

Making in India  
...Five Decades of  
Excellence

# Making in India

...Five Decades of Excellence

## Water

Water Management system for Power plants & Industry

## Industry

Electrical & Mechanical systems (Compressors, Pumps, Motors, etc.), Control & Automation systems for Fertilizer, Paper, Refining, Steel & Sugar industries

## Transmission

HVAC/HVDC systems, GIS, AIS, Substation Automation, FACTS Solutions, Transmission products up to 1200 kV

## Power

Power Generation plants including Thermal (up to 1000 MW), Nuclear, Hydro & Gas

BoP & Auxiliary systems, Pollution control eqpt (ESP, FGD)







## Oil & Gas

Oil Rigs & controls,  
Well Heads &  
Xmas Trees,  
Compressors

## Defence

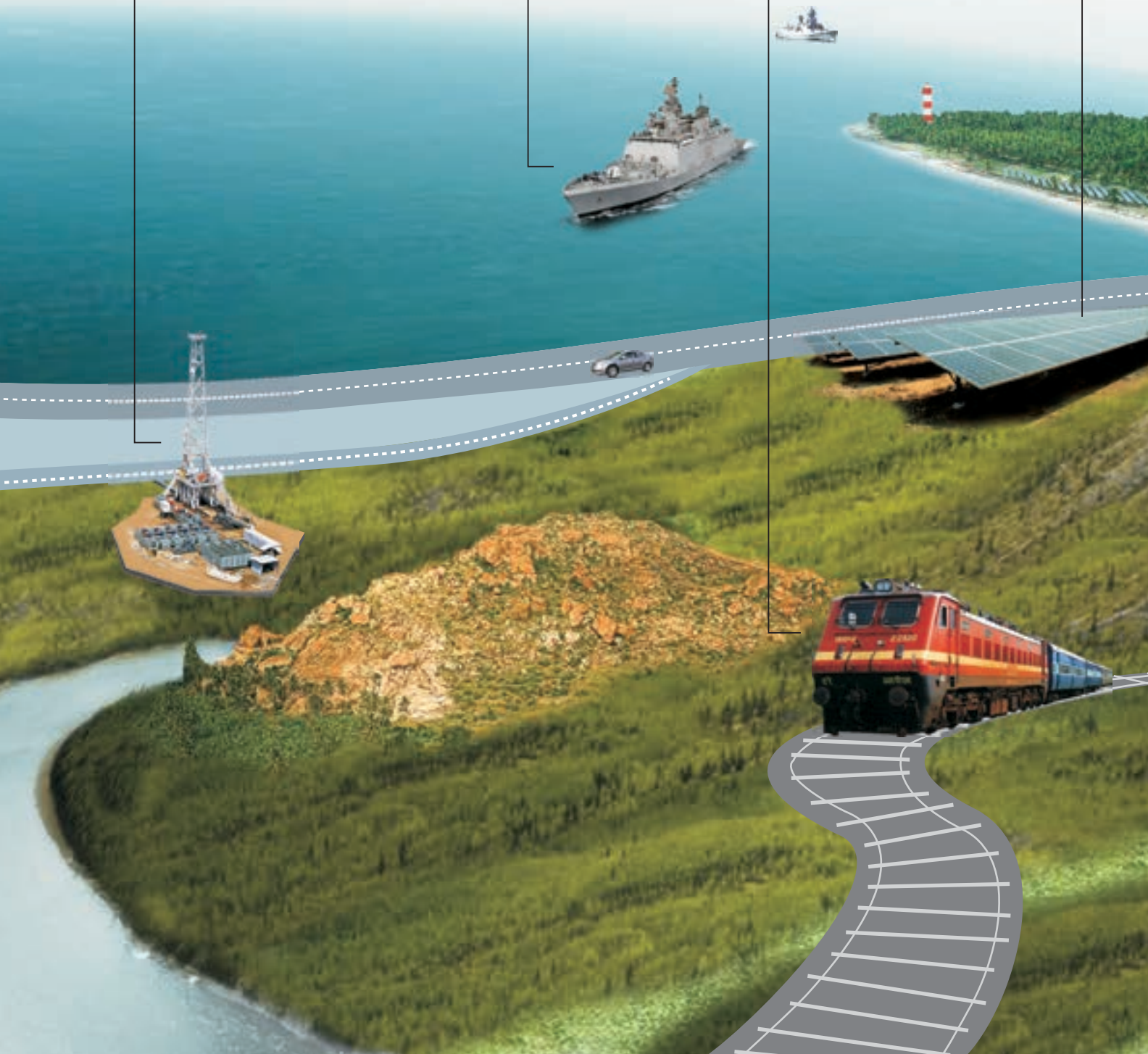
SRGM,  
Turret Casting T72 Tank,  
IPMS, ACS

## Transportation

Transportation systems,  
Locomotives, Propulsion  
systems & Electrics

## Renewable energy

Solar PV Power plants/  
Space-grade PV Panels  
& Batteries



# Efforts towards higher efficiency...

BHEL has achieved a major milestone with the commissioning of two 800 MW supercritical boilers at Sri Damodaram Sanjeevaiah Thermal Power Plant (SDSTPP) at Krishnapatnam in Nellore District of Andhra Pradesh. Significantly, these are the highest rating (800 MW) indigenous boilers commissioned in the country. The commissioning of the two 800 MW boilers at Krishnapatnam is an important milestone for the country seeking to achieve self-reliance in the field of contemporary, state-of-the-art supercritical technology. It also demonstrates BHEL's capability in the area of supercritical technology. The key equipment for the project has been manufactured by BHEL at its Trichy, Hyderabad, Ranipet and Bengaluru plants. The 800 MW boiler designed by BHEL is a two pass, once-through supercritical type, utilizing a Tangential Firing System. It is designed for single reheat, variable pressure operation, and with balanced draft furnace conditions. Supercritical technology results in ~11% reduction in CO<sub>2</sub> emissions, less fuel consumption & lower life-cycle cost to customers.

BHEL has so far contracted 41 sets of supercritical boilers.





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# Letter to Shareholders



## *Dear Shareholders,*

It is my proud privilege to present the 51<sup>st</sup> Annual Report of your Company for the financial year 2014-15. My message to you echoes the views of about 45,000 employees of BHEL family working to provide sustainable business solutions in the fields of energy, industry and infrastructure.

Amidst the arduous external economic and business environment, your company continued to face challenges in 2014-15 but, throughout the year, we demonstrated an exceptional resilience to these headwinds. From managing growth to managing slowdown, your company has steadily strengthened its inherent competitiveness as reflected from

“...From managing growth  
to managing slowdown,  
your company has steadily  
strengthened its inherent  
competitiveness as reflected  
from sustained market  
leadership, continued focus on  
innovation and project execution  
performance...”



sustained market leadership, continued focus on innovation and project execution performance.

Recent policy initiatives taken by the Government such as allocation of coal blocks through e-auction, rationalization of fuel prices, expeditious clearance of projects and boost to Defence & Transportation sector etc. are likely to improve business environment and provide momentum to existing and upcoming projects.

I would like to share some highlights of 2014-15 and provide few thoughts on both the key focus areas of your Board and the future prospects of your company:

- BHEL has achieved a Turnover of ₹ 30,947 Crore and a Net profit of ₹ 1,419 Crore during 2014-15.
- Despite a sharp contraction in the market and fierce competitive environment, BHEL retained its leadership position with 72 percent market share in Indian Power sector for the second consecutive year. BHEL secured orders worth ₹ 30,814 Crore- an increase of 10% over last year including BHEL's second largest order worth ₹ 7,788 Crore for 2x660 MW TANGEDCO Ennore SEZ on EPC basis.
- During 2014-15, your company synchronized/commissioned 11,941 MW of power plant equipment, more than 10,000 MW – 3<sup>rd</sup> year in a row. With this, your company has joined the elite club of select global giants having an installed base of over 150 GW of power generating equipment.
- Continuing with its focus on R&D and innovation, your company invested ₹ 1,019 Crore on R&D, and recorded a turnover of ₹ 7,300 Crore from in-house developed products and services. BHEL also filed the highest-ever 453 patents and copyrights in a year, enhancing the company's intellectual capital to 3,010.
- Your company has formed a consortium with Mishra Dhatu Nigam Ltd. (Midhani) and Hindustan Shipyard Ltd. (HSL) for jointly bidding for indigenously building P-75 (i) submarines for the Indian Navy.
- 2014-15 marked a turnaround in Indian Hydropower sector with addition of 736 MW to Central utilities, highest in a decade. This entire 736 MW of Hydroelectric projects was successfully commissioned by BHEL.
- During the year, the company secured export orders from 23 countries worth ₹ 720 Crore. A major milestone was commissioning of four power plants in overseas markets in Rwanda, Sudan, Ethiopia and Oman.

## Positioning for Future

With the revival in business sentiments, stream of opportunities are expected in the traditional as well as new areas of business, which shall enable BHEL to regain the growth trajectory.

- Accelerating Project execution is one of the key focus areas of BHEL. Your company has already augmented its capacity for power plant equipment manufacturing to 20,000 MW p.a. BHEL signed an MoU with the newly formed Telangana state for 6,000 MW Power projects and received two major EPC orders from TSGENCO for 1x800 MW Kothagudem TPS & 4x270 MW Bhadradi TPS. This has been followed by a historic landmark of securing the single largest EPC order worth ₹ 17,950 Crore for 5 x 800 MW (4000 MW) Supercritical Thermal power project to be set up at Yadadri, in Nalgonda district of Telangana. The company is all set to create new benchmarks in execution. We are also favourably placed in a number of other new tenders.
- In its effort to continue its sustained leadership position in the Indian power sector, BHEL has enhanced its thrust on EPC business and expanded its portfolio by adding Flue-Gas Desulphurisation (FGD), Water Management systems, Air Cooled Condenser, and other Balance of Plant (BoP) systems. Increasing the level of indigenisation in supercritical technology and development of Advanced Ultra Supercritical Technology are the major strategies in the power sector.
- Focus on cost optimization through increased indigenisation of supercritical technologies, higher value additions, increased vendor base and design/layout optimization efforts aided the company in enhancing competitiveness.
- Company's focus on cash realization during the year has resulted in retaining cash surplus position. The rising trend of debtors has also been arrested.
- As part of Diversification strategy, the company

set a new record in its Solar Photovoltaic (PV) business in a single year by supplying 50 MWp of SPV modules. Your company also received the largest value single order for 64 sets of IGBT based Traction Converters from CLW. Also, with the capability to design and offer all variants of 765 kV class transformers and Shunt Reactor, BHEL is well positioned to capitalize on the premium 765 kV voltage segment.

- BHEL has always been at the forefront in the engineering sector of the country in R&D efforts. R&D expenditure of the company has been more than 2.5% of the turnover for more than 5 years now. Your company has indigenously designed and developed Fuel Flexible Boiler capable of blending & firing a wide range of imported & indigenous coals.
- BHEL offers sustainable solutions to its customers throughout the entire operational lifecycle of the power plants by offering engineering and technology inputs for reducing greenhouse gas emissions, water consumption, less auxiliary power consumption and less fuel requirement. BHEL manufactured & commissioned India's first 660 MW (SG & TG) and 800 MW (SG) sets with supercritical technology.
- BHEL values its employees as its greatest asset. People Development strategy of BHEL is focusing on developing each person's competencies in alignment with business plans through implementation of initiatives like e- learning modules for developing leadership competencies in association with Harvard Business School, performance linked pay, career planning and succession planning. Your company was selected as one of the 'Best Companies to Work For' by leading magazine 'Business Today'.

## Marching on the journey ahead

The overall business scenario is improving. Green shoots in the economy and the recent 'Make in India' initiative by the Government of India have potential to take Indian Industry into a new phase of growth. 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.

“Energy & Infrastructure, being the fulcrum of economic development, would continue to depict a rising trend.... This represents a huge opportunity to be leveraged by your company”

I am grateful to you, our stakeholders – all business partners including customers for reposing their faith in us, employees for their resolve and unstinted devotion, our Members on the Board for their wisdom and continuous support, members of the Management Committee for efficiently steering the company's resources and you, our shareholders for evincing trust & faith in BHEL & its Management. Various Ministries of GoI, particularly the Department of Heavy Industry have been providing valuable guidance and support in our efforts.

Energy & Infrastructure, being the fulcrum of economic development, would continue to depict a rising trend till demand-supply deficit is addressed in its entirety. Energy security and climate change issues are determining the future course of development. This represents a huge opportunity to be leveraged by your company with its wide range of quality products & services. Therefore the Board of your company is confident of realising its vision of becoming a global engineering enterprise providing solutions for a better tomorrow, honouring our Golden Legacy.

Success is the sum of many small efforts. I look forward to your unfaltering support in our earnest efforts to overcome the challenges and fulfil our quest to take the company to greater heights.

