidated Financial Statements" and Accounting Standard 27 on "Financial Reporting of interest in Joint Ventures".

Principles of Consolidation:

- (a) The Financial Statements of the Parent Company and its Subsidiary company have been combined on a line-by-line basis by adding together the book values of like items of assets, liabilities, income and expenses after fully eliminating the intra-group balances and intra-group transactions and unrealised profits or losses in accordance with Accounting Standard - 21 on "Consolidated Financial Statements".
- (b) The financial statements of Joint Venture entities have been combined by applying proportionate consolidation method on a line by line basis on items of assets, liabilities, income and expenses in accordance with Accounting Standard- 27 on "Financial Reporting of Interests in Joint Ventures".
- (c) The consolidated financial statements have been prepared using uniform accounting policies for like transactions and other events in similar circumstances and are presented to the extent possible, in the same manner as the Parent Company's separate financial statements except as otherwise stated in the Significant Accounting Policies.
- (d) The difference between the costs of investments in the subsidiary over the net assets at the time of acquisition of shares in the Subsidiary is recognised in the Financial Statements as Goodwill or Capital Reserve as the case may be.
- (e) Minority interest' share of net loss of consolidated subsidiary for the year is adjusted against the income of the group in order to arrive at the net income attributable to shareholder of the Company.
- (f) Minority interest share of net liabilities of consolidated subsidiary is identified and presented in consolidated balance sheet separate from assets/liabilities & equities of the company shareholder.

2 The Consolidated Financial Statements includes the result of following entities:

Na			Country of Proportion (%) of Incorporation Shareholding as on 31.03.2014	
Sul	bsidiary Company			
1)	Bharat Heavy Plate and Vessels Ltd. (BHPV)	India		100
2)	BHEL Electrical Machines Ltd. (BHEL EML)	India	51	51
Joi	nt Venture Companies			
1)	BHEL-GE Gas Turbine Services Ltd.	India	one share less than 50%	one share less than 50%
2)	NTPC-BHEL Power Projects Pvt. Ltd.	India	50	50
3)	Dada Dhuniwale Khandwa Power Ltd.	India	50	50
4)	Raichur Power Corporation Itd.	India	36.49	42.73
5)	Latur Power company Ltd.	India	49.99	49.99



- (a) The financial statements of BHEL EML are consolidated based on the audited financial statement for the year ended on 31.03.2014.
- (b) The interest in Joint Venture Companies in respect of BHEL-GE Gas Turbine Services Ltd. is considered based on audited financial statements for the year ended as on 31.03.2014.
- (c) The interest in Joint Venture in respect of Power Plant Performance Improvement Ltd. (PPIL) has not been considered in preparation of Consolidated Financial Statements as the companiy is under liquidation and full amount of equity investment has been provided for as diminution in the value of investment.
- (d) The interest in Joint Venture in respect of NTPC BHEL Power Projects Private Limited, Raichur Power Corporation Ltd., Dada Dhuniwale Khandwa Power Ltd. and Latur Power Company Ltd. is considered based on unaudited financial statements for the year ended on 31.03.2014.

3	Сар	ital 8	other commitments		2013-2014	2012-2013
			d amount of contracts, net of advances, remaining to be	~· ~		
			I on capital account and not provided for	₹ in Crore	345.46	450.82
			ve includes for acquisition of intangible assets	₹ in Crore	9.80	1.65
4			d buildings includes			
	a)	i)	Acres of land for which formal transfer/ lease deed have not been executed	Acres	8939.61	8462.27
			Net Block of above	₹ in Crore	79.17	5.36
		::\	Number of flats for which formal transfer/ lease deed	V III 01010	70.17	0.00
		ii)	have not been executed	Nos.	12	12
			Net Block of above	₹ in Crore	1.51	1.55
		iii)	Number of buildings for which formal transfer/ lease			
		,	deed have not been executed	Nos.	1	1
			Net Block of above	₹ in Crore	5.07	5.21
		iv)	Acres of land for which the cost paid is provisional;			
		,	registration charges and stamp duty (net of provision	Acres	528.18	51.52
			already made), if any, would be accounted for payment	~. ~		
			Net Block of above	₹ in Crore	70.98	0.87
	b)		es of land leased to Ministry of Defence, Govt. of India partments & others	Acres	30.60	31.27
	c)		es of land being used by Ministry of Defence and for			
			ch further approval of the competent authority for	Acres	180.00	180.00
	d)		tinuance of licencing of this land is awaited. es of land is under adverse possession/encroachment	Acres	598.78	527.94
	e)		.85 acres of land pending mutation at Haridwar	Acres	390.76	527.54
	0)		st of land mentioned above in 4 (b), (c) (d) & (e) is not			
		•	erial)			
5	on f	ixed	act on the profit of providing 100 percent depreciation assets upto ₹ 10,000/- each, without considering such f earlier years, is as under:			
	•		preciation on assets upto ₹ 10,000/- charged off in the			
			ng year.	₹ in Crore	10.64	11.62
			lepreciation on above.	₹ in Crore	3.21	3.36
	Exc	ess a	mount charged.	₹ in Crore	7.43	8.26



6	Rev	enue	from operations			
	а		udes based on provisional prices	₹ in Crore	154.02	261.87
	b	Incl sale	udes for escalation claims raised in accordance with es contracts, inclusive of escalation claims on accrual is, to the extent latest indices were available;	₹ in Crore	1673.94	2136.62
	С	cus	udes despatches of equipment held on behalf of tomers at their request for which payment has been eived by Company; and	₹ in Crore	36.22	156.15
	d		eludes for price reduction (net of refund) due to delay in very as per the terms of the contract	₹ in Crore	57.66	201.19
7	Con	tinge	ent liabilities :			
	Α	Cla	ims against the company not acknowledged as debt :			
	i)	а	Income Tax Pending Appeals	₹ in Crore	0.90	34.36
		b	Against which paid under protest included under the head "deposit "	₹ in Crore	0.00	0.00
	ii)	а	Sales Tax Demand	₹ in Crore	1344.13	890.36
		b	Against which paid under protest included under the head "deposit "	₹ in Crore	190.56	129.19
	iii)	a	Excise Duty demands	₹ in Crore	489.55	438.90
		b	Against which paid under protest included under the head "deposit"	₹ in Crore	17.75	13.91
	iv)	a	Custom Duty demands	₹ in Crore	3.14	2.63
		b	Against which paid under protest included under the head "deposit"	₹ in Crore	2.89	0.06
	v)	Cou	urt & Arbitration cases	₹ in Crore	1045.24	746.57
	vi)	а	Liquidated Damages	₹ in Crore	4347.41	3381.71
		b	Amount deducted by customers towards LD included in vi)a	₹ in Crore	2673.51	2005.50
	vii)	Cou	unter Claim by contractors	₹ in Crore	0.77	0.61
	viii)	a	Service Tax Demand	₹ in Crore	294.13	186.03
		b	Against which paid under protest	₹ in Crore	0.70	0.00
	ix)	Oth	ers	₹ in Crore	91.52	158.88
	x)		porate Guarantee given on behalf of subsidiary npany (BHPV)	₹ in Crore		6.56
		/1	the state of the s			

(In view of the various court cases and litigations and claims disputed by the company financial impact as to outflow of resources is not ascertainable at this stage).

- 8 a) Cash credit limit from banks aggregating to ₹ 5000 Crore (previous year ₹ 5000 Crore) and Company's counter guarantee / indemnity obligations in regard to bank guarantee / letters of credit limit aggregating to ₹ 50000 Crore (previous year ₹ 50000 Crore) sanctioned by the consortium banks are secured by first charge by way of hypothecation of raw materials, components, work in progress, finished goods, stores, trade receivable and other current assets both present and future. The outstanding bank guarantees as at 31.03.2014 is ₹ 45083.60 Crore (previous year ₹ 41786 Crore)
 - b) Corporate Guarantee outstanding as on 31.03.2014 is ₹ 3312.07 Crore (Previous year ₹ 4717.71 Crore)



- 9 Balances shown under Long term trade receivable, Trade receivables, Trade Payables, contractor's advances, deposits and stock/materials lying with sub-contractors/fabricators are subject to confirmation, reconciliation & consequential adjustment, if any. The reconciliation is carried out on ongoing basis as the company is in the business of long term construction contracts and provisions wherever considered necessary have been made in line with the guidelines.
- 10 a) The disclosures relating to Construction Contracts entered on or after 01.04.2003 as per the requirement of Accounting Standard -7 (Revised) are as follows:

		(₹ in Crore)
	2013-14	2012-13
Contract revenue recognised for the year	33377.46	42268.26
In respect of Contract in progress at the end of year :		
The aggregate amount of Cost incurred and recognised		
profits (less recognised losses)	240909.16	208103.02
Amount of advance received	7952.36	7912.90
Amount of retentions (deferred debts)	19038.41	16932.57
In respect of dues from customers after appropriate netting off		
Gross amount due from customer for the contract work as an asset	2913.68	2833.23
Gross amount due to customer for the contract work as a liability	2167.28	2655.14
Contingencies	-	-

- b) The estimates of total costs and total revenue in respect of construction contracts entered on or after 1st April, 2003 in accordance with Accounting Standard (AS)-7 (R) Construction Contracts are reviewed and updated periodically to ascertain the percentage completion for revenue recognition. However, it is impracticable to quantify the impact of change in estimates.
- 11 The disclosure relating to derivative instruments:
 - a) The derivative instruments that are hedged and outstanding as on 31.03.2014 is Nil (previous year Nil).
 - b) The foreign currency exposures that are not hedged by a derivative instrument or otherwise are as under:

	2013-14	2012-13
a) Assets / Receivables		
In foreign currency		
in US\$ in Cro	re 69.90	62.73
in EURO in Cro	re 57.05	60.61
in LYD in Cro	re 0.83	0.88
in RO in Cro	re 0.03	0.03
In Indian currency		
in US\$ ₹ in Cro	re 4145.94	3383.78
in EURO ₹ in Cro	re 4635.44	4160.17
in LYD ₹ in Cro	re 39.75	37.17
in RO ₹ in Cro	re 5.24	4.78
in Others ₹ in Cro	re 32.20	35.19



(₹ in Crore)

b) Liabilities
In foreign currency

in foreign currency			
in US\$	in Crore	27.24	37.65
in EURO	in Crore	18.84	32.62
in LYD	in Crore	1.42	1.42
In Indian currency			
in US\$	₹ in Crore	1649.57	2066.01
in EURO	₹ in Crore	1575.57	2297.00
in LYD	₹ in Crore	69.36	61.00
in Others	₹ in Crore	210.24	151.22

12 a) Expenditure on departmental Repair & maintenance which are as under :

			(1 11 01010)
		2013-14	2012-13
	Plant & Machinery	186.73	193.09
	Buildings	56.43	59.82
	Others	51.15	33.14
b)	Agency Commission on exports included in expenses in connection		
	with exports	11.15	18.87
c)	Expenditure on research & development	311.38	338.23
d)	Rent Residential	50.98	59.14
e)	Payment to Auditors (Net of Service Tax)		
	As Auditors	0.58	0.58
	includes paid abroad	0.02	0.01
	Reimbursement of expenses	0.16	0.16
	Taxation matters(including certification)	0.15	0.13
	includes paid abroad	0.02	0.00
	Other services	0.36	0.35
f)	Payment to Cost Auditors	0.12	0.12
g)	Expenditure on entertainment	7.42	8.35
h)	Expenditure on foreign travel		
	Expenditure in Rupees	15.82	19.82
i)	Expenditure on Publicity and Public relations		
	Salaries allowances & other benefits	11.96	11.75
	Other expenses	17.52	15.14
j)	Director's Fees	0.10	0.14

- 13 As required by AS-18 ' Related Party Disclosures' are given below :
 - i) Related Parties Joint Venture Companies
 - 1 Powerplant Performance Improvement Ltd.