*With best wishes,*



**(B. Prasada Rao)**

Chairman & Managing Director

New Delhi  
August 08, 2015



# Leadership at BHEL

Board of Directors  
(As on 24.07.2015)



*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 Atul Sobti, Director (Power)

Shri R. Krishnan, Director (HR)

Shri A.N. Roy, Part-time Non-official Director

Shri Rajesh Kumar Singh, Joint Secretary, DHI

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

Shri I.P. Singh, Company Secretary

# Leadership at BHEL

## Management Committee (As on 24.07.2015)



B. Prasada Rao  
CMD



R. Krishnan  
Director, Human Resources



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



Atul Sobti  
Director, Power



A.V. Krishnan  
ED, Tiruchirappalli Complex



A.K. Dave  
ED, CMT&IP, MON & MM, New Delhi



C.K. Shrikhande  
ED, PS-NR, Noida



S. Gopinath  
ED, OSD, Tiruchirappalli, Complex



N. Ravi Chander  
ED, HPEP, Hyderabad



Anuj Bhatnagar  
ED, FQA & Safety, Noida



Prakash Chand  
ED, HEEP, Haridwar



Akhil Joshi  
ED, TL&JV, M&A, New Delhi



Rajeev Srivastava  
ED, PS-SSBG, Noida



S.C. Jain  
ED, PS-PMG & PS-TS, New Delhi



K.K. Seth  
ED, HRDI, NIC & CPG, Noida



Ramesh Koul  
ED, TBG, Noida



B.S. Vishwanatha  
ED, TSG & DBG, New Delhi



Devendra Raina  
ED, CPP, IPE, IPM & PMG, New Delhi



S.N. Maiti  
ED, PS-WR, Nagpur



M.K. Sharma  
ED, PE&SD, Hyderabad



L.K. Rawal  
ED, P&D, New Delhi



Amitabh Mathur  
ED, PS-ER, Kolkata





M. Khasgiwala  
ED, TP, Jhansi



J. Sankaran  
ED, HPVP, Visakhapatnam



S. Raj Sabapathy  
ED, CBU, Bengaluru



A.M.V. Yugandhar  
ED, HEP, Bhopal



Rajiv Garg  
ED, CS&IT, Noida



R.K. Tiwari  
ED, EDN, Bengaluru



N.R. Edkie  
ED, CFFP, Haridwar



V.K. Chohan  
ED, IO, New Delhi



Dr. Umakant Choudhury  
ED, Corp. R&D, Hyderabad



D. Bandyopadhyay  
ED, HR&CC, New Delhi



S. Biswas  
ED, CEPD & ARP, New Delhi



K. Mysaiah  
ED, BAP, Ranipet



Sandeep Narang  
ED, PS-PEM, Noida



K. Purswani  
ED, Corp. Quality, Noida



V.C. Krishnan  
ED, ISG, Bengaluru



Sudhanshu Pathak  
ED, Coordination, New Delhi



D. Guin  
GM-I, ROD, New Delhi



S. Vaidyanathan  
GM-I, Corp. Finance, New Delhi



Gururaj S. Rotti  
GM-I, Renewables & Water Business, New Delhi



G.K. Hedao  
GM-I, PS Marketing, New Delhi



A.K. Mukhopadhyay  
GM-I, PS-SR, Chennai



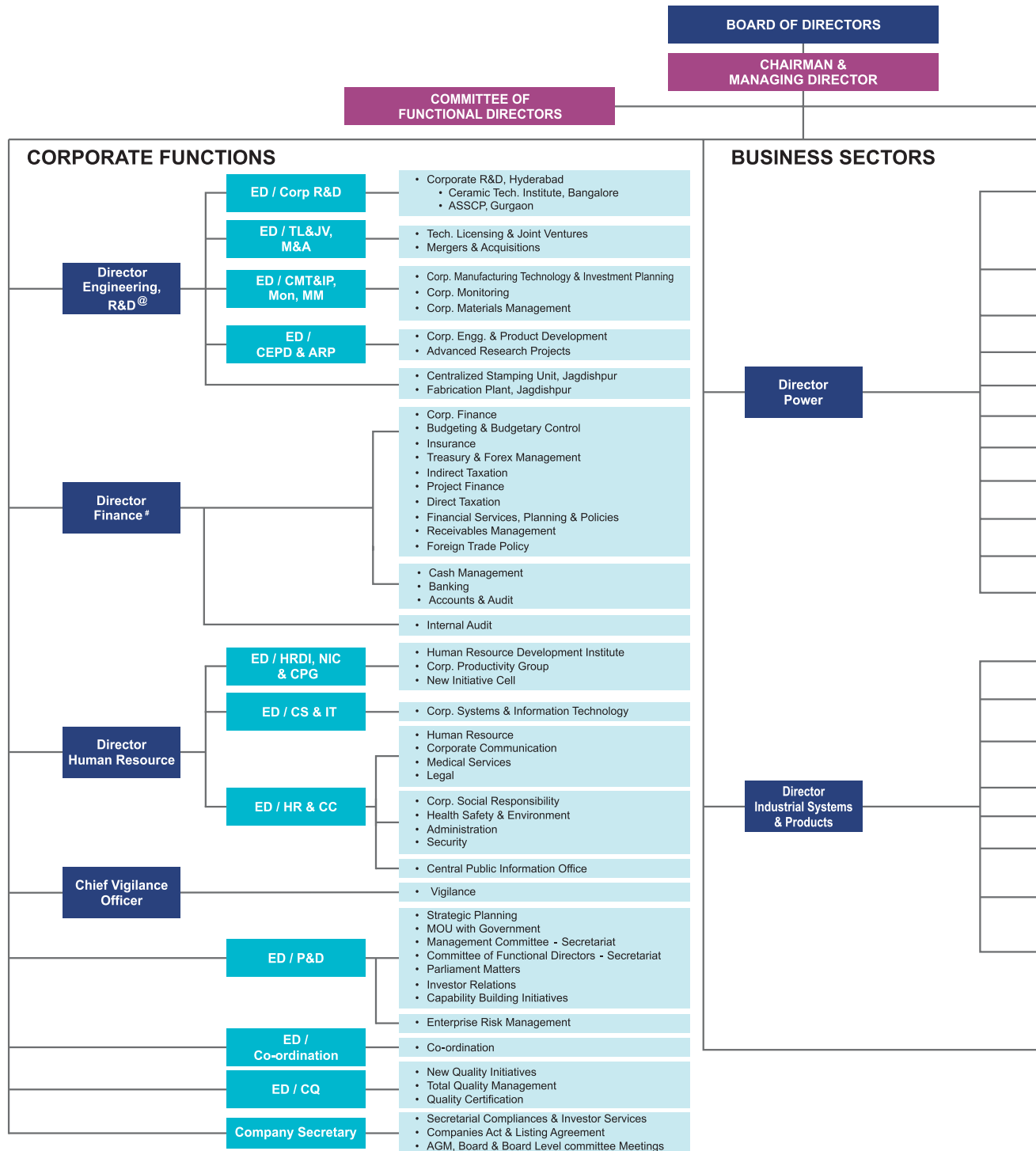
J. Govindaswamy  
GM-I, PPU, Thirumayam & PC, Chennai



K.S. Shivaprasad  
GM, Corp. P&D, New Delhi;  
Secretary, Management Committee

# Leadership at BHEL

## Corporate Organisational Structure (As on 04.07.2015)



# Director(Power) holds additional charge of Director (Finance)

@ CMD holds additional charge of Director (Engineering, R&D)



MANAGEMENT COMMITTEE

ED / PS-PMG

- Project Management
- Contract Closing Group

ED / PS-SSBG

- Spares & Services Business Group<sup>\$</sup>
- Heavy Equipment Repair Plant, Varanasi
- R&M Systems Group, Bhopal

ED / PS-PEM

- Project Engineering Management

ED / ISG

- Industrial Systems Group, Bangalore

ED / PS-ER

- Power Sector – Marketing

ED / PS-NR

- PS - MSX, SCT, HR & IT

ED / PS-WR

- PS Southern Region, Chennai

ED / FQA & Safety

- PS Eastern Region, Kolkata

ED / TSG & DBG

- PS Northern Region, NOIDA
- PS Western Region, Nagpur

ED / TBG

- FQA & Safety

ED / CPP, IPE, IPM & PMG

- Transportation Systems Group
- Defence Business

ED / CBU

- Transmission Business Group

ED / PE&SD

- Industrial Products Business (Elect & Mech.)
- Captive Power Plant Business
- IS-PMG & Contract Closing

ED / IO

- Renewables & Water Business
- Regional Operations Division
- Component Fabrication Plant, Rudrapur
- Electro Porcelains Division, Bangalore
- Insulator Plant, Jagdishpur
- Project Engg. & Systems Division, Hyderabad
- Overseas Business

OPERATIONS

ED / Bhopal

- Heavy Electrical Plant, Bhopal
- Centre for Electric Transportation, Bhopal

ED / Jhansi

- EMRP, Mumbai

ED / HEEP, Haridwar

- Transformer Plant, Jhansi

ED / CFFP, Haridwar

- Heavy Electrical Equipment Plant, Haridwar
- Pollution Control Research Institute, Haridwar

ED / HPEP, Hyderabad

- Central Foundry Forge Plant, Haridwar

ED / Trichy

- Heavy Power Equipment Plant, Hyderabad

ED / Thirumayam & PC

- High Pressure Boiler Plant, Trichy
- Seamless Steel Tube Plant, Trichy
- Welding Research Institute, Trichy

ED / BAP, Ranipet

- Industrial Valves Plant, Goindwal

ED / EDN, Bangalore

- Power Plant Piping Unit, Thirumayam
- Piping Centre, Chennai

ED / HPVP, Vizag

- Boiler Auxilliary Plant, Ranipet

- Electronics Division, Bangalore
- Electronics Systems Division, Bangalore

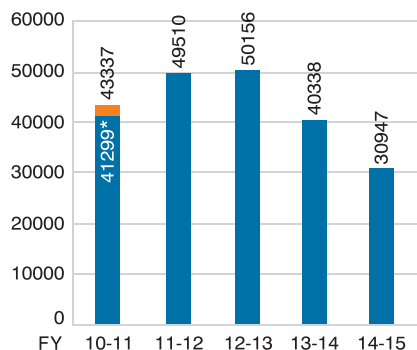
- Heavy Plates and Vessels Plant, Vizag

<sup>\$</sup> Matrix reporting to Director(IS&P) for Industry sector Business

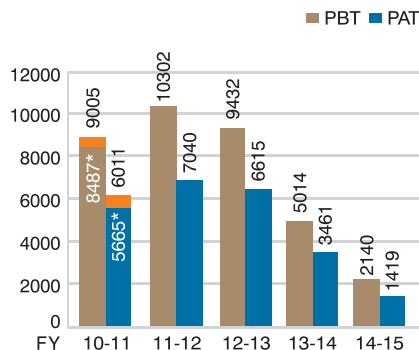
ED: Executive Director

## Year at a Glance

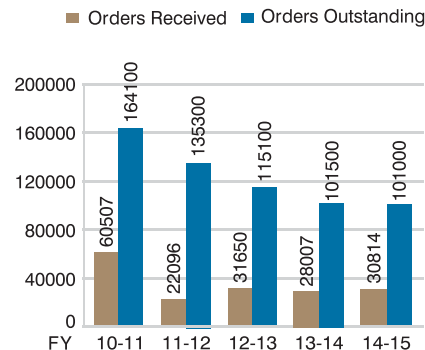
**Turnover**  
(₹ in Crore)



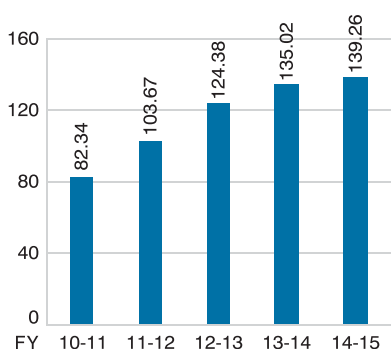
**Profit Before Tax / Profit After Tax**  
(₹ in Crore)



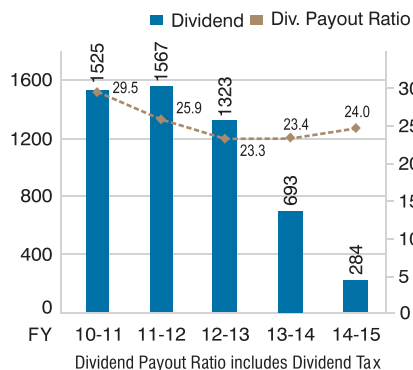
**Orders Received / Orders Outstanding**  
(₹ in Crore)



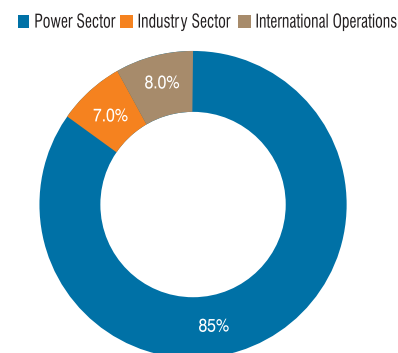
**Net Worth Per Share**  
(in ₹)



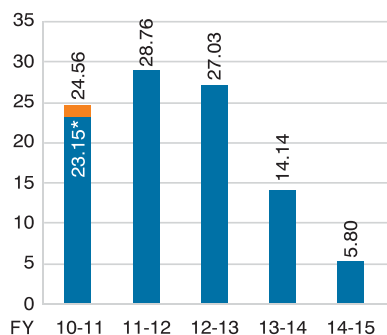
**Dividend (₹ in Crore) / Dividend Payout Ratio**



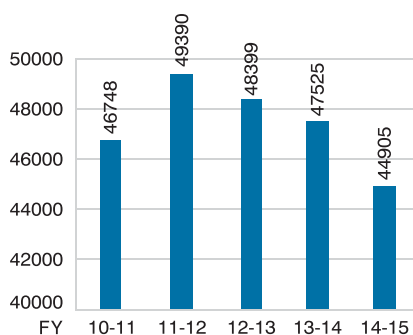
**Sector-wise Order Book Outstanding**  
(As at March 31, 2015)



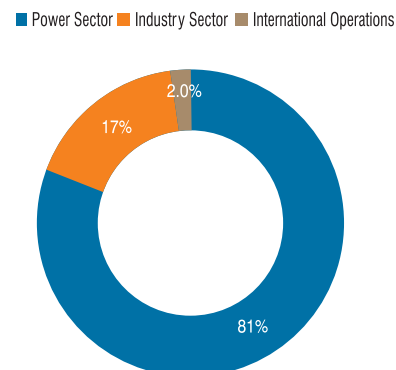
**Earnings Per Share**  
(in ₹)



**Manpower**  
(in Nos.)



**Sector-wise Order Book 2014-15**



\*Excluding one-time impact of change in policy of warranty obligation for earlier years

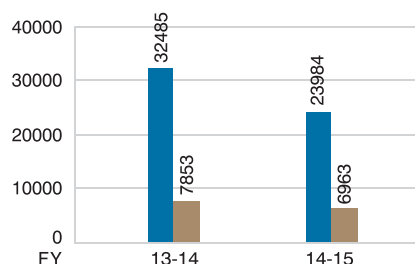


(₹ in Crore)

	2014-15	2013-14
Turnover	30947	40338
Profit before Tax	2140	5014
Profit after Tax	1419	3461
Retained Earnings	1078	2650
Total Assets	68467	72791
Net Worth	34085	33047
Long Term Borrowings	61	105
Debt:Equity	0.01	0.01
Per share (in ₹)		
Net Worth	139.26	135.02
Earnings	5.80	14.14
Employees (Nos.)	44905	47525

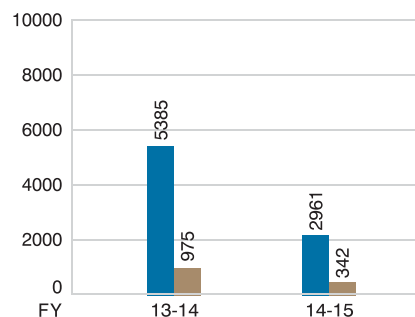
Segment-wise Revenue  
(₹ in Crore)

■ Power ■ Industry



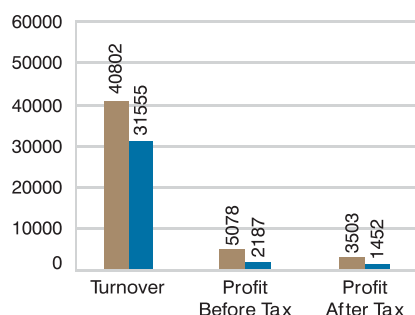
Segment-wise Results  
(₹ in Crore)

■ Power ■ Industry



Consolidated Financial Performance  
(₹ in Crore)

■ 2013-14 ■ 2014-15



**10000 MW<sup>+</sup>**

Power projects commissioned/  
synchronized p.a. 3 years in a row

**150 GW<sup>+</sup>**

Power Generating Equipment  
installed till date



Market Share

**72%** in Indian Power Sector

Innovation

**453**

Patents & copyrights filed



**44,905**

No. of Employees

**4.20**

Training Man-days  
per Employee



CSR & SD Expenditure

**2%**

(average of net profit during 2011-14)

**10,510**

vocational trainees &  
**29,494** Act-apprentices trained



Orders in Hand

**₹1,01,000** Crore

Hydropower projects commissioned  
in India during 2014-15

**100% by BHEL**



# About BHEL

Forging ahead on the sturdy foundation of 50 illustrious years of engineering excellence and embracing the glorious next phase of its growth, 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 (Railways), Renewable Energy, Oil & Gas and Defence with over 180 products offerings to meet the needs of these sectors. BHEL has been the solid bedrock of India's Heavy Electrical Equipment industry since its evolution in 1964.



*First 700 MW Nuclear Turbo Generator set under testing on test bed*

## Power Sector

BHEL is one of the few companies in the world having the capability to manufacture the entire range of power plant equipment and has proven turnkey capabilities for executing power projects from concept to commissioning. The power generation sector comprises Thermal, gas, hydro and nuclear power plants.

### BHEL:

- Supplies steam turbines, generators, boilers and its auxiliaries up to 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 of up to 250 MW
- Manufactures 220/235/540/550/700 MWe nuclear turbine generator sets
- Has proven expertise in plant performance improvement through Renovation, Modernization and Upgrading of variety of power plant equipment
- Has special knowhow of residual life assessment, health diagnostics and life extension of plants
- Supplied thermal sets have consistently exceeded national average efficiency parameters.



*4x500 MW Simhadri STPS commissioned by BHEL*





800 MW Turbo Generator rotor under assembly at HEPP, Haridwar

BHEL's growth has been synchronous with achieving self-sufficiency in indigenous manufacturing of heavy electrical equipment. BHEL constitutes a mammoth 20,000 MW per annum capacity for power plant equipment manufacturing in the country. A widespread network of 17 Manufacturing Divisions, 2 Repair Units, 4 Regional Offices, 8 Service Centres, 6 Overseas Offices, 6 Joint Ventures, 15 Regional Marketing Centres and current project execution at more than 150 project sites across India and abroad corroborates the humongous scale and size of its operations. Adding to its achievements, BHEL has joined the elite club of select global giants having an installed base of over 150 GW of power generating equipment globally. BHEL's 55% share in India's total installed capacity and 62% share in the country's total generation from thermal utility sets (coal based) as of March 31, 2015 stand testimony to its valuable contribution towards nation building. The company has been earning profits continuously since 1971-72 and paying dividends since 1976-77 which is a reflection of the company's commendable performance throughout.



Spiral Furnace wall panel for 660 MW Supercritical boilers manufactured at HPBP, Trichy

## 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 areas of operation include:

- **Captive Power projects:** Supplies steam turbine and gas turbine based captive power plants
- **Transmission:** Execution of EHV & UHV substations ranging from 132 kV to 765 kV & HVDC converter stations up to  $\pm 800$  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, EMU coaches and diesel electric locos up to 1400 HP.
- **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 Heads & Xmas Trees, Fabricated Equipment & 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 strategic equipment, etc.

BHEL also has a widespread overseas footprint in 77 countries with cumulative overseas installed capacity of BHEL manufactured power plants nearing 10,000 MW including Belarus, Bhutan, Egypt, Indonesia, Iraq, Kazakhstan, Malaysia, New Zealand, Oman, Rwanda, Sudan, Tajikistan and UAE.



*Future Cooperation Agreement signing in Astana, Kazakhstan*

The high level of quality & reliability of BHEL products is due to adherence to international standards by acquiring and adapting some of the best technologies from leading companies in the 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 (ISO 9001:2008), Environmental Management Systems (ISO 14001:2004) and Occupational Health & Safety Management Systems (OHSAS 18001:2007).

BHEL has been adept at transforming itself in line with the market requirements throughout its illustrious journey. Right from its incorporation in a protected market to facing the pressures of a liberalized economy and the current slowdown in the economic environment, BHEL has evolved with transforming its strategies from product manufacturing to market orientation; business excellence through portfolio restructuring and the current role of sustaining growth through diversification. BHEL owes its dexterity to the strong culture of strategic planning initiated in 1970 and today, the company is pursuing its seventh Corporate Plan with focus on Capability Enhancement,



*6 MW, 6.6 kV Primary Coolant Pump Motor*



Project Execution, Cost Competitiveness & Quality, Diversification, Engineering & Technology, and People Development.

Diversification in Transportation, Transmission, Defence, Water & Renewables is the strategy adopted to maintain a balanced portfolio of offerings. This strategy of diversifying and capitalizing new business opportunities stems from the commitment to innovation led growth which is an indispensable part of BHEL's business model. R&D focus of the organization is quite diverse ranging from advance ultra supercritical thermal power plants to IGCC power plants and grid connected renewable energy systems.

BHEL's greatest strength is its highly skilled and committed workforce of about 45,000 employees who have been the cornerstones of BHEL's journey ensuring success. 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 with its social initiatives aimed at Community Development, Health & Hygiene, Education, Environment Protection, Disaster Management, and Talent upgradation/Skill development.



Hon'ble Union Minister for HI&PE visits BHEL's Trichy Unit

The future is filled with both exciting opportunities & gruelling challenges. BHEL has embraced the new business opportunities by expanding its offerings and enhancing competitiveness seeking to realize its long term vision. Creating new business avenues and maximizing the utilization of available infrastructure will be the key to future growth and stakeholders' wealth enhancement. ●

## Soaking up the sun!



BAP Ranipet unit is the first unit of BHEL to install a 5 MWp grid interactive solar power plant

Boiler Auxiliaries Plant of BHEL at Ranipet has installed and commissioned a 5 MWp Solar PV Plant for captive purposes. With generation of around 25,000 Units per day, the plant is largely meeting the power requirements of the manufacturing plant and ensuring CO<sub>2</sub> mitigation by about 5600 MT CO<sub>2</sub>-e per year. The plant consists of a combination of PV panels of fixed type, Seasonal Tilt Type which can be tilted based on the inclination of sun's rays during various seasons and Single Axis Tracker Type which automatically tracks the movement of sun. All the above variations in the panel's type and SCADA, Module Cleaning system, inverters & SMU have been developed in-house by Electronics Division of BHEL at Bengaluru. The inverter has unique features like sleep mode, invoke mode and export mode so that any disturbances on the grid such as overload short-circuit, over-voltage etc. disables the firing circuit of the inverter and quietly withdraw it from the grid. Following the success of this initiative, other manufacturing units of BHEL are also in process of installing MW size Solar PV Plant in their premises.

## Vision

A global engineering enterprise providing solutions for a better tomorrow



## Mission

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



## Sustainable Performance

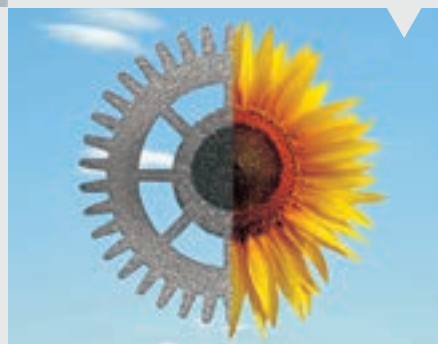
Profit Making Company since 1971-72

Consistent Dividend Paying Company since 1976-77

First listed its equity shares on stock exchanges in 1992

Market capitalization crossed ₹ 100,000 Crore in 2007

Crossed Turnover mark ₹ 50,000 Crore in 2012-13



## The Gentle Giant

An Indian Maharatna CPSE

One of the largest engineering & manufacturing companies in India serving core sectors of economy viz.

- Power
- Industry

Transmission/Transportation/Oil & Gas/Renewables/Water/Defence/Industrial Products-E&M

Major Integrated Power Plant Equipment Manufacturer in the world with 20,000 MW pa manufacturing capacity

17 Manufacturing Units,  
1 Subsidiary, 6 Joint Ventures,  
8 Service Centres & Infrastructure to deal with 150+ project sites

# World of BHEL

## Global Footprints

References in 77 countries

Offices in 6 countries

Contracted power plant equipment around 17,000 MW

Commissioned 4 power plants in four overseas markets for first time in a single year

## Did you know?

3 out of 5 houses in India are supplied power generated from BHEL sets

55% of India's nuclear power generating capacity (conventional island) installed by BHEL

All Indian satellites launched by ISRO are equipped with BHEL supplied solar panels since 2002 & batteries since 2005

BHEL is largest supplier to Indian Railways for rolling stock propulsion equipment

Only domestic supplier (outside IR) to Indian Railways for Locomotives

BHEL is energizing India's North-East with commissioning of highest rating (3X250 MW) coal-based power plant in Assam

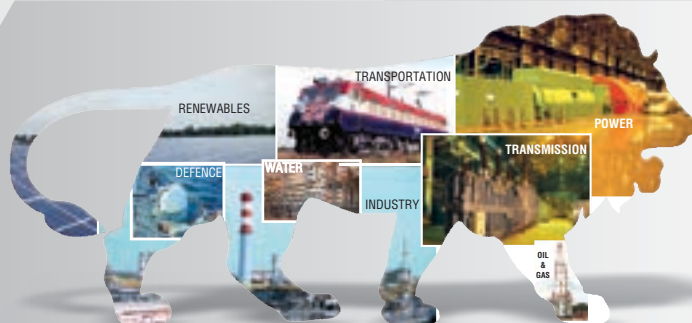
Indian Navy's INS Kolkata-D63 Missile Destroyer is equipped with BHEL's Super Rapid Gun Mount and Auxiliary Control systems

World's largest  $\pm 800$  kV, 6000 MW Multi-terminal HVDC NE-Agra Transmission project under execution by BHEL

All Power Stations awarded by Ministry of Power for early completion in 2013-14 were contracted on BHEL

Sudan's largest 500 MW Kosti Thermal Power Plant commissioned by BHEL

95% of hydroelectric generating capacity in Bhutan installed by BHEL







### Powering the industry

500,000<sup>+</sup> MVA transmission equipment supplied  
30000<sup>+</sup> AC machines supplied, largest Indian manufacturer  
130<sup>+</sup> MW- cumulative shipments of PV cells, modules and systems  
360 Electric Locos Supplied to Indian Railways & other industries  
375<sup>+</sup> Compressors & 88<sup>+</sup> Oil drilling Rigs Supplied  
40<sup>+</sup> Oil Rigs- Refurbishment & Upgradation completed  
30<sup>+</sup> SRGMs supplied till date



### Innovation

R&D Expenditure >2.5% of Turnover- highest in Indian engineering field

14 Centres of Excellence

More than 1 patent/copyright filed per day

Total intellectual capital: 3010

In-house R&D Centres of 12 Manufacturing units/Divisions recognized by DSIR



### Valuing people

Participative Management Culture through JCM, Plant Council, Shop Council since 1973

~ 75% Engineers amongst Executives

~ 1500 female employees inducted in the last ten years

Less than 1% attrition rate

4<sup>+</sup> days of training accorded to an employee per year

1000 Executives undergoing leadership training by Harvard Manage Mentor, an affiliate of Harvard Business School



### Energizing India

Built India's capability in power plant equipment manufacturing

157<sup>+</sup> GW power generating equipment installed till date

100<sup>+</sup> GW coal based utility installations in the country

Commissioned country's first indigenously manufactured 800 MW boiler at APPDCL Krishnapatnam-2

Commissioned country's first 660 MW indigenously manufactured supercritical set at NTPC Barh-5