- 2 BHEL-GE Gas Turbine Services Pvt. Ltd.
- 3 NTPC-BHEL Power Projects Pvt. Ltd.
- 4 Latur Power Company Ltd.
- 5 Raichur Power Corporation Ltd.
- 6 Dada Dhuniwale Khandwa Power Ltd.

ii) Key Management Personnel

S/Shri

B.P. Rao, Atul Saraya (upto 30.11.2013), O.P. Bhutani (upto 31.05.2013), M.K. Dube (upto 31.07.2013), P.K. Bajpai, R. Krishnan, W.V.K. Krishnashankar (w.e.f. 01.08.2013) and Atul Sobti (w.e.f. 01.12.2013), S. Basu, Anand Bansal, S. Srinivasa Rao, Y. K. Rastogi, M.R. Kamble, A.B. Ravi Chandran, Bhavaraju Srinivasa Rao, V.P. Singh

iii) Details of Transactions

Joint Ventures		2013-14	2012-13
Purchase of Goods and Services	₹ in Crore	39.96	86.70
Sales of Goods and services	₹ in Crore	1982.39	2757.14
Receiving of Services	₹ in Crore	40.60	0.00
Rendering of Services	₹ in Crore	289.86	303.63
Dividend income	₹ in Crore	16.90	16.66
Royalty income	₹ in Crore	1.29	0.90
Purchase of shares	₹ in Crore	25.00	-
Sale of Shares	₹ in Crore	0.00	64.00
Amounts due to BHEL at the end of the year	₹ in Crore	1034.17	978.18
Amounts due from BHEL at the end of the year	₹ in Crore	466.79	588.65
Advance deposit towards issue of shares	₹ in Crore	-	-
Provision for Doubtful debts	₹ in Crore	10.81	4.39
Advances given	₹ in Crore	0.81	2.20

Note: Majority of transactions are with BGGTS, NBPPL and Raichur Power Corporation Ltd.

Key Management Personnel (KMP)			
Payment of Salaries	₹ in Crore	3.02	2.53
Relatives of KMP			
Amounts due to BHEL at the end of the year	₹ in Crore	0.01	0.01
Payment of Salaries	₹ in Crore	0.24	0.25

14 Lease

Details of assets taken on lease on or after 1st April 2001 are as under:

i) Finance Lease:

a.	Outstanding balance of Minimum Lease payments	2013-14	2012-13	
	not later than one year	₹ in Crore	83.90	90.43



			later than one year and not later than five years	₹ in Crore	121.68	150.83
	later than five years ₹ in Crore		₹ in Crore	0.23	0.00	
	Total minimum lease payments at the balance ₹ in Crore sheet date		₹ in Crore	205.81	<u>241.26</u>	
		b.	Present Value of (a) above			
			not later than one year	₹ in Crore	67.87	75.53
			later than one year and not later than five years	₹ in Crore	104.78	129.50
			later than five years	₹ in Crore	0.02	0.02
			Total Present Value at the balance sheet date	₹ in Crore	172.67	205.05
		c.1	Finance charges	₹ in Crore	33.14	36.21
		c.2	Present value of Residual value, if any	₹ in Crore	0.00	0.00
	ii)		company is in the practice of taking houses for enpments etc. on operating lease both as cancellable and		_	s and EDP
	iii) Operating Lease The future minimum lease payments under non-cancellable operating lease are as under:			2013-14	2012-13	
		not l	ater than one year	₹ in Crore	2.10	2.54
		later	than one year and not later than five years	₹ in Crore	3.92	5.04
		later	than five years	₹ in Crore	4.15	4.40
	iv)		ails regarding rentals in respect of assets taken on lease r to 1.4.2001 are as given below:			
		Cos	t of Assets			
		Land	d & Buildings	₹ in Crore	0.01	0.01
		Con	nputers & peripherals	₹ in Crore	0.00	0.00
		Ren	tals payable over unexpired period of lease			
		Land	d & buildings	₹ in Crore	0.02	0.02
		Con	nputers & peripherals	₹ in Crore	0.00	0.00
15	Earı	nings	per Share:			
					2013-14	2012-13
	•	ghted year (average number of Equity Shares outstanding during A)	Nos. in Crore	244.760	244.760
	Non	ninal \	Value of Equity Share	(₹)	2.00	2.00
	Net	Profit	for the year after adjusting minority interest (B)	₹ in Crore	3502.86	6693.37
	Basi	c and	Diluted Earnings Per Share (B)/(A)	(₹)	14.31	27.35
16	The	discl	osure relating to Accounting Standard -29			(₹ in Crore)
	a) Liquidated Damages				2013-14	2012-13
		Оре	ning		1356.49	1170.62

Additions	697.84	652.27
Usage/ Write off/payment	-61.51	-348.08
Withdrawal/adjustments	-264.05	-118.32
Closing Balance	1728.77	1356.49
Contractual Obligation		
Opening	5012.62	3867.87
Additions	1119.53	1793.43
Usage/ Write off/payment	-133.39	-154.31
Withdrawal/adjustments	-352.89	-494.37
Closing Balance	5645.87	5012.62

- b) Liquidated damages are provided in line with the Accounting Policy of the company and the same is dealt suitably in the accounts on settlement or otherwise. Contingent liability relating to liquidated damages is shown in item No. 7 of Note-32.
- c) The provision for contractual obligation is made at the rate of 2.5% of the contract revenue in line with significant Accounting Policy to meet the warranty obligations as per the terms and conditions of the contract. The same is retained till the completion of the warranty obligations of the contract. The actual expenses on warranty obligation may vary from contract to contract and on year to year depending upon the terms and conditions of the respective contract.
- 17 Item of expense and income less than ₹ One Lakh are not considered for booking under Prior Period Items.
- 18 For certain items, the Company and its Joint Ventures have followed different accounting policies as indicated in Significant Accounting policies. However, impact of the same is not material. The share of jointly controlled entities has been indicated in each Notes of annual account by way of a note.

19 Amalgamation of erstwhile Bharat Heavy Plate & Vessels Limited, Visakhapatnam with the Company

- a) The Board for Industrial and Financial Reconstruction (BIFR) vide its order dated August 29, 2013 sanctioned the Modified Draft Rehabilitation Scheme (MDRS) for envisaging merger of Bharat Heavy Plate & Vessels Limited (BHPV) (100 % subsidiary of BHEL) with the Company under Section 18(5) of Sick Industrial Companies (Special Provisions) Act, 1985 ("SICA") with effect from appointed date i.e. October 01, 2011.
- b) The Company has made necessary filings with the Registrar of Companies on August 30, 2013 (effective date). The scheme of merger has accordingly been given effect in these accounts.
- c) Pursuant to the merger the assets and liabilities of the erstwhile Bharat Heavy Plate & Vessels Limited (whose principle business was design, fabrication, supply and erection of heat exchanges, columns, storage spheres, reactors and related products)were transferred to and vested on going concern basis in the Company with effect from the appointed date i.e. October 01, 2011.
- d) In terms of the Accounting Standard (AS) 14 "Accounting for Amalgamations", the scheme of amalgamation has been accounted for under the "Pooling of Interests method" wherein all the assets, liabilities and reserves & surplus/losses of the erstwhile BHPV Limited have been taken over at their book values as appearing in the books of accounts as on October 01, 2011.
- e) On the amalgamation of the BHPV with the Company, the share capital of BHPV stand cancelled without any further act or deed or instrument, from the Appointed Date. Since the Company holds 100% (along with its nominees) of the issued, subscribed and paid-up capital of BHPV, neither allotment of any new shares nor any payment was made to any person whatsoever in consideration or in lieu of the transfer and vesting of the Undertaking/ Business of BHPV in the Company.



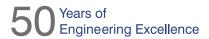
- f) The paid up Equity Share Capital of ₹ 33.80 Crore appearing in the books of account of BHPV and the corresponding Investments of ₹ 1 in respect thereof appearing in the books of account of the Company stand cancelled and the difference arising there from amounting to ₹ 33.80 Crore has been adjusted with capital reserves of the Company.
- g) Debit balance of Profit and Loss Account of the BHPV amounting to ₹278.05 Crore as on 01.10.2011 have been adjusted against surplus balance in Statement of Profit and Loss of the Company.
- h) All outstanding inter company balances totaling ₹ 273.67 Crore stand cancelled against corresponding balances in the books of the Company. Assets/liabilities as on appointed date (i.e. 01.10.2011) acquired on amalgamation are as follows:

Assets		₹ in Crore
Fixed Assets (net)	4.25	
Investment	0.01	
Inventories	44.99	
Sundry Debtors	120.98	
Cash & Bank Balances	2.73	
Loans and advances	55.77	228.73
Liabilities		
Capital Reserve	0.02	
Unsecured Loans	9.62	
Current Liabilities	165.01	
Provisions	24.66	199.31
Net Assets-Liabilities acquired on amalgamation		29.42
Debit balance of Profit & Loss account	278.05	
Less: Inter company balances	273.67	4.38
Adjusted with Capital Reserve		33.80

i) All the regular employees, who are in the service of BHPV, on the effective date, have become the employees of the Company and their services will be continuous and shall not be interrupted by reason of the amalgamation of BHPV.

		on or the dimargantation of 21 in th		
j)	Adjustment against Surplus i.e. balance in statement of profit and loss on account of			₹ in Crore
	i)	Debit balance of Profit & Loss account of the erstwhile BHPV as on appointed date (01.10.2011)		-278.05
	ii)	Profit before tax for the period from 01.10.2011 to 31.03.2013		
		Turnover	343.05	
		Less: Expenses	283.10	59.95
	iii)	Provision for tax including deferred tax		136.85

- 20 Previous year's figures have been regrouped /rearranged wherever considered necessary.
- 21 The Share application money pending allotment is of RPCL, a JV of the company in respect of money received by them from KPCL and the same is proposed to be converted to equity at a later date as and when a fresh infusion of Capital is required from KPCL.



22 Segment Information - Consolidated

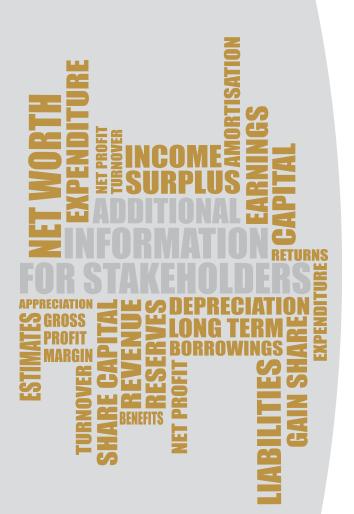
(₹ in Crore)

		For the year ended 31.3.2014			For the year ended 31.3.2013		
A.	PRIMARY SEGMENT - BUSINESS SEGMENTS						
		Power	Industry	Total	Power	Industry	Total
I.	SEGMENT REVENUE						
a.	Segment Revenue	32919.37	7882.62	40801.99	40017.51	10655.33	50672.84
b.	Inter-Segment Revenue	-	-	-	-	-	-
C.	Operating Revenue-External (a) - (b)	32919.37	7882.62	40801.99	40017.51	10655.33	50672.84
II.	SEGMENT RESULTS						
a.	Segment Results	5466.52	984.45	6450.97	8625.34	2233.02	10858.36
b.	Unallocated expenses (Net of income)			1239.83			1200.04
C.	Profit before finance cost & Income Tax (a) - (b)			5211.14			9658.32
d.	Finance cost			133.46			127.61
e.	Net Profit before Income Tax (c) - (d)			5077.68			9530.71
f.	Income Tax			1575.34			2837.61
g.	Net Profit after Income Tax			3502.34			6693.10
Ш	ASSETS & LIABILITIES						
a.	Segment Assets	48306.61	11998.56	60305.17	48254.35	13200.27	61454.62
b.	Unallocated Assets			14937.40			10298.29
C.	Total Assets			75242.57			71752.91
d.	Segment Liabilities	31618.07	6698.08	38316.15	31228.93	7300.31	38529.24
e.	Unallocated Liabilities			3752.01			2670.60
f.	Total Liabilities			42068.16			41199.84
IV	OTHER INFORMATION						
a.	Cost incurred during the period to acquire fixed assets (Incl. CWIP)	1352.54	273.61		1548.56	212.93	
b.	Depreciation	756.80	187.13		711.50	193.84	
C.	Non Cash Expenses (other than						
	depreciation)	2094.16	235.57		1362.91	370.87	
В.	SECONDARY SEGMENT - GEOGR						
		Within India	Outside India	Total	Within India	Outside India	Total
1	Net Sales / Income from Operations	38791.39	2010.60	40801.99	49726.08	946.76	50672.84
2	Total Assets	74606.02	636.55	75242.57	71249.43	503.48	71752.91
3	Cost incurred during the period to acquire Fixed Assets	1729.07	-0.79	1728.28	1803.00	0.07	1803.07

Notes:

- 1. The primary segments have been identified as 'Power and Industry' based on the orders booked by the respective business sectors, the order booked by International operation group is taken to Power or Industry as the case may be.
- 2. BGGTS (JV) is in the business of sale of parts and components of gas turbines, Engineering services, repair services and uprate repairs and other joint ventures are in setting up power projects or under power business the same has been considered under 'Power Segment'.
- 3. BHEL EML (Subsidiary Co.) manufacturing of rotating electrical machines, considered under 'Industry segment'.

Additional Information for Stakeholders



251	Ten Years Financials
253	Value Addition Statement
254	Performance Annual Plan
254	Contribution to Exchequer
254	Enterprise Value
255	BHEL in India
256	Product Profile
266	Glossary



Ten Years Financials

(₹ in Crore)

											n Crore)
		2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05
1	EARNINGS/OUTGOINGS										
	Earnings										
	Turnover (Gross)	40338	50156	49510	43337	34154	28033	21401	18739	14525	10336
	Revenue from Operations (Net)	38389	47618	47228	41566	32861	26212	19305	17237	13374	9527
	Other Operational Income	720	807	751	680	493	514	422	379	277	420
	Other Income	1616	1121	1266	1021	1155	983	1023	445	280	236
	Total Earnings	40725	49546	49245	43267	34509	27709	20750	18061	13931	10183
	Outgoings										
	Cost of material consumption, Erection & Engineering Expenses	22099	27899	28908	23209	20672	17620	11821	10182	8145	5871
	(Increase)/Decrease in work in progress & Finished Goods	1057	116	(823)	(127)	(787)	(1152)	(827)	(181)	(386)	(540)
	Employee benefit expenses	5933	5753	5466	5397	6540	2984	2608	2369	1879	1650
	Other expenses of manufacture, administration, selling and distribution (Incl. prior period items)	3315	3777	3242	2537	2057	1823	1644	1496	1177	1212
	Provisions (Net)	2259	1566	1403	2715	(934)	1281	778	172	283	126
	Less : Cost of job done for internal use	68	76	104	69	121	61	38	28	36	19
	Outgoings before finance cost & depreciation	34595	39035	38092	33662	27427	22495	15986	14009	11062	8301
	Profit before depreciation, finance cost & tax	6130	10511	11153	9605	7082	5214	4763	4052	2869	1882
	Depreciation	983	953	800	544	458	334	297	273	246	219
	Gross Profit	5147	9558	10353	9061	6624	4880	4466	3779	2623	1663
	Finance Cost	133	125	51	55	33	31	36	43	59	81
	Profit before tax	5014	9432	10302	9006	6591	4849	4430	3736	2564	1582
	Tax Expense (Net)	1553	2817	3262	2995	2280	1711	1571	1321	885	628
	Profit after tax	3461	6615	7040	6011	4311	3138	2859	2415	1679	953
	Dividend	693	1323	1567	1525	1141	832	746	600	355	196
	Corporate Dividend Tax	118	221	254	249	191	141	127	93	50	27
	Retained Profit	2650	5071	5219	4237	2979	2165	1986	1722	1274	731
1	WHAT THE COMPANY OWNED								-		,
	Fixed Assets										
	Gross Block	12050	10783	9707	8050	6580	5225	4443	4135	3822	3629
	Less: Accumulated Depreciation & Lease Adj.	7357	6325	5410	4649	4165	3754	3462	3146	2840	2585
	Net Block	4693	4458	4297	3401	2415	1471	981	989	982	1044
	Capital WIP incl. Intangible Assets under development	642	1172	1348	1733	1530	1157	658	302	185	95
	Non-Current Investments	420	429	462	439	80	52	8	8	8	9
	Deferred Tax Assets(Net)	1969	1551	1546	2164	1527	1840	1338	935	674	518
	Current Assets, Loans & Advances and other non current assets	65067	62518	59123	51523	42915	36901	27906	20980	16331	13343
	Total assets	72791	70128	66776	59260	48467	41421	30892	23214	18180	15010



Ten Years Financials (Contd.)

		2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05
III	WHAT THE COMPANY OWED										
	Long Term Borrowings	105	129	123	102	81	105	61	58	539	524
	Liabilities & Provisions	39639	39555	41280	39004	32489	28377	20056	14368	10340	8459
	Total liabilities	39744	39684	41403	39106	32570	28482	20117	14426	10879	8983
IV	NET WORTH OF THE COMPANY										
	Share Capital	490	490	490	490	490	490	490	245	245	245
	Reserves & Surplus	32557	29954	24883	19664	15427	12449	10285	8544	7057	5782
	Net Worth	33047	30444	25373	20154	15917	12939	10775	8788	7301	6027
٧	NET WORKING CAPITAL	28026	24273	17892	12551	10426	8524	7850	6612	5991	4884
VI	CAPITAL EMPLOYED	33139	29161	22651	16391	12968	10091	8873	7640	7001	5950
VII	VALUE ADDED	15046	19460	19098	18476	13171	9894	8323	7182	5683	4254
VIII	RATIOS										
	PBDIT to total assets (%) #	8.6%	15.4%	17.7%	17.8%	15.8%	14.4%	17.6%	19.6%	17.3%	13.9%
	Gross profit to capital employed (%) #	16.5%	36.9%	53.0%	61.7%	57.5%	51.5%	54.1%	51.6%	40.5%	29.8%
	Turnover/ gross block	3.3	4.7	5.1	5.4	5.2	5.4	4.8	4.5	3.8	2.8
	Earnings per share (₹) +	14.14	27.03	28.76	24.56	17.61	12.82	11.68	9.86	6.86	3.9
	Net worth per share (₹) +	135.02	124.38	103.67	82.34	65.03	52.86	44.02	35.9	29.83	24.62
	Current Ratio	1.76	1.64	1.43	1.32	1.32	1.3	1.4	1.5	1.6	1.58
	Total Debt / Equity	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.08	0.09
	Return on Net Worth	10.5%	21.7%	27.7%	29.8%	27.1%	24.3%	26.5%	27.5%	23.0%	15.8%
	Gross profit margin	12.8%	19.1%	20.9%	20.9%	19.4%	17.4%	20.9%	20.2%	18.1%	16.1%
	Net profit margin	8.6%	13.2%	14.2%	13.9%	12.6%	11.2%	13.4%	12.9%	11.6%	9.2%

[#] On the basis of average assets and capital employed

ullet Figures are restated on post-split made in 2011-12 and bonus issue of 1:1 in 2007-08



Value Addition Statement

(₹ in Crore)

Description	2013-14	2012-13	2011-12	2010-11	2009-10
A. Generation of Value Addition					
Value of Production (less excise duty)	37073	47219	47815	41527	33598
Less - Direct Material, Power & Fuel and Payments to Contractors	22027	27759	28717	23051	20427
Value Added	15046	19460	19098	18476	13171
Less - Other Operating Exp	2982	3196	2479	3461	845
(Net of income)					
Net Value Addition	12064	16264	16619	15015	12326
% to value of production	32.54%	34.44%	34.76%	36.16%	36.69%
B. Application of Value Addition					
Employees payments	5934	5753	5466	5410	5243
% to net value addition	49.19%	35.37%	32.89%	36.03%	42.54%
Depreciation	983	953	800	544	458
% to net value addition	8.15%	5.86%	4.81%	3.62%	3.72%
Financing charges :					
- Interest on borrowings	133	125	51	55	34
% to net value addition	1.10%	0.77%	0.31%	0.36%	0.27%
Tax Provision (Income Tax, Def. Tax & Prior Period)	1553	2818	3262	2994	2280
% to net value addition	12.88%	17.32%	19.63%	19.94%	18.50%
Dividend (incl. dividend tax)	811	1544	1821	1775	1332
% to net value addition	6.71%	9.49%	10.95%	11.82%	10.81%
Retained Profit	2650	5071	5219	4236	2979
% to net value addition	21.97%	31.18%	31.41%	28.22%	24.17%

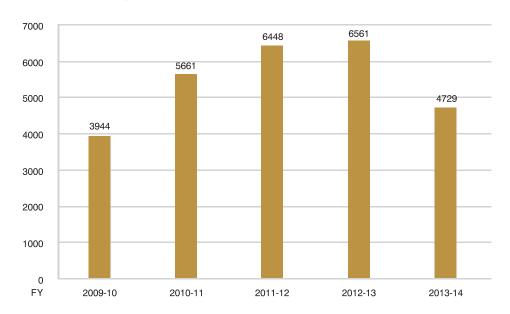


Performance Annual Plan

(₹ in Crore)

Category of Investment	2013-14	2012-13
Schemes	340	549
Modernisation and Rationalisation, others	140	72
Science & Technology	1	14
Customer Project Related Capital Investment	63	117
Total	544	752

Contribution to Exchequer (₹ in Crore)

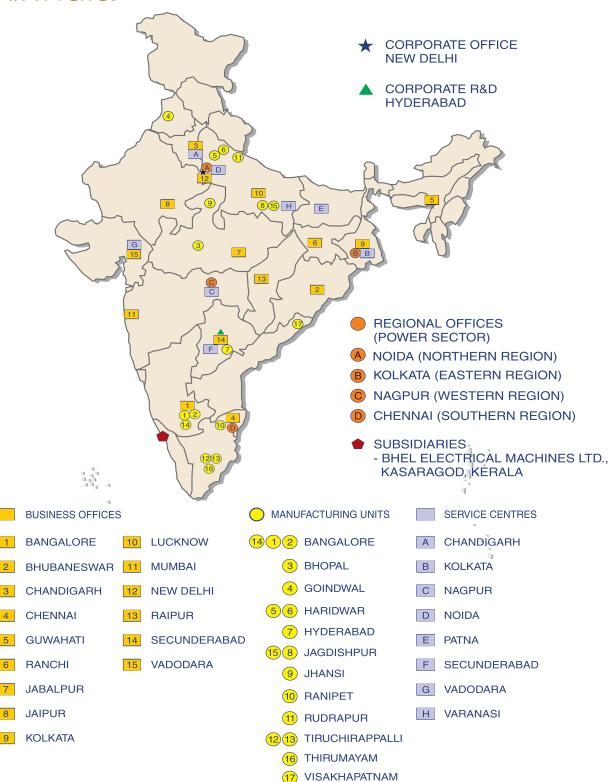


Enterprise Value

(₹ in Crore)

	2013-14	2012-13	2011-12	2010-11	2009-10
Market value of equity	48169	43322	62940	100971	117027
Add: Debt	2740	1500	193	163	128
less: Cash & Cash Equivalent	11873	7732	6672	9630	9790
Enterprise Value	39036	37090	56461	91504	107365

BHEL in India





Product

Profile

THERMAL POWER PLANTS

- Steam Generators, Steam Turbines, Turbo Generators along with regenerative feed cycle up to 800 MW capacities for fossil-fuel, and combined-cycle applications, capability to design and manufacture Steam Generators, steam turbines with supercritical steam cycle parameters and matching Turbo Generators of up to 1000 MW unit size
- Condensers, Condensate Extraction Pumps, Boiler Feed Pumps, Valves and Heat Exchangers meeting above requirement of TG Sets up to 1000 MW

NUCLEAR POWER PLANTS

- Steam generator & Turbines and matching Turbo-Generators, Condensers up to 700 MW capacity
- Heat exchangers
- Pressure vessel
- Reactor vessels

GAS-BASED POWER PLANTS

- Gas turbines and matching generators ranging from 25 to 292 MW (ISO) rating
- Gas turbine-based co-generation and combined-cycle systems for industry and utility applications

HYDRO POWER PLANTS

- Custom-built conventional hydro turbines of Kaplan, Francis and Pelton types with matching generators, pump turbines with matching motor-generators upto 300 MW, Bulb turbine with matching generators up to 10 MW
- High capacity pumps along with matching motors for Lift Irrigation Schemes (up to 150 MW)
- Electro Hydraulic Microprocessor based Digital Governor for conventional turbines