### Social onus

Committed to Principles of UN Global Compact

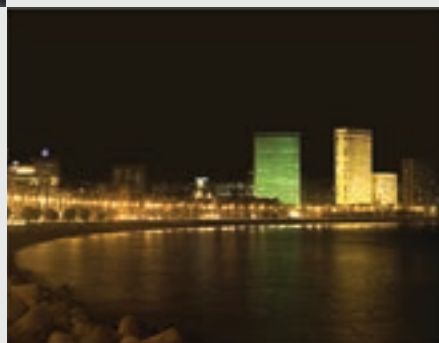
Signatory to Integrity Pact of Transparency International

Providing financial support for education of more than 20,000 school children

'Vanavil'- 5 acres eco-friendly park developed at BHEL Trichy having trees with botanical value

More than 75,000 eye donation pledges under "Vision to All-BHEL's Call"

Preserving Cultural heritage - Around 700 steel wheels supplied by BHEL for temple chariots in Tamil Nadu & Refurbishing Swatantrata Sangram Sangrahalaya in Red Fort, Delhi



### Heralding the change towards climate

Supercritical technology resulting in ~11% reduction in CO<sub>2</sub> emissions, less fuel consumption & lower cost to customers

Developed Fuel Flexible Boiler for operational flexibility & uninterrupted generation of electricity

Developed more efficient UHV Transmission systems and products (765 kV AC, 800 kV DC & 1200 kV AC)

Commissioned India's first 'Phase Shifting Transformer' (PST) at TSPGCL Kothagudem improving transmission efficiency

Average efficiency of Solar Photovoltaic cell increased to 18.75%

5 MWp grid interactive solar power plant at BAP, Ranipet powering unit operations & CO<sub>2</sub> mitigation ~ 5600 MT CO<sub>2</sub>-e per year

Low lifecycle cost of equipment facilitating affordable and environmentally sustainable energy systems



# 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 2014-15. Notable among these include:

## Business Excellence & Industry leadership:

- **'DSIJ Award 2014'** for the Most Efficient Maharatna PSU for the 6<sup>th</sup> year in succession



- **Recognition of excellence** for completing '50 years of Engineering Excellence' from **Dun & Bradstreet**



- **'44<sup>th</sup> EEPAC Award'** for the **'Star performer for 2013-14'** in the product group of project Exports
- **'Governance Now PSU Awards 2014'** under category of **"Asset Utilization & Strategic Turnaround"**

- **CBIP Award for 'Best Power Equipment Manufacturing Organisation'**

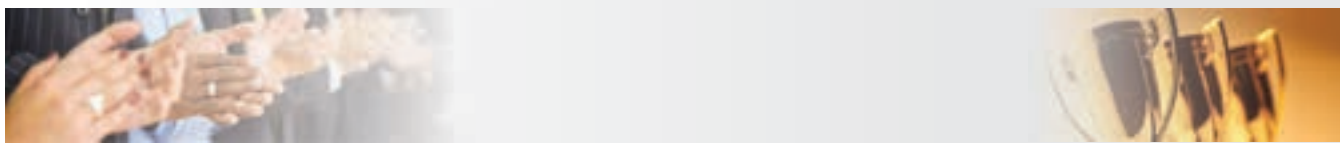


- **National e-Governance Gold Award for 2014-15** in the category - 'Innovative use of ICT by Central Government PSUs', for the project 'SAMPARK – Online Integrated Employee Centric services Portal', developed by **BHEL**, Bhopal



- **ICAI National Award for Excellence in Cost Management** for 9<sup>th</sup> consecutive year





- **Skoch Order-of-Merit** for 'Integrated Real Time Quality Management System at BHEL Bhopal' as a quality improvement initiative
- **6 'National Safety Award' to BHEL's EPD, Bengaluru and Trichy** units for outstanding achievements in terms of longest accident free period and lowest accident frequency rate at their works
- **'Dainik Bhaskar India Pride Award 2014-15'** for Excellence in Heavy Industries category for the 6<sup>th</sup> consecutive year

### Innovation

- **World Intellectual Property Organisation (WIPO) Award for 'Innovative Enterprises'** for its strong involvement in use of the Patent system and its achievements in R&D



- **India Today 'Best Maharatna PSU Awards' for Global Presence & Innovation & R&D**



- **PSE Excellence Award 2014 for R&D & Technology Development** in the Maharatna & Navratna CPSEs Category by the Indian Chamber of Commerce (ICC)



- **National Intellectual Property Award 2014** for being the 'Top Indian Public Limited Company in Patents'

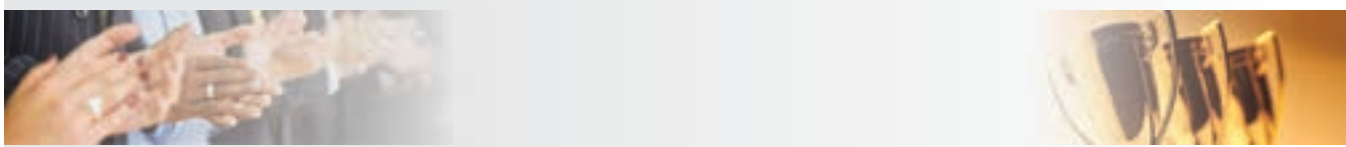
### Corporate Social Responsibility

- **Conferred 'Skoch Foundation Order of Merit Awards'** for the best CSR project in the country- 'Vision to All - BHEL's Call' for eradication of corneal blindness through eye donation



- **'Pandit Madan Mohan Malaviya Bronze Award'** for Best CSR Practices in the field of Education by 'CSR Times'
- **'Silver Plate'** Award by HelpAge India





## Leadership

- **'Honour of Excellence'** award bestowed by **Hon'ble President of India** on **Sh. B. Prasada Rao, CMD, BHEL**. Hon'ble Chief Justice of Kolkata High Court, Mrs. Justice Manjula Chellur, gave away the award at the inaugural function of the Indian Institute of Engineering Science & Technology (IIST), Shibpur (West Bengal)



- **Sh. Atul Sobti**, Director (Power), BHEL, was awarded the **'India Pride Award 2014-15'** for Excellence as **'Head of Department'** among Central PSUs. The award was received by Sh. Atul Sobti Director (Power), BHEL, from Sh. Arun Jaitley, Hon'ble Union Minister of Finance, Corporate Affairs and Information & Broadcasting



- **Sh. P.K. Bajpai**, Director (Finance) was awarded with **'CFO 100 Roll of Honor 2015'** in Funds Management Category
- BHEL Employees were awarded with Prime Minister's **'Shram Awards'** which included **1 'Shram Bhushan'** and **11 'Vishwakarma Rashtriya Puraskars'**



- Ms. M Girija, an artisan in the welder trade from BHEL Trichy received the **'All India Second Prize for the Best Woman Employee'** in 'non-executive category award' from Mr. Anant Geete, Hon'ble Union Minister for HI & PE





## Preserving the ancient heritage of India



*Swatantrata Sangram Sanghralaya at  
Red Fort, Delhi*

‘Swatantrata’ a word unparalleled in the annals of Indian history still sends a shiver up the spine of every Indian. Be it the 1857 Indian uprising- the first war of Indian independence or the emergence of Gandhian era leading to Quit India Movement and then culminating in the historic unfurling of Indian flag on 15<sup>th</sup> August, 1947 at Red Fort, a symbol of independence and national pride has played an indispensable role in the life of every Indian. Portrayal of these important times through documents, photographs, lithographs, ammunitions and memorabilia was taken up by Archaeological Survey of India in this charismatic building by establishing a ‘Swatantrata Sangram Sanghralaya’.

BHEL, born out of a similar motto ‘Self-sufficiency in Heavy Electrical Engineering’ acknowledges its roots with the ‘Swatantrata Sangram’ by actively participating in keeping the flames of freedom and self-reliance alive by associating with the rediscovery and preservation of this ancient heritage.

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# Directors' Report



# Directors' Report

## To the Members,

The Directors are delighted to present the 51<sup>st</sup> Annual Report on the business and operations of the Company and the statement of accounts for the year ended March 31, 2015.

## Financial Performance

		Financial Year	
Figures (in ₹ Crore except per share data)		2014-15	2013-14
a)	<b>Turnover (Gross)</b>	<b>30947</b>	<b>40338</b>
b)	Revenue from operations (Net)	29542	38389
c)	Other Operational Income	641	720
d)	Operating expenses	28094	34595
e)	<b>Operating profit</b>	<b>2089</b>	<b>4514</b>
f)	Add : Other income	1220	1616
g)	<b>Profit before depreciation, finance cost &amp; tax expense</b>	<b>3309</b>	<b>6130</b>
h)	Less: Depreciation	1077	983
i)	Less: Finance costs	92	133
j)	<b>Profit before tax</b>	<b>2140</b>	<b>5014</b>
k)	Less: Tax expense	721	1553
l)	<b>Profit after Tax</b>	<b>1419</b>	<b>3461</b>
m)	Add: Balance brought forward from the previous year	1171	1102
n)	<b>Profit available for appropriation</b>	<b>2590</b>	<b>4563</b>
i)	Adjustment pursuant to Amalgamation	0	81
ii)	Depreciation Adjustment	41	0
iii)	Dividend (including interim dividend)	284	693
iv)	Corporate Dividend tax (incl. on interim dividend)	57	118
v)	Amount transferred to General Reserve	1000	2500

o)	<b>Balance in Statement of Profit &amp; Loss</b>	<b>1208</b>	<b>1171</b>
p)	Earnings per Share (₹)	5.80	14.14
q)	NAV per share (₹)	139.26	135.02

Despite various issues relating to power projects like fuel linkages, fund constraints, land acquisition etc., BHEL recorded turnover of ₹ 30947 Crore in the year 2014-15. Net worth of the company has gone up by 3.14 %.

Performance of BHEL for the year 2013-14 has been rated as 'Good' in terms of MoU signed with the Government of India. BHEL has been awarded the MoU Composite score of '3.131'.

## Details of changes in Market Capitalisation

Description	As at 31 <sup>st</sup> March		Increase/ Decrease in %
	2015	2014	
Market Capitalization (₹ in Crore)	<b>57604.27</b>	47985.20	20.05
Price - Earnings Ratio	<b>40.58</b>	13.86	192.78

Note: Data based on share prices quoted on NSE.

**Percentage increase over/ decrease in the market quotations of the shares of the company in comparison to the rate at which the company came out with the last public offer-** BHEL has not offered shares to the public at large in an IPO.

## Dividend

The Board has recommended a Final Dividend of 31 % (₹ 0.62 per share), ₹ 151.75 Crore, for the year 2014-15. An interim dividend of 27 % (₹ 0.54 per share), ₹ 132.17 Crore, on share capital of ₹ 489.52 Crore, has already been paid for the year 2014-15. Thus the total dividend (exclusive of dividend tax) for the year 2014-15 is ₹ 283.92 Crore (₹ 1.16 per share) as against ₹ 692.68 Crore (₹ 2.83 per share) paid in the previous year.

Provision of ₹ 30.89 Crore has been made for Corporate Dividend Tax on the Final dividend

proposed. Corporate Dividend Tax of ₹ 26.43 Crore has already been paid on the interim dividend.



CMD, BHEL presenting the Final Dividend cheque for FY 2014-15 to Hon'ble Union Minister for HI&PE

## Orders Received

Despite operating in a subdued but healthy competitive business environment, the company secured orders worth ₹ 30814 Crore during the year. Sector-wise orders booked are as follows:

	(₹ in Crore)	
	2014-15	2013-14
Power Sector	24873	20433
Industry Sector*	5221	5007
International Operations	720	2567
Total Orders Booked	30814	28007
Order Book outstanding at the end of the year	101000	101500

\*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 134(5) of the Companies Act, 2013, it is hereby confirmed that:

- In the preparation of the annual accounts for the financial year ended March 31, 2015, the applicable accounting standards have been followed along with proper explanation relating

to material departures;

- the directors have selected such accounting policies and applied them consistently and made judgments and estimates that are reasonable and prudent so as to give a true and fair view of the state of affairs of the company at the end of the financial year and of the profit and loss of the company for that period;
- The directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of this Act for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities;
- The directors have prepared the annual accounts on a going concern basis;
- The directors have laid down internal financial controls to be followed by the company and that such internal financial controls are adequate and were operating effectively;
- The directors have devised proper systems to ensure compliance with the provisions of all applicable laws and that such systems are adequate and operating effectively;

## Management Discussion and Analysis

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

## Board of Directors

### Appointment

Shri Rajesh Kumar Singh, Joint Secretary, Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, has been appointed as Part-time Official Director w.e.f. 22.12.2014.

Shri T.N. Veeraraghavan has been appointed as an Additional Director w.e.f. 07.01.2015 to take charge of the office of Director (E,R&D).

Shri D. Bandyopadhyay has been appointed as an Additional Director w.e.f. 01.08.2015 to take charge of the office of Director (HR).

In accordance with Section 161 of the Companies Act, 2013 and Article 67(iv) of the Articles of Association of the Company, Shri Rajesh Kumar Singh and Shri D. Bandyopadhyay shall hold their directorships up to the 51<sup>st</sup> Annual General Meeting of the Company and is eligible for appointment as Director at the Meeting.



## Cessation

Shri Ambuj Sharma, Additional Secretary, Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, consequent to DHI order No. 1(2)/1995-PEXI dated 17<sup>th</sup> December, 2014 has relinquished his position as Part-time Official Director on 21.12.2014.

Shri P.K. Bajpai, who was appointed as Director (Finance) w.e.f. 01.07.2011 ceased to be a Director of the Company on attaining the age of superannuation on 31.05.2015.

Shri T.N. Veeraraghavan, who was appointed as Director (E,R&D) w.e.f. 07.01.2015 ceased to be a Director of the Company on attaining the age of superannuation on 30.06.2015.

Shri R. Krishnan, who was appointed as Director(HR), w.e.f. 01.04.2012 ceased to be a Director of the Company on attaining the age of superannuation on 31.07.2015.