- Microprocessor based Digital Controller for lift irrigation schemes
- Mini / micro hydro sets with PLC based compact Digital Governor up to 15 MW
- Static excitation systems for Hydro generators & motors
- Brushless exciter for Hydro generators & motors
- Special purpose Motor Generator sets
- Spherical (rotary) valves, butterfly valves and auxiliaries for hydro stations

DG POWER PLANTS

 HSD, LDO, FO, LSHS, natural gas based diesel generator power plants, unit rating of up to 20 MW and voltage up to 11 kV, for emergency, peaking as well as base load operations on turnkey basis

INDUSTRIAL SETS

- Industrial turbo-sets of rating from 7 to 150 MW
- Industrial steam turbines and gas turbines for drive applications and co-generation applications
- Reheat steam turbines and matching generators ranging from 120 to 200 MW captive, utility and combined cycle power plants

CASTINGS AND FORGINGS

 Sophisticated heavy castings and forgings of creep resistant alloy steels, stainless steel and other grades of alloy steels meeting stringent international specifications for components of sub critical, supercritical and ultra super critical technology

BOILERS

 Steam generators for utilities, ranging from 30 to 800 MW capacity, using coal, lignite, oil, natural gas or a combination of these



fuels; capability to manufacture boilers with supercritical parameters up to 1000 MW unit size

- Steam generators for industrial applications, ranging from 40 to 450 t/hour capacity, using coal, natural gas, industrial gases, biomass, lignite, oil, Bagasse or a combination of these fuels
 - Pulverized fuel fired boilers
 - Stoker boilers
 - Bubbling fluidized bed combustion (BFBC) boilers
 - Circulating fluidized bed combustion (CFBC) boilers up to 250 MW
 - Heat-recovery steam generators (HRSG)
 - Chemical recovery boilers for paper industry, ranging from capacity of 100 to 1000 t/day of dry solids

BOILER AUXILIARIES

Fans

- Axial reaction fans of single stage and double stage for clean air application and dust laden hot gases applications up to 200°C, with capacity ranging from 40 to 1300m³/s and pressure ranging from 400 to 1,500 mmwc
- Axial impulse fans for both clean air and flue gas applications up to 200°C, with capacity ranging from 25 to 600m³/s and pressure up 300 to 700 mmwc
- Single and double-suction radial fans (plate aerofoil bladed) for clean air and dust-laden hot gases applications up to 400°C, with capacity ranging from 4 to 660m³/s and pressure ranging from 200 to 3000 mmwc

Air-Preheaters

- Tubular Air Preheaters for industrial and utility boilers
- Rotary regenerative air-Preheaters for boilers and process furnaces
- Large rotary regenerative air-Preheaters for utilities of capacity up to 800 MW

Pulverizers

- Bowl mills of slow and medium speed for coal fired thermal stations with capacity from 18 t / hour to 110 t/ hour catering to 67.5 MW to 800 MW thermal power stations
- Tube mills for pulverizing low-grade coal with high ash content from 30 t/ hour to 110 t/ hour catering to 110 MW to 500 MW thermal power stations

Electrostatic Precipitators (ESP)

 Electrostatic precipitators of any capacity with outlet emission as low as 17 mg/Nm³ (efficiency up to 99.97%) for utility and industrial applications including Bio mass fired boilers, cement plants, steel plants, soda recovery boilers etc.

Guillotine Gates & Dampers

- Guillotine gates with electric / pneumatic actuator. Sizes up to 6m height & 7m width (with split) 100% leak proof with seal air
 - Bi-plane dampers with electric actuator. Sizes up to 7m height & 5m width. 100% leak proof with seal air
 - Louver dampers (Open close / Regulating)
 with electric / pneumatic actuator. Sizes
 up to 7m height & 5m width
 - Control dampers (Regulating) with pneumatic actuator. Sizes up to 11m height (split construction) & 4.5m width
- Bag Filters for Utility and Industrial applications.
- Flue gas desulphurization (FGD) systems with sea water/ limestone slurry scrubber
- Steel Chimneys for Heat Recovery Steam Generators (HRSG), Industrial Boilers, auxiliary boilers and other flue gas exhaust applications

SOOT BLOWERS

- Long retractable soot blowers (LRSB) for travel upto 12.2m
- Furnace temperature probe (FTP) for travel length 6.9m and 8.3m
- Long Retractable Non-rotating (LRNR) soot blowers with forward blowing for Air heaters



- Ash discharge valve for CFBC boiler application
- Soot blowers with integral starters
- Soot blower Sequential PLC control panel
- Rack type Long Retractable Soot blowers
- Wall blowers
- Rotary Soot blowers

VALVES

- High and Low-pressure turbines Bypass Valves
 hydraulic system for utilities and industrial application
- High and medium-pressure Valves, Cast and Forged Steel Valves of Gate, Globe, Non-Return (Swing-Check and Piston Lift-Check) types for steam, oil and gas duties up to 950 mm diameter, maximum pressure class 4500 (791 kg/cm²) and 650 °C temperature
- Hot re-heat and cold re-heat Isolating Devices up to 900 mm maximum class 1500 and 650°C temperature
- High-capacity Spring Loaded Safety Valves for set pressure up to 372 kg/cm² and temperature up to 630°C, and automatic electrically operated pressure relief valves for set pressure up to 210 kg/cm² and temperature up to 593°C
- Safety relief valves for applications in power, process and other industries for set pressure up to 421 kg/cm² and temperature up to 537°C
- Reactive cum absorptive type vent Silencers maximum diameter of 2700 mm
- Direct Water Level Gauges
- Angle Drain Valves Single & Multi Stage for Turbine Drain Application
- Severe Service Control Valves for RH & SH Spray Lines
- Quick Closing Non return Valves for Extraction lines and Cold Reheat Non Return valves, up to 800mm diameter, 158 kg/cm² pressure and 540°C temperature

PIPING SYSTEMS

 Power cycle piping, Constant load Hangers, Variable spring Hangers, Hanger components, Low Pressure piping including Circulating

- Water Piping for power stations up to 1000 MW capacity including Super Critical sets
- Piping systems for Nuclear Power Stations, Combined Cycle Power Plants & Industrial boilers and for power plants in Process Industries

SEAMLESS STEEL TUBES

- Hot-finished and cold-drawn seamless steel tubes with a range varying from outer diameter of 19 to 133 mm and wall thickness of 2 to 14 mm, in carbon steel and low-alloy steels to suit ASTM/API and other international specifications
- Rifled tubes
- Spiral finned tubes

CONDENSER AND HEAT EXCHANGERS

Surface Condenser

- 236 MW & 700 MW for Nuclear power plants
- 12.5 MW Marine applications
- Industrial Condensers

Feed Water Heaters (HP Heaters, LP Heaters, Drain Coolers etc.)

- Thermal -07 to 500 MW (sub-critical) & 300-800 MW (super critical with single stream)
- Nuclear 236 MW, 500 MW and 700 MW rating

Moisture Separator & Reheater (MSR)

236 MW, 500 MW & 700 MW Nuclear sets

Live Steam Reheater (LSR)

500 MW FBR Nuclear sets

Auxiliary Heat Exchangers for Turbo and Hydro Generators

- Air Coolers (Frame & Tube Type)
- Oil Coolers (Shell & Tube Type and Plug in Type)
- Hydrogen Coolers (Frame & Tube Type)

Auxiliary Heat Exchangers for Transformers

 Oil Coolers: Shell & Tube Type Single Tube or Concentric Double Tube Type; Frame & Tube Type

Auxiliary Heat Exchangers for General Application

- Water Water Coolers (Shell & Tube Type)
- Industrial Heat Exchangers for Refineries, Petro-Chemicals & Fertilizers industries
- Butterfly Valves (Fabricated/ cast body & door)
- Flash Tanks for thermal & nuclear sets
- Service Tanks, Storage Tanks & Pressure vessels for Thermal, Nuclear sets of all ratings & industrial applications
- CS/SS/Non-ferrous shell and tube heat exchangers and pressure vessels (For all applications irrespective of rating)
- Air-cooled heat exchangers for GTG upto Fr-9 E and Compressor applications of all ratings
- Steam jet air ejectors for all condensers upto 150 MW
- Deaerators from 7 MW to 800 MW
- Gland steam condensers 7 MW to 150 MW
- Gas coolers for all possible compressor applications
- Oil coolers STG upto 150 MW, GTG upto Fr-9 E
- Generator Air coolers upto 150 MW STG and GTG up to 9 FA

PUMPS

- Pumps for various applications to suit utilities up to a capacity of 1000 MW
- Boiler feed pumps (motor or steam turbine driven)
- Boiler feed booster pumps
- Condensate extraction pumps
- Circulating water pumps (Also known as-Cooling water Pumps)

DESALINATION AND WATER TREATMENT PLANTS

 Reverse Osmosis (RO) based Desalination Plants for treating Seawater, high Brackish and brackish water for domestic and industrial applications

- Reverse Osmosis based Demineralization (RO-DM) Plants for Power Plant to generate Water for Service / Potable / Boiler Feed Makeup requirements
- Various types of Pre-Treatment (Membrane based / Conventional) Systems to condition raw-water suitable for RO Application
- Sewage & effluent Treatment Plants for water re-use and re-cycling
- Operation & Maintenance of plants

AUTOMATION AND CONTROL SYSTEMS

- Steam Generator/ Boiler Controls
- Steam Turbine Controls
- Boiler Feed Pump (BFP) Drive Turbine Control
- Station Control and Instrumentation/ DCS
- Offsite/Off base controls/ Balance of Plant Controls
 - Ash handling
 - Coal Handling
 - Water System
 - Mill Reject System
 - Condensate on-line tube cleaning system
 - Gas Booster Compressor
- Hydro Power Plant Control System
- Gas Turbine Control System
- Nuclear Power Plant Turbine & Secondary Cycle control system
- Power block of solar thermal power plant
- Industrial Automation
- Sub-Station Automation (SAS) and Supervisory Control & data Acquisition System (SCADA)
- Electrical Control System (ECS) for Refineries
- Energy Management System (EMS) for Power Plant

POWER ELECTRONICS

- Excitation system
- AC Drive System
- Static Starters



Induction Heating Equipment

TRANSMISSION SYSTEM CONTROL

- High Voltage Direct Current (HVDC) system
- Flexible AC Transmission system (FACTS)
 - Fixed series compensation (FCS)/ Thyristor controlled series compensation (TCSC)
 - Static VAR Compensation (SVC) System
 - Controlled Shunt Reactor (CSR)
 - Static Compensator (STATCOM)

POWER SEMICONDUCTOR DEVICES

- Diodes- Ranging from 1400-4400V/250-2000A
- Thyristors Ranging from 1400-7000V/150-4950A
- Rotating Diodes for Turbo generators

SOLAR PHOTOVOLTAICS

- Mono/ Multi Crystalline Cells (125 and 156 mm)
- Mono/ Multi Crystalline Modules (40 to 300 Wp)
- PV Systems: Grid Interactive, Hybrid and stand alone PV power plants
- Space grade solar panels
- Space Quality Batteries

DEFENCE ELECTRONICS

- Integrated Platform Management system (IPMS)
- Integrated Bridge System (IBS)
- Machinery Control Room (MCR) Simulator
- Training Simulator for Vehicles, platforms, radars, weapons, missiles and CBT for all defence and para-military forces
- Weapon Fire control system, Avionics, radio communication Products, Electronic warfare system and Early Warning Systems
- Gun control System for Main Battle Tanks (MBT)

SOFTWARE SYSTEM SOLUTION

Merit Order rating

- Performance Analysis, Diagnostics & Optimization (PADO) for Thermal Utilities
- Performance Calculation & Optimization system
- OPC connectivity from DCS to third party systems
- Enterprise Asset Management System (EAMS)
- Enterprise Resource Planning (ERP)
- Operator Training Simulator
- Power House intranet software
- Alarm Analysis system
- Real Time Performance Data Monitoring system
- Historical Replay System