The Board of Directors place on record their deep appreciation of the valuable services rendered as well as advice and guidance provided by S/shri Ambuj Sharma, P.K. Bajpai, T.N. Veeraraghavan and R. Krishnan 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, Shri Atul Sobti and Shri S.K. Bahri will retire by rotation at the Annual General Meeting and being eligible, offers themselves for re-appointment.

In compliance with Clause 49(VIII)(E)(1) of the Listing Agreement, brief resumes of the Directors proposed for appointment and re-appointment along with requisite details are given in the Explanatory Statement/ Annexure to the Notice.

No Director has given resignation during the year.

## CEO/CFO Certificate

CEO/CFO certificate {as per Clause 49(IX) of Listing Agreement} is placed at **Annexure – II**.

## Sustainable Development

Sustainability is just a natural extension of the way BHEL sees itself and its responsibilities. For almost fifty years of its existence, the company has been leveraging technology and innovations for providing products, systems and services to its customers enabling them to use resources with better efficiency and productivity which is also reflected in its Mission Statement – **“Providing**

## **Sustainable Business solutions in the fields of Energy, Industry & Infrastructure”.**

BHEL has ingrained the triple bottom line approach for Sustainable Development in its business processes. It has been creating value for its stakeholders since inception. Its R&D efforts have always been directed towards development and diffusion of technologies which are having reduced environmental footprints. Its structured CSR programme is directed towards bringing prosperity to the society and is aligned to the efforts being made by Government of India towards inclusive growth.

BHEL has undertaken numerous CSR initiatives and more than 300 such CSR projects/activities implemented during 2014-15 covered majorly all Units/ Regions. In addition, company has undertaken many environmental sustainability initiatives which falls broadly in the areas of renewable energy generation, material and natural resource management, energy management, water & bio-diversity management and carbon management. The details of all such sustainability initiatives are provided in **Annexure-III**.

## Business Responsibility Report

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

Continuous product development is the cornerstone of strategy for meeting the challenges in today's environment. BHEL places strong emphasis on innovation and creative development, which are the important drivers of BHEL's R&D programmes for achieving growth. The R&D efforts of the company are not only aimed at improving the performance and efficiency of the existing products, but also developing new products using state-of-the-art technologies and processes.

BHEL has recorded significant achievements during the year. The R&D expenditure of the company for the current financial year is ₹ 1018.59 Crore which is 3.29% of the turnover. This also includes the expenditure incurred on R&D efforts gone into major modifications/ improvements in product/ designs against customer requirements which are

not covered in R&D projects. The company filed 453 patent and copyright applications filed during the year 2014-15, enhancing the company's intellectual capital to 3010.

It is imperative to focus on newer areas to meet the challenges of a changing business scenario while continuing development in traditional areas of business. To meet this objective, BHEL has taken several technology development initiatives covering various business verticals viz. Power, Transportation, Transmission, Solar, Water, Defence and other areas. 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 commercialization, Carbon capture, Solar PV & Thermal, 765/1200 kV Transmission System, GIS up to 765 kV,  $\pm 800$  kV HVDC system, IGBT based Propulsion Systems for higher rating Locos, EMU, Metro coaches on mission mode. The company is also engaged in development of emerging technologies 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. Further details are given in **Annexure-V**.

### Official Language Implementation

Continuous efforts were made for propagation and effective implementation of Rajbhasha in the company. Inspection of 12 Units/Divisions was done to monitor and review the progress in this area. Committee of Parliament on Official

Language appreciated the efforts being made in this area during the inspection of Corporate Office on 16.01.15.

More than 900 non Hindi speaking employees were imparted training under Hindi teaching scheme of Govt. of India. Training for using latest version of Unicode Hindi on computer was also imparted to more than 5000 employees of all the Units/Divisions. 70 Hindi workshops were organized to motivate employees to work in Hindi covering more than 1800 employees. In addition, 1 Translation Training Programme was conducted with the help of Central Translation Bureau, Rajbhasha Vibhag, Ministry of Home Affairs.

Under Inter Unit Rajbhasha Shield Scheme, 13 Units were given award for excellent Rajbhasha Implementation. 03 executives were awarded for Hindi Book writing under Hindi Book Award Scheme. In addition, 350 employees who do their work in Hindi were also awarded with cash awards.

All the Units/Divisions of the company, including Corporate Office, celebrated Hindi Divas and Hindi Week/ Fortnight/Month during which various competitions, Seminars, Cultural Programme and Kavi Sammelan were held.

BHEL 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 15 Units/ Divisions of BHEL were awarded by the TOLICs for various achievements in this area.

A handbook "Rajbhasha Sahayika" has been prepared as helping material for doing work in Hindi. It is being distributed to employees in Hindi workshops and it has been uploaded on Corporate intranet also.

13 Hindi Magazines are being published all over the Company to motivate the employees for Hindi writing and these are getting awards from various institutes. "Arunima" from Corporate Office was awarded with Second Prize by TOLIC (PSU), Delhi for excellent House Journal.

All BHEL Rajbhasha Coordinators Meet was held on 9<sup>th</sup> & 10<sup>th</sup> October, 2014 at EPD, Bengaluru. 35 employees from various Units/Division of the Company attended the Meet.



Hindi Diwas Samaroh organised at BHEL on 15<sup>th</sup> September, 2014

## Vigilance

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

Preventive vigilance remained the focus area of BHEL Vigilance, with special emphasis on systemic improvements. To strengthen the vigilance administration, Whistleblower Policy of the company was issued. Further, action was initiated for review of Works policy, Works Account Manual and HR Manual.

Public Awareness is an important cornerstone for good governance. An enlightened employee not only can contribute in achieving the organizational goal but also in system improvements. Training programmes / sessions were conducted to update employees about Company's policies, rules and procedures in various BHEL Units and Regions. In addition, interactive sessions were held with line executives representing different functional areas to sensitize them about the risk prone areas.



*Vigilance Awareness Week observed in BHEL from 27<sup>th</sup> October to 1<sup>st</sup> November, 2014*

With a view to create awareness about procurement and works policy, rules and procedures etc., to disseminate the instructions/ guidelines issued by CVC and Government of India from time to time and to share best practices and case studies, a quarterly e-Newsletter 'DISHA' is being published by Corporate Vigilance.

Corporate Vigilance teams inspected 9 Units. The issues observed during inspections were discussed

in interactive sessions with the respective 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 organization.

The critical review of tender conditions was also undertaken with a view to increase competition and check cartel formation. Due to proactive action of Vigilance, savings to the tune of ₹ 37.03 Crore (approx.) have been achieved.

BHEL Vigilance prepared a detailed Corruption Mitigation Action Plan in respect of potential areas of corruption, which has been taken up for implementation by all Units.

Routine / Surprise Inspections were carried out by Unit / Corporate Vigilance to verify the compliance of rule and procedures. Instructions/Guidelines were issued concerning following issues for further improvement in the system:

- Deficiencies in Tendering Process of Transportation Contracts
- Clarification on clause 4.0 of Guidelines on Suspension on Business Dealings with Suppliers / Contractors
- Prequalification Criteria (PQ)
- Receipt and Opening of Tenders
- Deficiency in Quality Inspections
- Reasonableness of Rates

Some specific areas concerning Estate Management, Stores Management, Procurement were identified and Unit Managements were advised to initiate action in these areas:

- Recovery of outstanding dues on account of rent and allied charges from the allottees of quarters/ shops in Townships.
- Identification/ segregation of surplus / usable stores/ scrap material from the stores lying outside the workshops in the premises of units and not used/ disposed of for very long time.
- Installation of Bio-metric Attendance System linked with pay system.
- Procurement through open tender route



particularly for high value packages and review of PMDs to weed out inactive suppliers.

To improve record management, Guidelines for Retention / Weeding out of Old Records in Vigilance Department issued on 20.08.2014.

To enhance the skills of Vigilance Officers, a workshop for Vigilance Officers was organized from 27.08.2014 to 29.08.2014 at BHEL, Bhopal

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 website. In addition, e-tendering route is being promoted for procurement and e-payment system has been implemented to reduce vendor interface. Further, steps have been taken to promote e-procurement in the Company. The percentage of e-procurement increased from 25% to 37% and around 26% of tenders (value wise) were decided through Reverse Auction during 2014-15.

Vigilance examined 144 complaints and investigated 30 complaints during the year.

## **Safety & Security**

Though BHEL has an established and mature Safety Management System accredited to OHSAS 18001: 2007, BHEL's management has further enhanced its focus on building a strong safety culture. To reinforce the organisation setup for safety and to improve our safety practices safety performances and other safety related issues are now reviewed in MCM on quarterly basis.

The result of efforts to improve safety are gradually becoming visible as there has been a marked improvement in safety statistics in recent past. It is reflected in data related to fatalities and man-days lost for the calendar year 2013 and 2014. At project sites, there was approximately 45% reduction in incidences of fatalities and 50 % reduction in the man-days lost due to various types of accidents during calendar year 2014 in comparison to calendar year 2013.

Dedicated Safety and Occupational Health Centres are being run in the factory premises taking care of safety and health issues at the work place. Some of

the initiatives taken in our units to build and maintain safety and health culture at work place during the year are:

- Sponsoring BHEL officials for 1 year advanced Diploma course in Industrial Safety conducted by Central / Regional Labour institute at Mumbai, Kanpur, Kolkata, Chennai and Faridabad
- Periodic health and safety awareness campaigns
- Regular health and safety related training programmes
- Display of posters and safety instructions
- Safety pledge & Tool box meetings
- Regular Plant Safety Inspections
- Encouraging use of Personal Protective Equipment
- Mock Drills in identified hazardous areas at specified frequency
- Publication of in-house magazines and hand books on various safety topics
- Work Permit system for carrying out critical activities
- Conducting periodic safety drills, Internal audits & 3<sup>rd</sup> party audits
- Job Safety Analysis for identified activities
- Monthly departmental Safety Committee meetings and plant safety committee meetings
- 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
- Making available Material Safety Data Sheet (MSDS) for all the hazardous chemicals and safe work procedures are followed
- Developing operation control procedures (OCPs) and providing it to the concerned for effective implementation

Further, Annual Safety Heads Meet was conducted at Corporate Office on 16<sup>th</sup> & 17<sup>th</sup> Sep, 2014 for sharing of experience amongst the people directly involved in ensuring safety at their respective workplaces.

The Company's security mechanism is sufficient to provide security to each Plant/Unit. Security of most of the plants of the company is being managed by the CISF except for in some smaller plants where the company has its own security. Also, in some plants, Corporate Office and Regional Offices, the security is being looked after by the private agencies sponsored by Directorate General Resettlement, Govt. of India or Ex-Servicemen Corporations.

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

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. Review of security is done internally also from time to time. Monthly report on theft/ pilferage and fire incident compiled by Corporate Security Department along with quarterly reports on various security related issues as per the decisions taken in the meetings of HR & Security Heads.

Adequate measures have been taken by installation of CCTV's and SOP in many plants and offices to mitigate any security threats.

The Management, security staff and employees of company are sensitized to the security needs of the company.

## Corporate Governance

As per the requirements of Clause 49 of the Listing Agreement a detailed report on Corporate Governance (including Board/Committee meeting details) together with the following is given at **Annexure – VI:**

- (i) Auditors certificate on Corporate Governance (CG) under clause 49 of Listing Agreement & DPE guidelines on Corporate Governance.
- (ii) Secretarial Audit Report u/s 204(1) of the Companies Act, 2013 and Management reply thereon.
- (iii) Extracts of Annual Return pursuant to section 92(3) of the Companies Act, 2013 read with rule 12(1) of the Companies (Management and Administration) Rules, 2014.

Declaration under section 149(6) of the Companies Act, 2013 pertaining to criteria of Independence has been given by the Independent Directors to the Board of Directors.

## Other Disclosures

Information in accordance with the provisions of Section 134(3)(m) of the Companies Act, 2013 read with Companies (Accounts) Rules, 2014 regarding conservation of energy, technology absorption and foreign exchange earnings and outgo is given at **Annexure-VII.**

As per provisions of section 197 of the Companies Act, 2013 read with Rule 5 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, every listed company is required to disclose the details of the remuneration of directors etc. in the Directors' Report. However as per Notification No. GSR 463(E) dated 5<sup>th</sup> June, 2015 issued by the Ministry of Corporate Affairs, Government Companies are exempted from complying with provisions of section 197 of the Companies Act, 2013. BHEL being a Government Company, therefore, such particulars have not been included as part of Directors' Report.

Statement pursuant to Section 129 of the Companies Act, 2013 (AOC-1) relating to Subsidiary Companies & Joint ventures and Form AOC-2 pursuant to section 134(3)(h) of the Companies Act read with Rule 8(2) of the Companies (Accounts) Rules, 2014 are given at **Annexure-VIII.**

## Links to Company Websites

1. Familiarisation Programme of Independent Directors, Weblink :  
[http://www.bhel.com/investor\\_relations/pdf/familiriazation\\_progmr\\_for\\_IDs.pdf](http://www.bhel.com/investor_relations/pdf/familiriazation_progmr_for_IDs.pdf)
2. Policy Determining Material Subsidiaries and Policy Dealing with Related Party Transactions, Weblink :  
[http://www.bhel.com/pdf/Policy\\_with\\_regard\\_to\\_Related\\_Party\\_Transactions.pdf](http://www.bhel.com/pdf/Policy_with_regard_to_Related_Party_Transactions.pdf)

## Auditors

The Auditors of your Company are appointed by the Comptroller and Auditor General of India. The names of auditors appointed for the year 2014-15 are printed separately in the Annual Report.

The details of cost auditors appointed for the year 2014-15 and Cost Audit details are printed separately in the Annual Report.

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, Secretarial 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 : 06.08.2015



# Annexure-I

## Management Discussion and Analysis

### 1.1 Economic & Business Overview

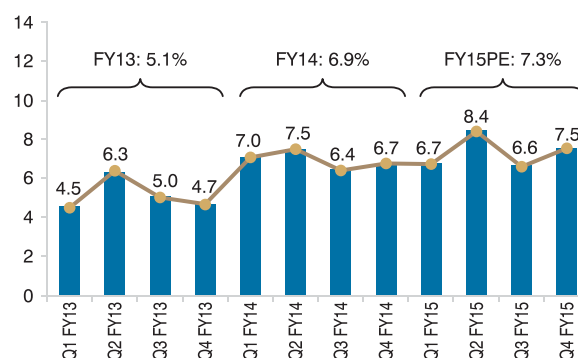
The year 2014-15 witnessed improvement in macro parameters coupled with improved business and consumer confidence. Post revision of base year, GDP growth over the last three years points towards steady recovery. The combined effort on part of RBI and GoI has ensured inflation to come down to the envisaged trajectory. As a result the market is seeing interest rate cuts, a much awaited relief for industry.

On the exchange rate front, much of the relief has come from stability of Indian currency against USD. It augurs well for export oriented firms and offering a suitable destination for foreign manufacturers to set their shops here.

Industrial activity indicators, IIP and PMI, are pointing towards strong production activity. Collectively it

can be said that economy is in much better shape and would expand further on the back of ongoing structural changes and clearing of stranded infrastructure projects.

GDP Growth



Source: MOSPI, GOI

# Power Sector

## 1.2 Profile and Performance of Business Segments

### 1.2.1 Power Sector

#### Opportunities

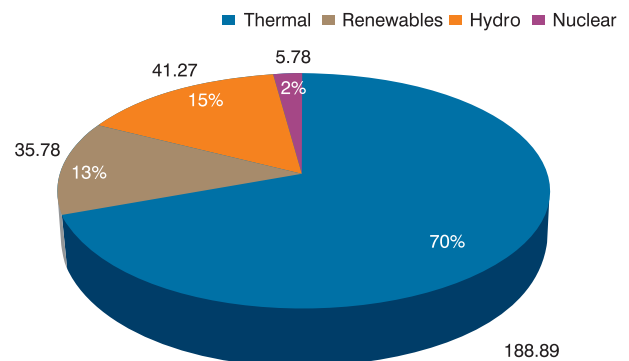
India is the world's second fastest-growing major economy, with growth rates averaging 7.5% over the past 10 years and has the potential to become the world's third largest economy (nominal basis) by 2020. In the next two decades, current size of economy of USD five trillion (PPP) is expected to grow four to five times as per various studies and estimates. Also, India is the second most populous country in the world, with over 1.26 billion people, more than a sixth of the world's population. All the factors indicate potential for high growth of power demand in the country.

Human Development Index (HDI), which is a composite statistic of life expectancy, education and per capita income indicators, is directly correlated to the per capita electricity consumption. For a country like India, even a small increase in electricity use is associated with large increases in HDI. This further 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 271.7 GW by March 2015.

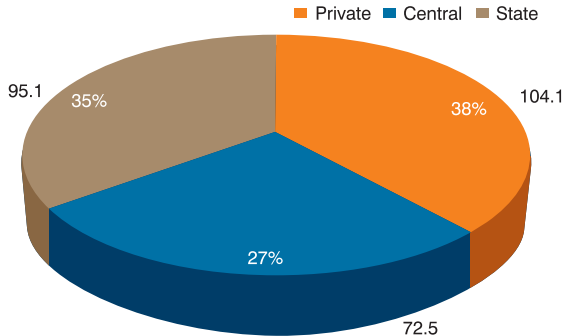
With capacity addition of 61,014 MW during the first three years of the 12<sup>th</sup> Plan (2012-15), the country has exceeded the achievement of 54,964 MW during the 11<sup>th</sup> Plan (2007-12) through conventional

Installed Generation Capacity (GW) - Fuelwise



As on 31<sup>st</sup> March, 2015, Source : Ministry of Power

## Installed Generation Capacity (GW) - Utilitywise

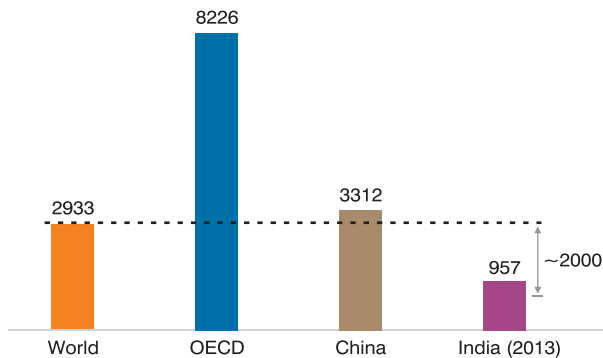


As on 31<sup>st</sup> March, 2015  
Source: Ministry of Power

sources, which itself was more than double that of 21,240 MW during 10<sup>th</sup> Plan (2002-07). Despite the growth, there is still further scope of accelerating the growth of capacity addition as India continues to experience shortages in energy with total deficit of 3.6% and peak deficit of 4.7% during 2014-15.

Reforms for a more efficient and competitive power sector are under way in India. While there has been some progress in this regard, shortage of power and lack of access, which is reflected in low per capita electricity consumption in India vis-à-vis other major economies, continue to be major constraints on India's economic growth.

## Electricity Consumption per Capita per year (kWh), 2014



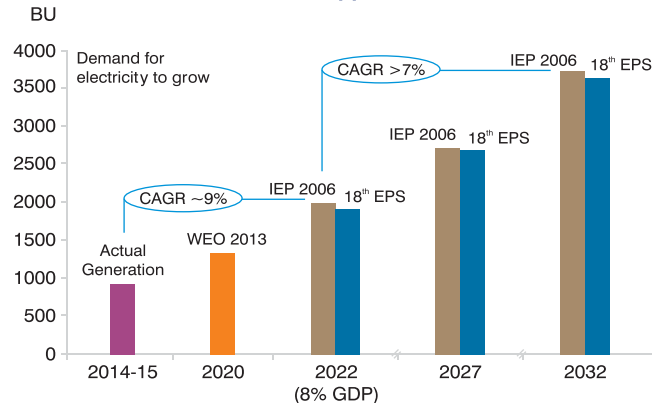
Per capita electricity consumption in India will have to be tripled to match the world average level.

Considering the recent state of power generation status and in order to deliver a sustained economic growth rate of 8.0% up to 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 of the current levels by 2035 translating into a CAGR of approx 7% in electricity generation. This

represents a need for the substantial augmentation of power generation capacity from current levels.

The recent 'Make in India' initiative of Government of India is likely to further enhance the demand for power in the country.

## Indian Power Sector: Opportunities Unlimited

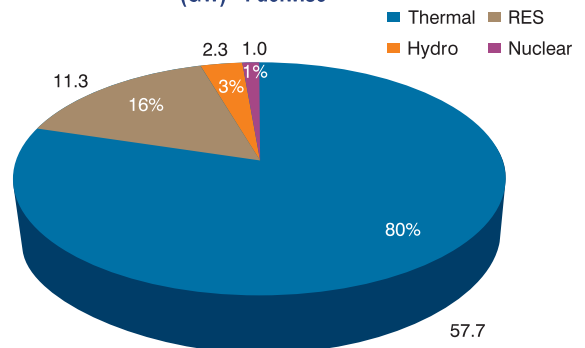


WEO: World Energy Outlook, IEP: Integrated Energy Policy, EPS: Electric Power Survey, CEA

A capacity addition of 88.5 GW has been envisaged for the 12<sup>th</sup> Plan (2012-17). This comprises an estimated 72.3 GW of thermal power, 10.9 GW of hydro power and 5.3 GW of nuclear power. In addition, a grid interactive renewable capacity addition of about 30 GW has been envisaged. This comprises wind, small hydro, biomass and solar energy.

During the first 3 years of 12<sup>th</sup> Plan (2012-15), capacity addition of 61 GW has already taken place, which is 111% of the five year period of 11<sup>th</sup> Plan (2007-12) achievement. In addition, 11.3 GW of grid interactive renewable capacity was also added during 2012-15.

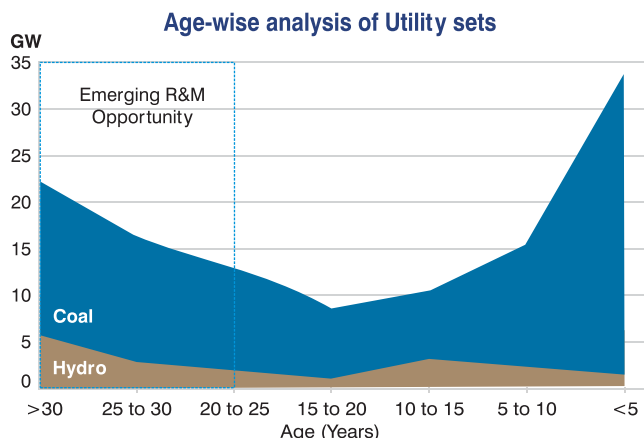
## Installed Generation Capacity during 2012-15 (GW) - Fuelwise



Apart from new capacity additions, huge opportunity exists in Renovation & Modernization (R&M) business as almost 24% 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, with many private producers and domestic manufacturers 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.

Developers of Power Plants have been facing numerous constraints like coal/gas allocation, environment clearance, land acquisition, financing and funds tie-ups, etc. for last about 4 years. This has resulted in only very few new projects coming up.

Recently, Government has taken steps to propel growth in power sector. These include allocation of coal blocks to central and state govt. companies, auction of Coal Blocks for private developers, setting a target of 1 Billion Tonnes of Coal output by 2020 and the declaration of intent in the Union Budget to set up 5 UMPPs in near future, etc. This, alongwith steps like the Government decision for domestic sourcing for UMPPs and extension of CEA's advisory to Central/ State Utilities for condition of Phased Manufacturing Programme (PMP) have had a positive impact on the prospects for the sector, particularly for domestic manufacturers.

India has a huge hydro power potential of 148 GW, out of which only 42 GW has been realized till date. Steps have been taken to attract investments into

the hydro sector and increase the falling share of hydroelectricity in the country's installed capacity mix. Government is planning Hydropower Purchase Obligation (HPO), which will obligate the power distribution companies to purchase power from hydro power plants. This has led to signs of revival in hydro power segment. However, the Supreme Court verdict staying 23 Hydro Projects in Uttarakhand has acted as a dampener, thereby delaying the imminent revival in the sector. The Nuclear business is primarily driven by government policies, public perceptions and global dynamics.

### Offerings

BHEL offers 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 and has supplied 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, and pump turbines with matching motor generators up to 300 MW are also engineered and manufactured by BHEL.

BHEL offers gas turbines and matching generators ranging up to 299 MW (ISO) rating, tailored to meet specific needs, for both open and combined cycle operation.

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

meet the latest environmental norms, retrofit package for Control & Instrumentation for replacing obsolete technology with state-of-the-art technologies are also being offered by BHEL.

In order to overcome the current uncertainty of coal supply, BHEL has in-house developed 'Fuel Flexible Boiler', which is capable of firing entire range from 100% Indian to 100% imported mix of coal. The design has been developed by BHEL with its vast experience of over five decades of working with various coals. This will provide security against variation in design coal and the coal actually available during operation, thereby offering operational flexibility to customers to ensure un-interrupted generation of electricity.

## Achievements during the Year

### Order Booking

Power Sector secured orders worth ₹ 24,873 Crore with market share of 72%, against previous five years average of 64%, despite shrinking market and intense competition, reinforcing the leadership of BHEL in Indian Power Sector. It includes orders for 4 nos. of Turbines & Generators (TG) and 4 nos of Steam Generators (SG) for supercritical sets, making cumulative supercritical technology orders basket to 31 TG and 36 SG by the end of 2014-15, thus reinforcing BHEL's leadership in this segment. Share of EPC orders has also improved during the year, with EPC business in the utility segment contributing to 89%. Major highlights of the orders received during 2014-15 include:-

- Order for country's first ever EPC contract for 800 MW rating Supercritical Power Project secured from GSECL for 1 x 800 MW Wanakbori for ₹ 3,536 Crore



BHEL wins India's first ever EPC contract for 800 MW Supercritical Power Project at Wanakbori from GSECL

- BHEL's Second largest order worth ₹ 7,688 Crore for 2x660 MW TANGEDCO Ennore SEZ on EPC basis
- 1x800 MW TSGENCO Kothagudem, Telangana state's first supercritical order, secured on EPC basis for ₹ 3,810 Crore
- Order for Country's first 9FB Advanced Class Gas Turbine received from KPCL for Yelahanka CCPP on EPC basis for ₹ 1,202 Crore. This is the first gas-based order for domestic market, after a gap of almost last 3 years

## Major Orders booked

Significant utility orders received in the Power sector:

### THERMAL

#### Supercritical Ratings (2,920 MW)

- 1x800 MW GSECL / Wanakbori (EPC)
- 2x660 MW TANGEDCO/ Ennore SEZ (EPC)
- 1x800 MW TSGENCO / Kothagudem (EPC)

#### Sub-critical Ratings (1,450 MW)

- 4x270 MW TSGENCO / Manuguru (EPC)
- 1x370 MW KPCL/ Yelahanka CCPP (EPC)

### HYDRO (564 MW)

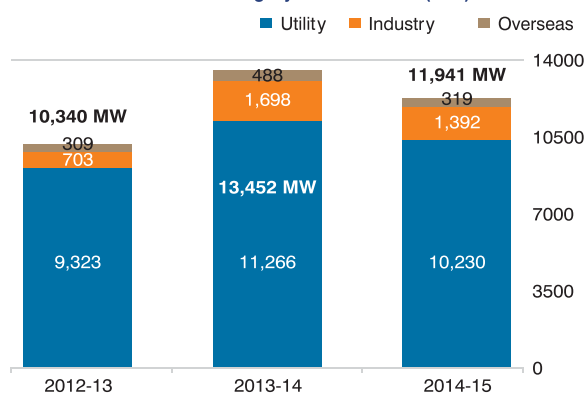
- 4x111 MW THDCIL / Vishnugad Pipalkoti HEP (E&M Pkg)
- 3x40 MW NTPC / Rammam Stg III HEP (E&M Pkg)

Spares & Service Group booked orders aggregating to ₹ 2,375 Crore for spares & service.