SWITCHGEAR

Medium Voltage Vacuum Switchgear of various types for indoor and outdoor applications for voltage ratings up to 36 kV and Gas insulated switchgears (36 kV -145 kV)

- Indoor switchgears up to 12 kV, 50 kA, 3500 Amp. for thermal, nuclear, hydro and combined cycle Power Plant Projects
- Indoor switchgears up to 36 kV, 31.5 kA, 2500 Amp. for Industries and refineries
- Indoor Vacuum circuit breakers 12 kV, 25 kA, 1250 amp. for distribution system
- Outdoor Vacuum circuit breakers 36 kV, 25 kA, 2000 Amp. for transmission and distribution segment
- Outdoor Vacuum circuit breakers 12 kV, 25 kA, 1250 amp. for distribution segment
- Outdoor pole mounted 1 Ph, Vacuum circuit breaker 25 kV, 25 kA, 1600 amp. for trackside railway application
- Outdoor pole mounted Autorecloser / sectionaliser / capacitor switch for 12 kV rural segment
- Gas insulated switchgears 36 kV, 25 kA, 1600 Amp. for refineries, urban s/s
- Gas insulated switchgears 145 kV, 40 kA, 2500 Amp. for transmission segment



SF6 circuit breakers (145 kV - 800 kV)

BUS DUCTS

 Bus-ducts with associated equipment to suit generator power output of utilities of up to 800 MW capacity

TRANSFORMERS

- Power transformers for voltage upto 1200 kV
- Generator transformers (up to 500 MVA, 400 kV, 3 Ph / 400 MVA, 400 kV, 1 Ph)
- Auto transformers (up to 1000 MVA, 400 kV, 3 Ph / 600 MVA, 400 kV, 1 Ph / 1000 MVA, 765 kV, 1 Ph / 1000 MVA, 1200 kV, 1 Ph)
- Converter Transformers / Smoothing Reactors (up to 600 MVA, ±500 kV)/ (upto 254 MVAr, ±500 kV) for power stations
- Shunt Reactors (up to 150 MVAr, 420 kV, 3 Ph / 110 MVAr, 765 kV, 1 Ph)
- Controlled Shunt Reactors (up to 200 MVA, 420 kV, 3 Ph / 150 MVAr, 420 kV, 1 Ph / 110 MVAr, 765 kV, 1 Ph)
- Phase Shifting Transformers (up to 315 MVA, 400 kV, 3 Ph, up to 333 MVA 420 kV, 1 Ph, PST (1000 MVA bank in 3 Ph) for transmission lines)
- Instrument transformers
 - Current transformers upto 400 kV
 - Electro-magnetic voltage transformers upto 220 kV
 - Capacitor voltage transformers (33 kV to 1200 kV)
- Special Transformers
 - Rectifier transformer (Upto 120 kA, 132 kV)
 - Furnace transformer (Upto 33 kV, 60 MVA)
- Traction Transformer
 - Freight loco transformer upto 25 kV, 7475 kVA for 3 phase drive locomotives
 - ACEMU transformer upto 25 kV, 1550 kVA
- ESP (HVR) Transformer 100 kV 1400 mA
- Dry type transformer upto 15000 kVA
 - Smoothing reactors upto 3.3 mH, 2700 Amp

- Dry Type reactor upto 300 mH, 120 Amp
- DC Choke upto 0.5 mH, 4600 Amp
- Cast resin dry type transformers up to 15 MVA 33 kV

INSULATORS

PORCELAIN INSULATORS

- High-tension Porcelain Disc insulators for AC/DC applications, ranging from 70 kN to 420 kN electro-mechanical strength, for clean and polluted atmospheres, Suitable for application upto 1200 kV AC & ±800 kV HVDC transmission line & Sub-stations
- Hollow porcelains up to 765 kV for Transformers
 & SF6 circuit breakers
- Solid core insulators up to 400 kV for Bus Post & Isolators for substation applications

COMPOSITE INSULATORS

- For 25 kV Railway Traction
- Long Rod insulator up to 765 kV for transmission lines
- Hollow Insulators upto 765 kV for Instrument Transformers

WEAR RESISTANT MATERIAL (CERALIN)

- Ceramic Liners for Wear Resistant Application in Thermal Power Station and other various applications
- Ceramic Liners for Ash Slurry Application

INDUSTRIAL AND SPECIAL CERAMICS

- EWLI Electronic Water Level Indicators used in Boiler Drum Water Level Monitoring (BHELVISION system)
- Ceramic and Tungsten Carbide Flow Beans for Christmas tree valves
- Grinding Media for Pulverizing in Thermal Power Plant

CONTROL PANEL

 LT Switchgear, SCAP, Thyristor, RAPCON and STATCON Panels

CAPACITORS

H.T. Capacitors for Power factor correction (Motor Capacitors) 3.3 to 11 kV delta connected Capacitor banks



- H.T. Capacitors for Shunt, Series & SVC (Static VAR compensation), Harmonic filter & HVDC applications (3.3 kV to 500 kV, 1 Ph/ 3 Ph capacitor banks of rating 0.5 MVAr to 250 MVAr)
- Capacitor Divider for CVT
- Coupling Capacitor for PLCC
- Surge Capacitor for protection of Generators & Transformers (11kV to 40 kV)
- Roof Capacitor for traction locomotive
 - Capacitor Divider for CVT up to 1200 kV
 - Coupling Capacitor for PLCC upto 400kV

BUSHINGS

- 52 to 400 kV OIP condenser bushings for transformer applications
- 25 kV Locomotive bushings
- Special application bushings like cable box and wall bushing

ON LOAD TAP CHANGERS (OLTC)

On Load Tap Changer for various application like Power Transformer, Furnace Transformer, Station Transformer, Rectifier Transformer etc

- On Load Tap Changer up to 400 kV class Transformer
- Off Circuit Tap Switch up to 400 kV lass Transformer

ELECTRICAL MACHINES

AC Squirrel cage, Slip ring, Synchronous, Variable speed motors; Industrial Alternators and Motors for Hazardous areas are manufactured as per range summarized below. Special-purpose machines are manufactured on request.

- Voltage, Frequency & Enclosure
- Voltage AC 415 V to 13800 V
- Frequency 50 Hz & 60 Hz
- Enclosure SPDP, TETV, CACW, CACA & Duct Ventilated
- AC Machines for Safe Area Application
 - Induction Motors

- Squirrel cage motors -150 kW to 21000 kW
- Slip ring motors 150 kW to 10000 kW
- Synchronous motors- 1000 kW to 20000 kW
- Variable speed Motors
 - 150 kW to 21000 kW (Squirrel cage motors)
 - 1000 kW to 20000 kW (Synchronous motors)
- AC Machines for Hazardous Area Application (Fixed speed or with VFD)
 - Flame-proof squirrel cage Induction motors (Ex 'd') (150 kW to 1500 kW)
 - Non-sparking squirrel cage Induction motors (Ex 'n') (150 kW to 4000 kW (higher ratings on request))
 - Increased safety squirrel cage Induction motors (Ex 'e') (150 kW to 4000 kW (higher ratings on request))
 - Pressurized motors (Ex 'p')
 - 150 kW to 21000 kW (Squirrel cage motors)
 - 1000 kW to 20000 kW (Synchronous motors)
- Mill Duty Motors (150 kW to 5000 kW with speed base speed > 150 rpm) for steel mills.
- Industrial Alternators (Steam turbine, Gas turbine and Diesel engine driven) (3000 kVA to 25000 kVA)
- Induction Generators (300 kVA to 6000 kVA) for mini/ micro HEP
- 2 Pole Gas Turbine driven Generators up to 330 MW and matching Exciters
- 4 Pole Gas Turbine driven Generators up to 60 MW and matching Exciters
- 2 Pole Steam Turbine driven Generators up to 330 MW and matching Exciters
- 4 Pole Steam Turbine driven Generators up to 60 MW and matching Exciters
- Permanent Magnet Based Generators up to 5 MW
- Gas Turbine generators up to 270 MW



COMPRESSORS

- Multi stage Centrifugal compressors along with auxiliary system for various applications are manufactured and supplied with following configuration & parameters
 - Model
 - Horizontally split type up to 40 bar design pressure
 - Vertically split type up to 350 bar design pressure
 - Capacity 300000 m³/hr
 - Gas Air, CO₂, N₂, H₂, NH₃, Natural Gas, Wet Gas, Propylene etc.
 - Industry Refineries, Fertilizers, Oil & Gas, Steel, Power
 - International standard API 617
 - Testing capability MRT, Performance test, Full load, full pressure full speed test, Complete Unit Test
 - Driver Steam Turbine, Gas Turbine, Motor

CONTROL GEAR

Industrial Control Gear

- Electronic controllers for industries/ power plants
- Digital Excitation control system (1000 A, 400 V DC/, 400 V DC with redundant thyristor stacks & DC field breaker)
- Large current rectifiers with PLC Based digital controls
- Digital Hydraulic/ compact Governors
- Digital AVR (1 Ph, 300 V DC/ 3 Ph, 400 V DC)
- Control panels and cubicles for applications in steel, aluminium, cement, paper, rubber, mining, sugar and petrochemical industries

Contactors

- LT air break type AC for voltages up to 660 V
- LT air break type DC contactors for voltages up to 600 V
- HT vacuum type AC for voltages up to 11kV

Control and Relay Panels

- Control & Protection panels for EHV Transmission Projects for voltages upto 400 kV
- Synchronizing Trolley / Swing Panels
- Protection panels for large Generators up to 600 MW for thermal, nuclear, hydro and combined cycle Power Plant Projects
- Remote Control and relay panels for MV Switchgear
- Turbine gauge panels for hydro sets
- Outdoor type control panels and marshalling kiosks
- Remote Transformer Tap-Changer Control panels
- LT Switch Gear, SCAP & Thyristor Panel

TRANSPORTATION EQUIPMENT

Traction Machines

- AC traction motors (upto 1150 kW) for all locos & EMUs
- DC traction motors (upto 630 kW) for all ranges of locos & EMUs
- AC traction alternators (upto 3860 kW) for all ranges of DE locos & EMUs
- DC traction generators up to 2000 kW
- Motor generator sets (upto 25 kW) for all type of requirements
- Auxiliary generators and exciters (upto 50 kW) for all type of requirements
- Eddy current clutch for radiator fan
- DC blower motors (upto 50kW) for dynamic braking system
- Traction grade gears and pinions

Transportation Systems

- Traction systems
- Urban transportation systems
- AC electric locomotives (upto 5000 HP, 25 kV AC, 1500 V DC)
- AC-DC dual voltage electric locomotives
- Diesel-electric (Upto 2600 HP) & Diesel



hydraulic locomotives

- ACEMU Coaches
- Battery powered locomotive
- OHE recording-cum-test car
- Bogies
- Dynamic track stabilizers
- Wagon (Up to 28 Axle, 296 Tonne)
- · Rail cum Road vehicle
- Utility vehicle
- Ballast cleaning machines

TRACTION DRIVE SYSTEM

- Traction Propulsion Systems comprising traction converter, auxiliary converter and Vehicle Control Electronics for:
 - 6000 HP GTO/ IGBT based AC Locomotives
 - 1600 HP AC Electrical Multiple Unit (EMUs)
 - 1400 HP Diesel Electrical Multiple Units (DEMUs)

Traction Control Gear

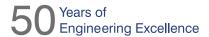
- Control gear equipments for AC Electric & Diesel Electric Locomotives, EMUs, DEMU, DETC, metro railways and other traction applications
- EP contactors, EM contactors, EM relays, Reversers & EP Offload switches, Isolating switches, resistors, resistor panels etc. for traction applications
- Master controllers
- Main Starting Resistors (MSR) & Dynamic braking resistors(DBR)
- Control cubicles
- Excitation control & Voltage regulator panels for DF Locos
- Rectifiers (upto 1200V), converter/ inverter for AC/ DC EMUs
- Aux converters/ Static Inverter for AC Locos

OIL FIELD EQUIPMENT

- Oil Rigs A variety of on-shore drilling rigs with AC-SCR and AC technology, work-over rigs, mobile rigs, for drilling up to depths of 9,000 metres, complete with matching draw-works and hoisting equipment including:
 - Mast and substructure
 - Rotating equipment : Draw works; Rotary;
 Swivels; Travelling Blocks
 - o independent Rotary drive unit
 - Mud System including pumps
 - Power packs and rig electrics
 - Rig instrumentation
 - Rig utilities and accessories
 - Refurbishment and up gradation of BHEL and Non BHEL make Oil Rigs
 - DC Oil rig motors of all required ranges
 - Oil rig alternators of all required ranges
 - Accessory and load gear box for Gas Turbine
 - Inlet and exhaust duct for Gas Turbine
- Well heads and X-mas Trees up to 15 000 psi, Mud Line Suspension, Choke and Kill manifold, CBM Wellheads, DSPM H- Manifold Assembly, Mud valves, ESP hangers, Block type X-mas Trees & Landing Bases for Casing Heads.

Oil Rig Controls

- AC power control room
- DC power control room
- Power Pack (DG sets)
- AC Control Module
- DC Control Module
- Driller's Console
- Cable set, cable trays, cable box and crew room for oil rigs.
- Mobile lightening Tower, Rig Lightening Tower
- DG set for Oil rig application (63/250/380/ 500 KVA)



DISTRIBUTED POWER GENERATION AND SMALL HYDRO PLANTS

- Wind electric generator of up to 600 kW rating
- Small hydro power plants up to 25 MW station capacity

SYSTEMS AND SERVICES

Power Generation Systems

- Turnkey power stations/ EPC contracts
- Combined-cycle power plants
- Cogeneration systems
- Captive power plants
- Concept to Commissioning solutions for Solar Photovoltaic systems upto MWp rating
- Modernization and renovation of power stations and RLA studies
- Software packages including simulators for utilities
- Erection, commissioning, support services, spares management and consultancy services for all the above systems

Transmission Systems

- Sub-stations/switchyards
- Shunt and Series compensation systems
- Power system analysis and controls
- HVDC transmission systems

INDUSTRIAL SYSTEMS

- Complete Coal Handling Plant and Ash Handling Plant including Civil & Structural, Mechanical, Electrical works and Automation systems
- Complete Mine Winder Systems
- Complete Electrics, Drives, Controls & Automation Systems for Processing & Compacting of Raw Materials, Iron Making, Primary & Secondary Steel Making, Casters & steel Finishing like Mills & process Lines for both long products & flat products
- Complete Raw Material Handling System including Civil & Structural, Mechanical,

- Electrical and Automation systems for Steel and other industries
- Complete Electrics & Automation Systems for High Current Rectifiers for Aluminium Smelters and Processing Mills for Aluminium Plants
- Automated Storage & Retrieval Systems (ASRS)
- Balance of Plant (BOP) for Hydro power plants



Glossary & Abbreviations

ASEAN	Association of South East	GGSR	Guru Gobind Singh Refinery
	Asian Nations	GIS	Gas Insulated Substation
BHPV	Bharat Heavy Plates & Vessels Limited	GNDTP	Guru Nanak Dev Thermal Plant
BIDCO	Bajaj Infrastructure Development Company	GTG	Gas Turbine Generator
C&I	Control & Instrumentation	GTPP	Gas Turbine Power Plant
CCPP	Combined Cycle Power Plant	HMEL	HPCL-Mittal Energy Limited
CEA	Central Electricity Authority	HP Turbine	High Pressure Turbine
CFBC	Circulating Fluidised Bed Combustion	HVDC ICF	High Voltage Direct Current Integral Coach Factory
CISF	Central Industrial Security Force	IGCC	Integrated Gasification Combined Cycle
CLW	Chitaranjan Locomotive	RCF	Rail Coach Factory
	Works	ID Fan	Induced Draft Fan
CMIE	Centre for Monitoring Indian Economy	IGBT	Insulated-Gate Bipolar Transistor
CPRI	Central Power Research Institute	IGCAR	Indira Gandhi Centre for Atomic Research
CSO	Central Statistical Office	IPRs	Intellectual Property Rights
CSR	Corporate Social Responsibility	JSEB	Jharkhand State Electricity Board
CVC	Chief Vigilance Commissioner	KAPP	Kakrapar Atomic Power
DEMU	Diesel Electric Multiple Unit		Project
DVC	Damodar Valley Corporation	KSCA	Kilogram-force per Square Centimetre Absolute
E&C	Engineering & Construction	LP Turbine	Low Pressure Turbine
ED	Executive Director	M&A	Merger & Acquisitions
EHV	Extra High Voltage	MEMU	Mainline Electric Multiple Unit
EMU EPC	Electric Multiple Unit Engineering, Procurement &	MHI&PE	Ministry of Heavy Industries & Public Enterprises
ESP	Construction Electrostatic Precipitator	MOEF	Ministry of Environment &
FACTS	Flexible Alternating Current		Forests
	Transmission System	MoU	Memorandum of Understanding
FD Fan	Forced Draft Fan	MRPL	Mangalore Refinery and
GDP	Gross Domestic product		Petrochemicals Limited



MUs Million Units TAN TRANSCO Tamil Nadu Transmission Corporation **NALCO** National Aluminium Company TG **Turbine & Generator** NPCII **Nuclear Power Corporation of** TL&JV India Limited Technology Licensing & Joint Venture **NPGCL** Nabinagar Power Generation TOLIC Town Official Language Company Limited Implementation Committee OA Operational Availability **TPS** Thermal Power Station **OECD** Organisation for Economic **UHVAC** Ultra High Voltage AC Co-operation and Development Ultra Mega Power Project **UMPP OEMs** Original Equipment VIGEYE-GPMS VIGilance EYE-Global Project Manufacturers Management Solutions **OPGCL** Odisha Power Generation WAG W (broad gauge), A (AC Corporation Limited traction), G (goods duty) **OTPC ONGC Tripura Power** Company **PEF** Power Equipment Fabrication **PFCCU** Petrochemical Fluidized Catalytic Cracking Unit **PGCIL** Power Grid Corporation of India Limited **PSEs Public Sector Enterprises PSPCL** Punjab State Power Corporation Limited Renovation & Modernisation R&M **RAPP** Rajasthan Atomic Power **Project RDSO** Research, Design & Standards Organisation **REIL** Rajasthan Electronics & Instruments Limited **RINL** Rashtriya Ispat Nigam Limited **RRVUNL** Rajasthan Rajya Vidyut Utpadan Nigam Limited SCOPE Standing Conference of **Public Enterprises** SD Sustainable Development **SECI** Solar Energy Corporation

of India

Solar Photo Voltaic

Sambhar Salts Limited

Super Thermal Power Plant

SPV

SSL

STPP

NOTICE



Bharat Heavy Electricals Limited

(CIN: L74899DL1964GOI004281)
Regd. Office: BHEL House, Siri Fort, New Delhi-110 049
Phone: 011-66337000, Fax: 011-26493021

Website: www.bhel.com, E-mail: shareholderquery@bhel.in

Notice

Notice is hereby given that the 50th Annual General Meeting of the Members of BHARAT HEAVY ELECTRICALS LIMITED will be held on Friday, the 19th September, 2014 at 10 A.M. at FICCI Auditorium, Barakhamba Road (Tansen Marg), New Delhi-110001, to transact the following businesses:-

ORDINARY BUSINESS

- To receive, consider and adopt the Audited Balance Sheet of the Company as at 31st March, 2014 and the Statement of Profit & Loss Account for the financial year ended on that date together with the Directors' Report and Auditors' Report thereon.
- 2. To declare dividend for the year 2013-14.
- To appoint a Director in place of Shri R. Krishnan (DIN: 03053133), who retires by rotation and being eligible, offers himself for re-appointment.
- To appoint a Director in place of Shri W.V.K. Krishna Shankar (DIN: 05304782), who retires by rotation and being eligible, offers himself for re-appointment.
- 5. To authorize the Board of Directors to fix the remuneration of the Auditors for the year 2014-15.

SPECIAL BUSINESS

 To consider and, if thought fit, to pass with or without modification, the following resolution as an **Ordinary Resolution**:

"RESOLVED THAT pursuant to provisions of Section 148 and all other applicable provisions of the Companies Act, 2013 and 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

for conducting the audit of the cost records of the Company for the financial year ending March 31, 2015 as approved by the Board of Directors of the Company will be put up to the shareholders for ratification by next Annual General Meeting."

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

- 7. To consider and, if thought fit, to pass with or without modification, the following resolution as an **Ordinary Resolution**:
 - "RESOLVED THAT Shri Atul Sobti (DIN: 06715578), 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. 01.12.2013 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."
- To consider and, if thought fit, to pass with or without modification, the following resolution as an **Ordinary Resolution**:

"RESOLVED THAT Shri S.K. Bahri (DIN: 06855198), 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. 31.03.2014 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

50 Years of Engineering Excellence

- pursuant to the provisions of Section 160(1) of the Companies Act, 2013, be and is hereby appointed as a Director of the Company."
- To consider and, if thought fit, to pass with or without modification, the following resolution as an **Ordinary Resolution**:

"RESOLVED THAT pursuant to the provisions of Sections 149, 152 and all other applicable provisions of the Companies Act, 2013 and the Companies (Appointment and Qualifications of Directors) Rules, 2014 (including any statutory modification(s) or re-enactment thereof for

the time being in force), Ms. Harinder Hira (DIN: 01858921), who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Section 161 of the Companies Act, 2013 w.e.f. 08.05.2014 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 herself 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."

By Order of the Board of Directors

(I.P. Singh)
Company Secretary

Place: New Delhi

Dated : August 16, 2014

NOTICE



Notes:-

- 1. A MEMBER ENTITLED TO ATTEND AND VOTE AT THE MEETING IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND THE PROXY NEED NOT BE A MEMBER OF THE COMPANY. A PERSON APPOINTED AS PROXY SHALL ACT ON BEHALF OF SUCH MEMBER OR NUMBER OF MEMBERS NOT EXCEEDING FIFTY AND HOLDING IN AGGREGATE NOT MORE THAN TEN PERCENT OF THE TOTAL SHARE CAPITAL OF THE COMPANY CARRYING VOTING RIGHTS. HOWEVER, AS PER RULE 19(2) PROVISO OF THE COMPANIES (MANAGEMENT ADMINISTRATION) AND RULES, 2014, A MEMBER HOLDING MORE THAN 10% OF TOTAL SHARE CAPITAL OF THE COMPANY CARRYING VOTING RIGHTS MAY APPOINT A SINGLE PERSON AS PROXY AND SUCH PERSON SHALL NOT ACT AS PROXY FOR ANY OTHER PERSON OR SHAREHOLDER, PROXY FORM DULY COMPLETED SHOULD BE DEPOSITED AT THE REGISTERED OFFICE OF THE COMPANY NOT LESS THAN FORTY-EIGHT HOURS (48 HOURS) BEFORE THE SCHEDULED TIME OF THE ANNUAL GENERAL MEETING. BLANK PROXY FORM IS ENCLOSED.
- Corporate Members are requested to send a duly certified copy of the Board Resolution/Power of Attorney authorizing their representative to attend and vote on their behalf at the Annual General Meeting.
- 3. Relevant Explanatory Statement pursuant to Section 102(1) of the Companies Act, 2013, in respect of Special Business, as set out above is annexed hereto.
- 4. Brief resume of each of the Directors proposed for appointment and re-appointment is given at Annexure-II to the Directors' Report.
- 5. S/Shri R. Krishnan and W.V.K. Krishna Shankar, Directors, retire by rotation and being eligible, offer themselves for re-appointment. However, as per the terms of their appointment, the tenure of S/Shri R. Krishnan and W.V.K. Krishna Shankar as Directors of the company will expire on 31st July, 2015 and 31st August, 2015 respectively.