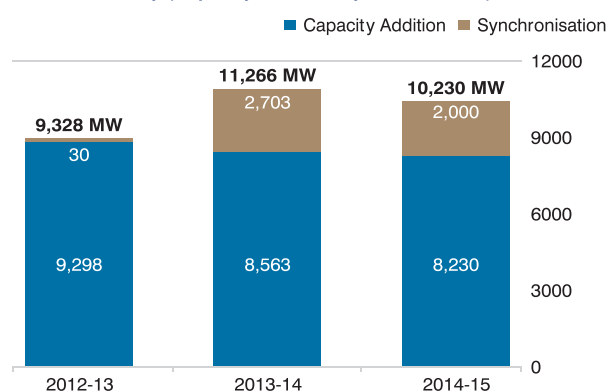
## Projects Commissioned

BHEL has continued to cross 10,000 MW mark of commissioning / synchronisation for the third consecutive year. Capacity addition by BHEL during the first 3 years of the XII Plan has exceeded the 5 year achievement of the XI Plan. In 2014-15, BHEL maintained a healthy pace of project execution. Power projects totaling 11,941 MW were commissioned/synchronized during the year, inclusive of 10,230 MW Utility sets, 1,392 MW captive sets/ industrial sets in the country and 319 MW in overseas markets. BHEL commissioned utility projects aggregating to 8,230 MW, which is up by 19% against the commissioning target of 6,914 MW set by Ministry of Power.

### Commissioning/Synchronization (MW)



### Utility (Capacity Addition/Synchronization)



### Summary of BHEL Sets Commissined During the year 2014-15

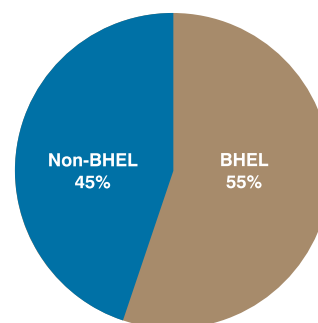
Segment	Description	Set	MW
Utility Segment	Utility Segment (Cumulative)	29	10229.71
	Capacity Addition	25	8229.71
	Coal	16	7015
	Hydro	6	736.01
	Gas	3	478.7
	Synchronisation	4	2000
	Coal	4	2000
Overseas	Overseas (International Operations)	6	319
Industry Sector	Industry Sector (Cumulative)	26	1392.55
	Execution by Power Sector	18	1130.75
	Execution by MUs	8	261.8
	<b>Grand Total</b>	<b>61</b>	<b>11941.26</b>

During the year, 25 nos. of Utility sets were commissioned expanding footprint of BHEL to 398 coal based sets (including 88 sets of 490/500/525/600/660 MW rating), 395 nos. hydro utility sets and 100 gas-based sets installed in India showcasing experience and execution capabilities. Capacity addition in Hydro Utility segment aggregating to 736 MW / 6 sets was highest in last decade by BHEL.

With this, installed capacity of BHEL supplied Utility sets in India went up to 1,32,293 MW and company maintained its lion's share of 55% in the country's total installed capacity of 2,41,427 MW comprising of Coal, Gas, Diesel, Hydro and Nuclear Sets (excluding Renewables and Up-rating/ De-rating). However, 62% of the total generation from Thermal Utility Sets (coal based) was contributed by BHEL supplied sets, testifying superior performance of BHEL sets.

### Installed Capacity - Utility\*

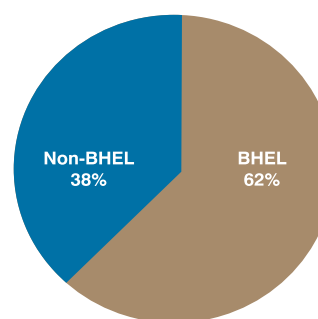
2,41,427 MW (31.03.15)



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

### Generation - Utility\*\*

836 BU (2014-15)



\*\* Coal & Lignite

Note: Excludes Renewables and Up-rating / De-rating

### First Time Achievement

- Indigenously manufactured supercritical set



of 660 MW rating commissioned by BHEL at Barh-5 successfully establishing its product under this rating



*Indigenously manufactured supercritical set of 660 MW rating commissioned by BHEL at Barh 5*

- First 800 MW set of BHEL commissioned at Krishnapatnam-1 (BHEL scope: SG package only)
- Further, commissioning of highest rating indigenously manufactured boiler in the country achieved at Krishnapatnam-2 (800 MW)
- Country's largest 1000 MW nuclear set commissioned at Kundankulam-1 (BHEL scope: E&C of TG)
- First of its kind in the country; HP1203 vertical bowl Mills with a capacity to supply coal at two elevations, erected and commissioned at Krishnapatnam (2x800 MW) (BHEL Scope: SG only)



*2 Units of 200 MW each of Koldam HEP commissioned by BHEL during the year*

## Setting Benchmarks in Commissioning

- More than 10,000 MW Commissioned/ Synchronized – for 3<sup>rd</sup> year in succession

- BHEL joins elite club of select international companies, having installed more than 150 GW of power generating equipment cumulatively. Current installation by BHEL stands at a staggering 1,57,568 MW
- BHEL commissioned 736 MW in hydro segment - highest annual commissioning in the last 10 years. Incidentally, all hydro sets in the country which achieved capacity addition this year, were commissioned by BHEL (Parbati III - NHPC, Rampur - SJVNL and Koldam - NTPC)
- Capacity addition by BHEL during the first 3 years of 12<sup>th</sup> plan (till 31<sup>st</sup> March 2015) stands at 26,091 MW (63% of its total 12<sup>th</sup> plan target of 41,661 MW) which is more than the total commissioning of 25,385 MW achieved in entire 11<sup>th</sup> Plan period (2007-12) by BHEL
- BHEL crossed 100 GW of domestic coal based utility installations in 2014-15. Current installation by BHEL stands at 1,02,000 MW towards country's coal based installed capacity

## Utility Sets Commissioned during the year

A total of 25 Sets totaling 8,230 MW were commissioned in domestic market during the year by BHEL.

S.No.	Project Name	MW
<b>Utility Sets (Domestic) - 25 Sets, 8229.71 MW</b>		
<b>Coal Based Sets - 16 Sets, 7015 MW</b>		
1	JITPL Derang-1	600
2	Chhabra-4	250
3	Malwa (Shree Singaji TPS)-2	600
4	JPL Raigarh-3	600
5	Neyveli-2	250
6	JITPL Derang-2	600
7	Amravati-3	270
8	Barh STPP Stage-II Unit-5	660
9	Amravati-4	270
10	Tuticorin-1	500
11	Amravati-5	270
12	D B Super TPP (Janjgir Champa)-2	600
13	JPL Raigarh-4	600
14	Sikka-3	250
15	Chandrapur-8	500
16	Muzaffarpur-3 (Kanti-3)	195

Gas based sets - 3 sets, 478.7 MW		
1	Ramgarh ST-III STG (Gas)	50
2	OTPC Tripura-2 (Gas)	363.3
3	Monarchak GT	65.4
Hydro based sets - 6 sets, 736.01 MW		
1	Parbati Stage-III U-4	130
2	Rampur-4	68.67
3	Rampur-5	68.67
4	Rampur-6	68.67
5	Koldam-2	200
6	Koldam-1	200

### Utility Sets Synchronised and awaiting Commissioning

In addition, a total of 4 Sets totaling to 2,000 MW were synchronised in domestic market.

S.No.	Project Name	MW
Utility Sets (Synchronised awaiting commissioning): 04 sets, 2,000 MW		
1	Anpara D-6*	500
2	Marwa - 2	500
3	Sagardighi - 3	500
4	Bokaro - A	500

\* Commissioned on 06.06.2015

### Overseas Sets Commissioned by BHEL during the year:

A total of 6 Sets totaling to 319 MW of Overseas Sets were commissioned

S.No.	Project Name	MW
Overseas - Utility (6 Sets/319 MW)		
1	PDO, Oman	126
2	Tendaho Ethiopia-1	20
3	Rwanda HEP 1	14
4	Rwanda HEP 2	14
5	Kosti, Sudan STG 3	125
6	Tendaho Ethiopia - 2	20

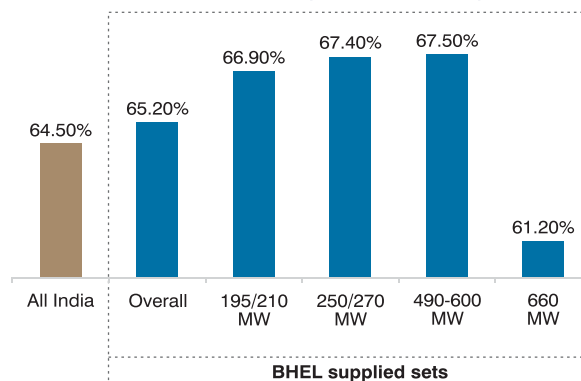
### Performance of Equipment

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

- 178 BHEL supplied coal-based sets achieved PLF of over 70%. Out of these, 27 sets registered PLF of over 90% and 76 sets achieved PLF between 80% - 90%
- 181 BHEL coal based sets achieved OA higher than 90%

- 192 BHEL supplied coal-based sets clocked uninterrupted operation of more than 90 days during the year, out of which, 27 sets continuously operated for more than 200 days and 67 sets operated twice continuously for more than 90 days
- BHEL supplied Nuclear sets registered an OA of 92.3% and PLF of 83.7% in 2014-15
- 12 nuclear sets clocked uninterrupted operation for more than 90 days

Plant load factor (Coal-based sets)



Thermal Power Plants with BHEL supplied equipment recording -

#### PLF more than 90%:

Kakatiya, Raigarh, Talcher- NTPC, Dahanu, Budge Budge

#### PLF 80-90%:

Ramagundam, Sabarmati, Korba (NTPC), Amarkantak Ext-210, Bakreshwar, Neyveli MC-II, Simhadri, Korba East, Sipat, Mettur, CESC, Tuticorin, Singrauli, Unchahar, Kota, Korba (W), Vijaywada-500, Vijaywada, Tanda, Mejia-250, Rihand STG II



Budge Budge TPS equipped with BHEL sets recorded PLF of over 90%

## Customer Focus

- Capacity Addition of 100% of NTPC (4 sets/ 1,255 MW) and SJVNL (3 sets/206 MW) Projects during the year, was by BHEL.
- BHEL's share towards NTPC's total installed capacity is 72% (32,178/44,398 MW)
- All 6 Units of Rampur HEP (6x68.67 MW) of SJVNL were commissioned within a span of 9 months (March'14 to Dec'14)
- 3 Units of Amravati (5x270 MW) of M/s Rattan India Power Ltd. were commissioned within 42 days.
- Trial operation of three sets completed within a span of 5 months at JPL Raigarh (4x600 MW) - Units 1, 2 and 3.

## Renovation & Modernisation

Renovation, Modernization & Uprating of following units led achievement of their full load after operating for more than 25 years of installation – a testimony to BHEL's product & service excellence.

### R&M Projects completed in FY 14-15:

Project	MW	Category	State	Remarks
PSPCL Bhatinda U#4	110	Thermal	Punjab	Uprated to 120 MW
KBUNL Muzaffarpur U#2	110	Thermal	Bihar	Running at full load
UPJVNL Rihand U#4	50	Hydro	Uttar Pradesh	Running at full load

## 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:

- Trim balancing of Rotor system at Santaldih-5 & 6 of WBPDCCL
- Replacement of LP inlet compensator bellow at Farakka STPS-5 of NTPC
- Refining/machining of HP/IP Rotor Fins at Budge Budge-3 of CESC
- Replacement of IP nozzle segment at Kolaghat-5 of WBPDCCL
- Rectification of furnace width of Boiler at Bokaro-4 of BSPGCL

- Rectification of facial run out of 'Exciter side end Shield' of Generator by machining at Kolaghat-5 of WBPDCCL
- Modification/alteration of mill components by all cut machine at Muzaffarpur-2 Kanti of KBUNL

## Acknowledgement & Recognition of Excellence

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

- NPCIL: For all out support towards TG Erection & Maintenance works of Kudankulam Unit-1 Nuclear Power Project- The first 1000 MWe machine, commissioned in the country (BHEL Scope: TG E&M)
- RPCL: For successfully achieving the Boiler Hydro test at Yermarus Unit 1 (800 MW)
- KWPCL: For successful completion of trial run of 600 MW set at Avantha Power, Raigarh.

### Overhauling

- NTPC: For excellent performance during Turbine revival works of Unit-2 at Farakka STPS (MW)
- BPSCL: For performance during overhauling of Boiler of Unit-4 at Bokaro (75 MW)
- RINL: For successful repair of TG Rotor at RINL (67.5 MW)
- MSPGCL: For post operational Chemical cleaning of Boiler at Bhusawal-4 (500 MW)
- Govt of NCT, Delhi: For efforts towards overhauling 'Gas Turbine Generator' Unit-1 (104.6 MW) of PPCL, Indraprastha in a short span of 7 days

### Spares & Service Group

- NSPCL Durgapur and TSGENCO Kothagudem Units 7&8 for supply of APH Basket
- OPGCL, IB Valley for Upgradation and Retrofitting of ESP
- Tata, Trombay Unit-8 (250 MW) for Restoration of damaged unit



#### Others

- WBPDCCL Sagardighi for good safety culture maintained throughout the year 2014

#### National Awards for Meritorious Performance in Power Sector 2013-14

In June 2015, a number of power stations equipped with BHEL supplied sets, received meritorious award under 'National Awards for Meritorious Performance in Power Sector (2013-14)' by Ministry of Power, Govt. of India for meritorious performance under different categories.