- 6. The Register of Members and Share Transfer books of the Company shall remain closed from 10th September, 2014 to 19th September, 2014 (both days inclusive), for determining names of the shareholders eligible for final dividend, if declared, at the meeting.
- 7. Members are advised to submit their National Electronic Clearing Service/Electronic Clearing Service (NECS/ECS) mandate in the form (given elsewhere in the Annual Report) duly filled in and signed, to enable the Company to make remittance by means of NECS/ECS.
- 8. The Board of Directors has recommended a final dividend of 76% on the Paid-up Equity Share Capital (₹ 1.52 per share) of the Company in addition to an interim dividend of 65.5% (₹ 1.31 per Share) already paid during the year 2013-14.
- 9. The final dividend on the Equity Shares as recommended by the Board of Directors for the year ended 31st March, 2014, if approved by the shareholders at the Annual General Meeting, will be payable within 30 days from the date of declaration of dividend i.e. on or before 18th October, 2014, to those shareholders whose name appear: -
 - As Beneficial Owners of shares as at the closure of business hours on 9th September, 2014 as per the list to be furnished by NSDL/CDSL in respect of the shares held in the Electronic mode; and
 - ii. As Members in the Register of Members of the Company after giving effect to all valid share transfer requests in physical form which are lodged with the Company/RTA on or before the close of business hours on 9th September, 2014.
- 10. Pursuant to Section 205A(5) read with Section 205C of the Companies Act, 1956, the dividend amounts which remain unpaid /unclaimed for a period of 7 years, are required to be transferred to the "Investor Education and Protection Fund" constituted by the Central Government. After that, there remains no claim of the members whatsoever on the said amount. Accordingly, the final dividend for the Financial Year 2006-

50 Years of Engineering Excellence

07 and interim dividend for Financial Year 2007-08, which remains unclaimed, are proposed to be transferred to the said account on 23rd October, 2014 and 1st March, 2015 respectively.

Members who have not claimed /encashed their Dividend so far for the financial year ended 31st March, 2007 or any subsequent financial year(s) may approach the Company for obtaining payments thereof before expiry of the stipulated 7 years period.

- 11. Members may avail facility of nomination in terms of section 72 of the Companies Act, 2013, by nominating (Form enclosed with the Annual Report) any person to whom their shares in the Company shall vest in the event of their death.
- 12. Pursuant to Section 139 (5) read with Section 142 (1) of the Companies Act, 2013, the Auditors of a Government Company are appointed by the Comptroller and Auditor General (C&AG) of India and their remuneration is fixed by the Company in the Annual General Meeting. The General Meeting may authorize the Board to fix up an appropriate remuneration of Auditors for the year 2014-15 as may be deemed fit by the Board.
- 13. Members are requested to notify immediately any change of address:-
 - to their Depository Participants (DPs) in respect of their electronic share accounts; and
 - ii. to the Company at its Registered office or the Registrar & Share Transfer Agent (M/s. Karvy Computershare Private Ltd.) in respect of their physical shares, if any, quoting their folio number, Banker's name and account number to ensure prompt and safe receipt of dividend warrants.
- 14. Members who hold shares in dematerialized form are requested to write their Client ID and DP ID Numbers and those who hold shares in physical form are requested to write their Folio Number in the attendance slip for attending the Meeting. However, entry to the Auditorium will be strictly on the basis of entry slip available at the counters at the venue and to be exchanged with attendance slip.
- The Securities & Exchange Board of India has mandated submission of Permanent Account Number (PAN) by every participant in

- securities market. Members holding shares in demat form are, therefore, requested to submit PAN details to the Depository Participants with whom they have demat accounts. Members holding shares in physical form can submit their PAN details to M/s Karvy Computershare Private Limited / CS department of BHEL.
- 16. In terms of Clause 35B of the Listing Agreement, the Company is pleased to provide the facility to members to exercise their right to vote by electronic means through M/s Karvy Computershare Private Limited. The members, whose names appear in the Register of Members / list of Beneficial Owners as on Thursday, August 14, 2014, i.e. the cutoff date taken by the Company for dispatch of Annual Report and the Notice (including notice for e-voting) calling the Annual General Meeting will be eligible to vote for the purpose of E-voting / AGM. The e-voting period will commence from Saturday, September 13, 2014 at 9.00 a.m. and will end at 6.00 p.m. on Monday, September 15, 2014. The e-voting module will be disabled on September 15, 2014, at 6.00 p.m. The members desiring to vote through electronic mode may refer to the detailed procedure on e-voting sent separately alongwith necessary user id and password. Once the vote on a resolution is cast by the shareholder, the shareholder shall not be allowed to change it subsequently. The voting right of shareholders shall be in proportion to their share in the paid up equity share capital of the Company as on the cut-off date being, August 14, 2014.

The Company has appointed Shri Pranav Kumar of M/s Pranav Kumar & Associates, Practicing Company Secretary, to act as a scrutinizer, to scrutinize the e-voting process in a fair and transparent manner. The Scrutinizer shall within a period not exceeding three (3) working days from the conclusion of the e-voting period unblock the votes in the presence of at least two (2) witnesses not in the employment of the Company and make a Scrutinizer's Report of the votes cast in favour or against, if any, forthwith to the Chairman of the Company. The results shall be declared on or after the Annual General Meeting of the Company. The results declared along with the Scrutinizer's Report shall be available on

NOTICE



the Company's website within two (2) days of passing of the resolution at the Annual General Meeting of the Company and will accordingly be communicated to the stock exchanges.

- 17. Members are requested to:
 - i. bring their Attendance Slip duly completed and signed at the venue of the meeting.
 - ii. quote their Folio/DP & Client ID Nos. in all correspondence.
 - iii. note that no briefcase or bag will be allowed to be taken inside the auditorium for security reasons.

iv. note that no gifts will be distributed at the AGM.

By Order of the Board of Directors



(I.P. Singh) Company Secretary

Place: New Delhi Dated: August 16, 2014

Members are requested to register their email-ids at the earliest to support the Company's Green initiative. In case of shareholders holding shares in electronic form, details may be sent to their respective DP. Shareholders holding shares in physical form are requested to send email details to our RTA, M/s Karvy Computershare Private Limited.

Annexure to the notice

EXPLANATORY STATEMENT PURSUANT TO SECTION 102(1) OF THE COMPANIES ACT, 2013

The following explanatory statement sets out the material facts relating to the business mentioned in Item No. 6, 7, 8 and 9 of the accompanying Notice dated August 16, 2014.

ITEM NO. 6

Provisions with regard to cost audit under the Companies Act, 2013 and Rules made thereunder have been notified to be effective from 1st April 2014, which requires remuneration of the cost auditors as approved by the Board to be ratified by shareholders subsequently. The Companies (Cost Records and Audit) Rules, 2014 has been notified vide MCA GSR 425(E) dated 30th June 2014. As there is lack of clarity regarding the coverage of our products for cost audit, clarification has been sought from Cost Audit Branch, Ministry of Corporate Affairs. On getting necessary clarification on the subject, required action to get the Board's approval for appointment of cost auditor will be taken and the remuneration approved by the Board will be submitted for ratification by next Annual General Meeting.

None of the Directors and Key Managerial Personnel of the Company and their relatives is concerned or interested, financial or otherwise, in the resolution set out at item no. 6.

The Board of Directors commends the resolution for approval of the Shareholders.

ITEM NO. 7

Shri Atul Sobti (DIN: 06715578), aged 55 years is a Mechanical Engineer and has a Diploma in Project Management. As per the direction of the Govt. of India, Shri Atul Sobti was appointed as an Additional Director of the Company w.e.f. 01.12.2013. Having been so appointed, Shri Atul Sobti holds office till the date of ensuing Annual General Meeting by virtue of Section 161 of the Companies Act, 2013 read with Article 67(iv) of the Articles of Association of the Company and is eligible for appointment.

As per requirement of Section 160 of the Companies Act, 2013, the Company has received a Notice in writing, proposing candidature of Shri Atul Sobti for the Office of Director of the Company.

Except Shri Atul Sobti, being an appointee, none of the Directors and Key Managerial Personnel of the Company and their relatives is concerned or interested, financial or otherwise, in the resolution set out at item no. 7.

The Board of Directors commends the resolution for approval of the Shareholders.

ITEM NO. 8

Shri S.K. Bahri (DIN: 06855198), aged 58 years, is an IAAS officer of 1981 batch. At present he is Additional Secretary & Financial Adviser (AS & FA) Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry. As per the direction of the Govt. of India, Shri S.K Bahri was appointed as an Additional Director of the Company w.e.f. 31.03.2014. Having been so appointed, Shri S.K. Bahri holds office till the date of ensuing Annual General Meeting by virtue of Section 161 of the Companies Act, 2013 read with Article 67(iv) of the Articles of Association of the Company and is eligible for appointment.

As per requirement of Section 160 of the Companies Act, 2013, the Company has received a Notice in writing, proposing candidature of Shri S.K. Bahri for the Office of Director of the Company.

Except Shri S.K. Bahri, being an appointee, none of the Directors and Key Managerial Personnel of the Company and their relatives is concerned or interested, financial or otherwise, in the resolution set out at item no. 8.

The Board of Directors commends the resolution for approval of the Shareholders.

ITEM NO. 9

Ms. Harinder Hira (DIN: 01858921), aged 62 years is Ex-Chief Secretary, Government of Himachal Pradesh. As per the direction of the Govt. of India, Ms. Harinder Hira was appointed as an Additional Director of the Company w.e.f. 08.05.2014. Having been so appointed, Ms. Harinder Hira holds office till the date of ensuing Annual General Meeting by virtue of Section 161 of the Companies Act, 2013 read with Article 67(iv) of the Articles of Association of the Company and is eligible for appointment.

NOTICE



As per requirement of Section 160 of the Companies Act, 2013, the Company has received a Notice in writing, proposing candidature of Ms. Harinder Hira for the Office of Director of the Company.

The Company has received a declaration from Ms. Hira that she meets the criteria of independence as prescribed both under sub-section (6) of Section 149 of the Companies Act, 2013 and under Clause 49 of the Listing Agreement. Keeping in view her vast expertise and knowledge, it will be in the interest of the Company that Ms. Harinder Hira is appointed as an Independent Director. In the opinion of the Board, Ms. Hira fulfills the conditions specified in the Companies Act, 2013 and Rules made thereunder for her appointment as an Independent Director of the Company and is independent of the Management.

Except Ms. Harinder Hira, being an appointee, none of the Directors and Key Managerial Personnel of the Company and their relatives is concerned or interested, financial or otherwise, in the resolution set out at item no. 9.

The Board of Directors commends the resolution for approval of the Shareholders.

By Order of the Board of Directors

(I.P. Singh)
Company Secretary

Place: New Delhi Dated: August 16, 2014





Bharat Heavy Electricals Limited (CIN: L74899DL1964GOI004281)

Regd. Office: BHEL House, Siri Fort, New Delhi-110 049

Phone: 011-66337000, Fax: 011-26493021

Website: www.bhel.com, E-mail: shareholderquery@bhel.in

ATTENDANCE SLIP

50th Annual General Meeting to be held on Friday, the 19th day of September, 2014 at 10.00 AM at FICCI Auditorium, Barakhamba Road (Tansen Marg), New Delhi-110 001

NAME OF THE ATTEND	ING MEN	MBER (IN BLOCK LETTERS)						
Folio. / DP ID-CLIENT ID	O No.							
No. of shares held								
Name of PROXY (IN BLOCK LETTERS, T ATTENDS INSTEAD OF								
I hereby record my pres	ence at th	ne 50 th Annual General Meeting o	on 19 th September. 20	014.				
Thereby recerding pre-		To do 7 minual donoral modining s	511 10 Goptomizel, 2					
						Signature	e of M	ember/Proxy
THIS ATTE	NDANCE	SLIP DULY FILLED IS TO BE I	HANDED OVER AT T	HE ENTRANC	E OF TH	HE MEETING	i HAL	.L
बीएचईएल PIFEL Maharatna Company	Golden Jubilee 1864 - 2014	Bharat He (CIN: L74899DL1964 Regd. Office: BHEL Phone: 011-6633700 Website: www.bhel.	4GOI004281) House, Siri Fort, Ne 00, Fax: 011-264930 com, E-mail: shareh	ew Delhi-110 04 121	19	ted		
		PRO	XY FORM					
Name of the Member(s)	:							
Registered Address:								
Folio No/ DP ID-Client Id	d:							
E-Mail Id:								
No of Shares held:								
I/We, being the member	(s) of	shares of the above named	d company, hereby a	ppoint:				
1. Name:				,				
Address:				0: .				
E-mail ID:				Signati	ure:			
Or failing him								
2. Name:								
Address:				Cianati	ıro:			
E-mail ID:				Signati	ure.			
Or failing him								
3. Name:								
Address:				Signati	Ire.			
E-mail ID:								
Friday, the 19th September	er, 2014 at	e (on a poll) for me/us and on my 10:00 A.M. at FICCI Auditorium, ons as are indicated below:						
SI.No.		Resolution				For		Against
Ordinary Business				1				
		Statements of the Company for		March, 2014				
		ors' Report and Auditors' Report	thereon					
		for the year 2013-14						
		R. Krishnan (DIN: 03053133) wh						
		W.V.K. Krishna Shankar (DIN: 05						
	Board of L	Directors to fix the remuneration of	of the Auditors for the	e year 2014-15				
Special Business	-f Ct A	unditore for the fine point year 001	4.45					
		uditors for the financial year 201 I Sobti (DIN: 06715578) as Direc						
		(. Bahri (DIN: 06855198) as Direc						
		inder Hira (DIN:01858921) as Inc						
Appointment C	n IVIO. I IAI	maci fina (Diri.01000921) as inc	acpendent Director					
						_		Please
Signed this day of	20)14		Signature of	f shareh	older (s)		affix
•								
								revenue
Signature of first prox	v holder	Signature of second	proxy holder	Signature of t	third pro	oxy holder		stamp

 $Notes: (a) \ The form \ should \ be \ signed \ across \ the \ stamp \ as \ per \ specimen \ signature \ registered \ with \ the \ RTA/DP$

(b) This form should be deposited at the Registered Office of the Company atleast 48 hours before the time fixed for holding the meeting.





Bharat Heavy Electricals Limited

(CIN: L74899DL1964GOI004281)

Regd. Office: BHEL House, Siri Fort, New Delhi-110 049

Phone: 011-66337000, Fax: 011-26493021

Website: www.bhel.com, E-mail: shareholderquery@bhel.in

Dear Shareholder(s),

Re: Payment of dividend through National Electronic Clearing Services (NECS)/Electronic Clearing Services (ECS)

Pursuant to Circular No. CIR/MRD/DP/10/2013 dated 21.03.2013, SEBI has mandated that companies whose securities are listed on the stock exchanges shall use, either directly or through their RTA, any RBI approved electronic mode of payment such as ECS/ NECS etc.

In case you have not already sent the NECS/ECS/Bank Account particulars to our Registrars, viz. M/s Karvy Computershare Pvt. Ltd. or to your Depository Participant (DP) (in case of **demat holding**), we would request you to provide the said particulars in the format given below to facilitate prompt, safe & correct payment of dividend, if declared in the 50th Annual General Meeting of the company to be held on 19th September, 2014.

Please ensure that the details submitted by you to the Registrars / Depository Participant are correct as any error therein could result in the dividend amount being credited to wrong account.

Payment of dividend through NECS/ECS and / or to the designated Bank Account, which will appear on the dividend warrant, will help to prevent fraudulent encashment of dividend warrants.

Kindly help us in this endeavour to serve you better.

Yours faithfully,



(I P Singh) Company Secretary

P.S. In case you are holding shares in demat form, kindly advice your Depository Participant to take note of your Bank account particulars / NECS/ECS mandate.

FORM FOR NECS/ECS MANDATE / BANK ACCOUNT PARTICULARS

	Only I On NECS/ECS MANDAIL / BANK ACCOONT PARTICULANS					
1/\	We do hereby authorise BHEL / my Depository Participant to:					
	Print the following details on my / our dividend warrant					
	Credit my dividend amount to my Bank account by NECS/ECS					
	(Strike out whichever is not applicable)					
Му	v / our Folio No Client A/c No or DP ID No					
Pai	rticulars of Bank Account :					
A.	Bank Name :					
В.	Branch Name :					
	(Address for Mandate only)					
C.	9 digit code number of the bank & branch as :appearing on the MICR cheque					
D.	IFSC Code :					
E.	Account Type (Saving / Current) :					
F.	Account No. as appearing on the cheque book :					
G.	STD code & Telephone No. of Shareholder :					
	we shall not hold the Company responsible if the NECS/ECS could not be implemented or the Bank discontinues e NECS/ECS, for any reason.					
	Mail to Mail to Mis Karvy Computershare Pvt. Ltd. UNIT: BHEL 17-24, Vittal Rao Nagar, Madhapur HYDERABAD-500081 Signature of the Shareholder					

Please attach (i) photocopy of a cheque or a blank cancelled cheque issued by your bank relating to your above account for verifying the accuracy of the 9 digit code number AND (ii) a copy of your **PAN card** with this form.



Bharat Heavy Electricals Limited (CIN: L74899DL1964GOI004281)

Regd. Office: BHEL House, Siri Fort, New Delhi-110 049

Phone: 011-66337000, Fax: 011-26493021

Website: www.bhel.com, E-mail: shareholderquery@bhel.in

NOMINATION FORM

[Pursuant to Section 72 of the Companies Act, 2013 and Rule 19(1) of the Companies (Share Capital and Debentures) Rules, 2014]

(To be filled in by individual (s) applying singly or jointly)

Bharat Heavy Electrica BHEL House, Siri Fort, New Delhi-110049	ls Ltd.				
I/WeSecurities, particulars of persons in whom shall v. (1) PARTICULARS OF The security	f which are given here est, all the rights in resp	eunder wish to pect of such s	o make non securities in t	nination and do hereby he event of my/our dea	nominate the following
Nature of securities	Folio No./DP ID & Client ID	No. of se	ecurities	Certificate No.	Distinctive No.
(2) PARTICULARS OF NO	DMINEE/S:-				
(a) Name		:			
(b) Date of Birth		:			
(c) Father's/ Mother's	/Spouse's Name	:			
(d) Occupation		:			
(e) Nationality		:			
(f) Address		:			
(g) E-mail id		:			
(h) Relationship with	the security holder	:			
(3) IN CASE NOMINEE IS	S A MINOR:-				
(a) Date of Birth		:			
(b) Date of attaining n	naiority	:			
(c) Name of guardian		:			
(d) Address of guardi		:			
Date:			Name:		
Place:			Address:		
Name of the Securi	ty Holder(s)	Signature	Witne	ess with name, addres	ss, signature & date

Instructions:

- 1. The Nomination can be made by individuals only applying/holding shares on their own behalf singly or jointly, Non-individuals including society, trust, body corporate, partnership firm, Karta of Hindu Undivided Family, holder of Power of Attorney cannot nominate. If the shares are held jointly, all joint holders will sign the nomination form. Space is provided as a specimen, if there are more joint holders, more sheets can be added for signatures of holders of shares and witness.
- The nominee shall not be a Trust, Society, Body corporate, Partnership firm, Karta of Hindu Undivided Family or a Power of Attorney holder. A non-resident Indian can be a nominee on repatriable basis.
- Nomination stands rescinded upon transfer of share.
- Transfer of share in favour of a nominee shall be valid discharge by a Company against the legal heir.
- The intimation regarding Nomination/Nomination Form shall be filed in duplicate with Company/Registrar and Share Transfer Agent of the Company who will return one copy thereof to the shareholder.
- The above Form is only valid for new nominations. Incase of cancellation or variation in existing nomination, a separate Form SH-14 provided in the Companies (Share Capital and Debentures) Rules, 2014 is to be submitted by the Security Holder(s).
- In case you are holding shares in demat form, kindly advice your Depository Participant to take note of nomination details.

Bankers

Allahabad Bank Andhra Bank Bank of Baroda Canara Bank Corporation Bank Central Bank Indian Bank

Indian Oversea Bank

Oriental Bank of Commerce

Punjab National Bank Punjab & Sindh Bank State Bank of India State Bank of Hyderabad

Syndicate Bank

State Bank of Travancore

UCO Bank

Union Bank of India United Bank of India

Vijaya Bank

IDBI

CITI Bank N.A

Deutsche Bank AG

The Hongkong and Shanghai Banking Corporation Ltd.

Standard Chartered Bank

The Royal Bank of Scotland N.V.

J P Morgan Axis Bank

The Federal Bank Limited

HDFC

Kotak Mahindra Bank

ICICI

Indusind Bank

Yes Bank

Registered Office

Regd. Office: BHEL House, Siri Fort,

New Delhi-110 049 (India) CIN: L74899DL1964GOI004281

Phone: 011-66337000 Fax: 011-26493021 Website: www.bhel.com

E-mail: shareholderquery@bhel.in

Auditors

S.N. Dhawan & Co., New Delhi Wahi & Gupta, New Delhi Vinay Kumar & Co., Allahabad Anjaneyulu & Co., Hyderabad Vardhaman & Co., Trichy

Patel Mohan Ramesh & Co., Bangalore

SBA & Co., Bhopal

J. V. Ramanujam & Co., Chennai

Cost Auditors

Jugal K. Puri & Associates, New Delhi

K.L. Jaisingh and Co., Noida

Narsimha Murthy & Co., Hyderabad

RKMS & Associates, Chennai

Vishwanath Bhat & Co., Bangalore

Sunil Singh & Co., Lucknow

Sanjay Kasliwal & Associates, Bhopal Velamarthi & Associates, Visakhapatnam

Cost Audit Report

Financial Year	Due date of filling Cost Audit Report	Actual date of filing Cost Audit Report
2012-13	27.09.2013	24.09.2013
2013-14	27.09.2014	Will be filed by due date

Share Transfer Agent

M/s Karvy Computershare Private Ltd.

UNIT: BHEL

Delhi: 105-108, Arunachal Building,

19, Barakhamba Road, New Delhi – 110 001

Tel.: 011-23324401, 43681700/01/02/21

Fax: 011-23730743

E-mail: ksbldelhi@karvy.com

Hyderabad: 17-24, Vittal Rao Nagar,

Madhapur,

Hyderabad – 500 081 Tel.: 040-44655000 Fax: 040-44655024

E-mail: madhusudhan.ms@karvy.com

einward.ris@karvy.com

Website: www.karvycomputershare.com

Successful Transition from 30 MW to 800 MW Unit Rating

in utility segment



20069 MW (181 sets)

 First set of 30 MW rating having GEC technology commissioned in June 1969

1130 MW

(23 sets)

- First turbine of 100 MW 'LMW (Russian Design)' supplied from Haridwar
- First 33 MW
 Hydro project
 commissioned in
 May 1970 at Obra

1964-74

- First turbine of 200 MW (LMW) supplied to Obra in 1977
- First set of 210 MW 'KWU (German Design Turbine)' commissioned at Korba Hasdeo in Oct 1983
- First Nuclear turbine of 235 MWe commissioned at Kalapakkam (MAPP) in July 1983
- First 500 MW (KWU) unit commissioned at Trombay in Jan 1984
- 120 MW 3 cylinder HMN series machine introduced

29053 MW (270 sets)

- First 5 MW Gas turbine commissioned at Baramura in April 1986
- First Fr 5 GT based Cogen plant contracted from ONGC
- First 146.5 MW Steam Turbine commissioned for NTPC Dadri CCPP in Feb 1994

20895 MW (224 sets)

- Intermediate ratings of 250 MW introduced with advanced technology
- First Fr 6FA GT Combined Cycle Plant contracted from TNEB
- In-house engineered sets in ratings 250 MW, 500 MW introduced having advanced class blading
- 120 MW
 2 cylinder KN
 series machine
 introduced

52917 MW (205 sets)

- · Introduction of:
- 270/300/525/ 600 MW in-house engineered sets
- 660 MW supercritical sets
- India's largest 800 MW supercritical set
- Large advanced class Gas Turbine (Fr. 9FA_{+e}) based combined cycle power plants
- Double cylinder 150 MW Steam Turbine
- 120 MW single cylinder turbine
- 540 MWe nuclear set for TAPP commissioned in June 2005
- First 600 MW sub-critical set commissioned in Mar 2013
- First 660 MW supercritical set commissioned in Nov 2013
- First 800 MW boiler synchronised at Krishnapatnam in Mar 2014

1974-84

1984-94

1994-2004

2004-2014



Bharat Heavy Electricals Limited

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

www.bhel.com

Corporate Identity Number: L74899DL1964GOI004281