- 6 of 6 (100%) Power Plants awarded for early completion, were executed by BHEL.

Award Category	Plants that received the awards for Early Completion (2013-14)
<b>Gold</b>	<ul style="list-style-type: none"> <li>• Jindal Power's O.P. Jindal Super Thermal Power Project, Unit - 2</li> <li>• SJVNL's Rampur Hydro Electric Project, Unit - 5</li> <li>• NHPC's Nimoo Bazgo Hydro Electric Project, Unit - 3</li> </ul>
<b>Silver</b>	<ul style="list-style-type: none"> <li>• Jindal Power's O.P. Jindal Super Thermal Power Project, Unit - 1</li> <li>• SJVNL's Rampur Hydro Electric Project, Unit - 2</li> </ul>
<b>Bronze</b>	<ul style="list-style-type: none"> <li>• DB Power's Badadarha Thermal Power Project, Unit - 1</li> </ul>



Rampur Hydro Electric Project awarded National Gold Award for Early Completion (2013-14)

- 10 out of 16 (63%) of the power stations awarded for their performance have units equipped with BHEL supplied power equipment.



NTPC's Dadri CCPP equipped with BHEL sets awarded National Silver Award for Meritorious Performance (2013-14)

Award Category	Stations that received the awards for their performance during 2013-14
<b>Gold</b>	<ul style="list-style-type: none"> <li>• NPCIL's Kakrapar Atomic Power Station</li> </ul>
<b>Silver</b>	<ul style="list-style-type: none"> <li>• NTPC's Dadri Combined Cycle Gas Turbine Station (*)</li> <li>• NPCIL's Rajasthan Atomic Power Station (*)</li> </ul>
<b>Bronze</b>	<ul style="list-style-type: none"> <li>• NTPC's Ramagundam Super Thermal Power Station(*)</li> <li>• NTPC's Korba Super Thermal Power Station</li> <li>• CESC's Budge Budge Thermal Power Station (*)</li> <li>• NPCIL's Kaiga Generating Station (*)</li> </ul>
<b>Certificate of Merit</b>	<ul style="list-style-type: none"> <li>• NTPC's Vindhyachal Super Thermal Power Station (*)</li> <li>• Tata Power's Trombay Thermal Power Station</li> <li>• PSPCL's Guru Hargobind Thermal Plant, Lehra Mohabbat I &amp; II</li> </ul>

(\*) BHEL+ NON BHEL sets

#### Preparing for Growth

BHEL has successfully maintained its leadership in Indian Power Sector even in difficult times. The company has continuously re-calibrated its strategies for sustaining growth. Basic premise for the strategy revolves around increasing contribution, portfolio expansion, and enhance competitiveness for creating more value propositions for customers.

BHEL has always aimed at maximizing value proposition to the customers. The company

has augmented its manufacturing capacity to 20,000 MW per annum in order to cater to the Nation's requirements of accelerated capacity addition. BHEL has indigenous capabilities for various types/ ratings of power equipment, thus ensuring self reliance in power plant equipment manufacturing for the country. With the capability to manufacture Turbine-Generator, Boilers and critical auxiliaries up to 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 the company to 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 overcome the current uncertainty of coal supply, BHEL has in-house developed 'Fuel Flexible Boiler', which is capable of firing entire range from 100% Indian to 100% imported mix of coal.

BHEL has taken various initiatives to address the various challenges of the future. The existing systems & practices are being critically reviewed for improving effectiveness of operations. A number of Apex level documents/procedures are being revised/ streamlined to align with current needs and business environment. Many design improvements/ layout optimisation and improved parameters are being attempted.

Timely delivery, maintaining quality, reduced rejections/reworks, effective resource management & material utilization, enhancing EPC capabilities and creative approach towards challenges are the way forward for achieving success in project execution. 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. to offer to the market a comprehensive single stop solution. Further, BHEL is enlarging its scope of offer with inclusion of new products viz. Flue-Gas Desulfurization (FGD), Water Management System, Air Cooled Condenser & other BoP systems



4000 TPH Stacker Reclaimer being fed by conveyor at NTECL, Vallur TPP

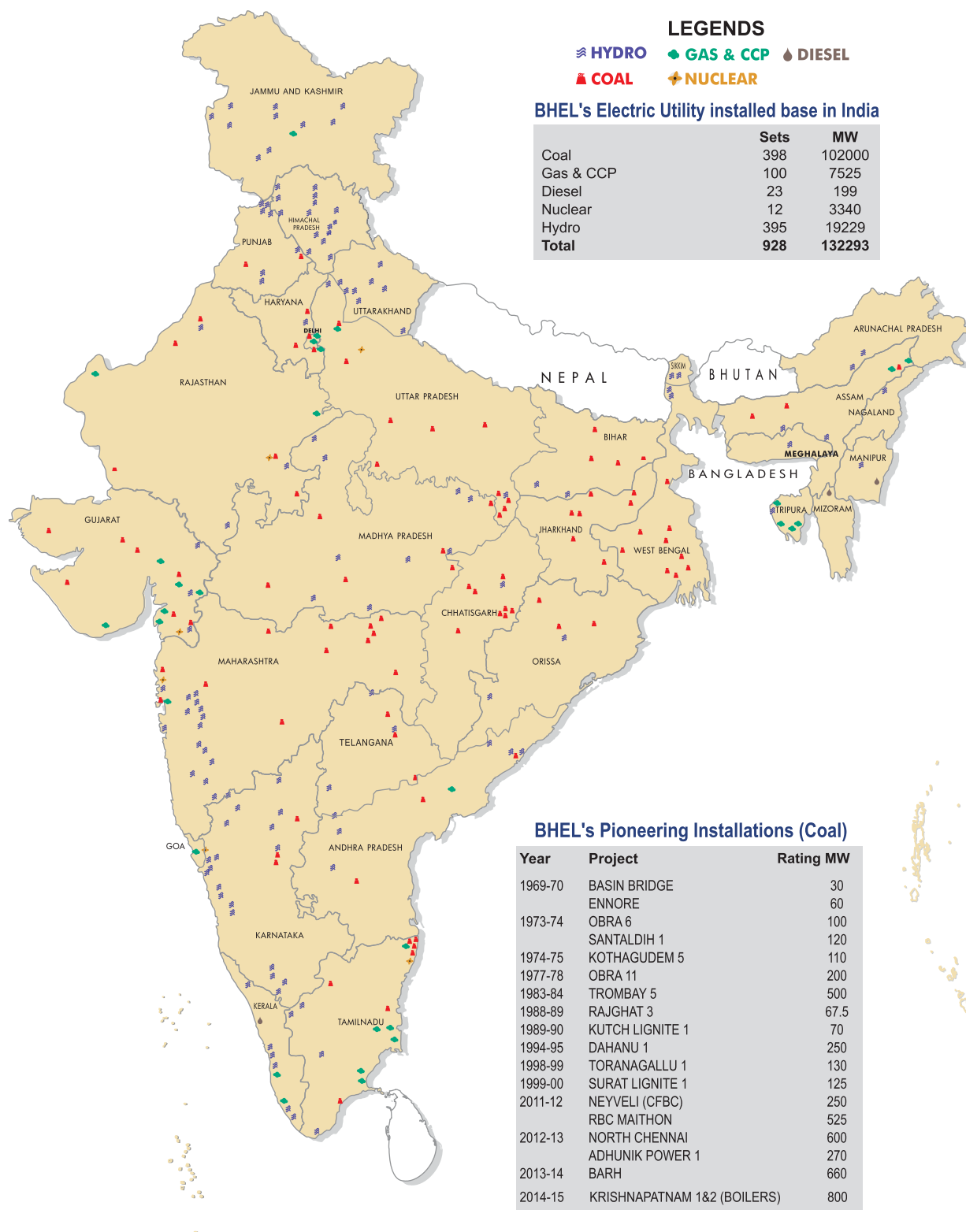
in its power sector portfolio. Exploration of new business models with partnerships for Power Plant Developers for upcoming UMPPs and debt financing for new projects in partnership with Financial Institutions are also underway.

To further upgrade its technology, company is striving for development of Advanced 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 up to 300 MW hydro sets. Developing efficient runner profiles and reducing hydro turbine weight have been instrumental in BHEL's recent successes in the field. To harness emerging opportunities for R&M in hydro power plants, necessary organization changes have been put in place. Further to harness emerging opportunities in nuclear power, company is working towards increasing its offerings in nuclear plant with focus on indigenization and entry into core-nuclear area. ●

## BHEL Make Electric Utility Installations

Coal, Gas, Nuclear, Diesel and Hydro Projects  
Commissioned as on 31.03.2015



This graphical representation does not purport to be the political map of India



# Industry Sector



## 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, Solar PV plants, Centrifugal Compressors, Oil Rigs, Drive Turbines, Industrial Boilers & Auxiliaries, Waste Heat Recovery Boilers, Gas Turbines, Pumps, Heat Exchangers, Valves, Heavy Castings and Forgings, Electrostatics Precipitators, ID/FD Fans, Seamless Steel Tubes, Air Separation Units, Cryogenic Systems, Locomotives, Traction Machines, Electrical Machines, Transformers, Switchgears, Water Treatment Plants, Strategic Equipment for Defence, etc.

During the year, BHEL's Industry Sector secured orders (including inter sectoral orders) worth ₹ 6,201 Crore registering a growth of 13% over the year 2013-14 for variety of products.

1,373 MW of captive power projects and 20 MW of solar PV projects were synchronized during the year.

### 1.2.2.1 Transportation

#### Business Environment & Opportunities

Government of India through its Rail Budget for 2015-16, has envisaged an investment plan of ₹ 8,56,020 Crores during the years 2015-19 to transform and modernise Railway infrastructure and passenger amenities. Major investments have been planned for rolling stock acquisitions, safety, track expansion & electrification and high speed travel. To mobilise resources, Railways has put renewed focus on execution of projects through public private partnership for setting up new production units for Diesel Electric Locomotives at Marhowrah and Electric Locomotives at Madhepura. Due to growing urbanization, Mass Rapid Transit System (MRTS) for intra-city commutation is emerging as a key focus area for various state governments.

'Make in India' initiative along with allowance of 100% FDI in Railway projects is expected to open new stream of opportunities for Indian companies in association with Global Technology Partners and OEMs.

## Offerings

BHEL provides electrical propulsion system and its controls to Indian Railways. Today, BHEL supplied & installed IGBT propulsion equipment (Traction Converter/ Auxiliary Converter/VCU) account for more than 40% of IGBT based electric locomotives in operation by Indian Railways. BHEL has also developed IGBT propulsion equipment for Air Conditioned AC EMUs for Mumbai sub-urban region. In diesel segment, BHEL has established itself as a supplier of alternators and traction motors for 3-phase DE locomotives. Development of IGBT propulsion for DEMU and DE locos has also been taken-up. Our key offerings include:



First Rake of AC EMU manufactured at Jhansi Plant

- **Rolling Stock**
  - Electric locomotives up to 5000 HP
  - Diesel-Electric shunting locomotives for industry and power plants
  - Special purpose Vehicles like OHE recording-cum-test car & dynamic track stabilizers
- **Traction Machines**
  - Traction motors - Both AC & DC motors for Locos & Electrical Multiple Units
  - Traction alternators – for Locos & Electrical Multiple Units
- **Traction Drive System & Controls**
  - GTO/IGBT based Traction Power Converter Systems for AC Locos & Electrical Multiple Units
  - Control gear equipment for AC Locomotives, EMUs, DEMU, DETC

- **Traction Transformer**

- Transformers - single phase & three phase for Electric Locos & EMUs

## Achievements during the Year

### Order Receipts

- Largest value order received from Chittaranjan Locomotive Works (CLW) for 64 sets of IGBT based Traction Converters (₹ 150 Crores).
- Largest quantity order received from Railways for 99 sets 5400 kVA Traction Transformers & 300 nos. AC Traction Motors type IM4507 for 4500 HP DE locos.

### Other achievements:

- Manufactured, tested and supplied 3-Phase IGBT based AC EMU propulsion equipment for India's first air conditioned AC EMU announced by Indian Railways. Main Transformer Type 1578 kVA with Air Conditioning winding of 300 kVA and 3-Phase Traction Motor Type IM3601 AZ of 285 kW rating have been developed for this project.
- Received regular supplier status for Traction Alternator type TA9901 for 4500 HP DE locos
- BHEL has developed & type tested 2x500 kVA Hotel Load Converter for 6000 HP loco. The prototype unit has been supplied to CLW for installation in the locomotive.

Designed & manufactured 7775 kVA Transformer with Hotel Load winding for 6000 HP/WAP-7 & WAP-5 Electric Loco. This transformer has been developed at BHEL Jhansi and would replace 7475 kVA transformer in future.



Manufactured, tested & supplied 3-Phase IGBT based AC EMU propulsion equipment for India's first air conditioned AC EMU



## Preparing for Growth

**Collaborative and Indigenous development** - Joint development of IGBT drives for 6000 HP AC locos and AC EMUs has been carried out in association with M/s Strukton, Netherlands to meet requirements of Indian Railways. Joint development is complemented with indigenous development of traction motors, alternators and traction transformers. As a result, development of 3-phase DE locos/ AC EMUs has been completed and has been successfully put in service. Further, indigenous development of IGBT based propulsion equipment for DE locomotives and DEMU is being carried out.

**Capacity Planning** - To cater to the upcoming demand of locomotives emerging from Dedicated Freight Corridors, manufacturing facilities for 4,500 HP & 6,000 HP Diesel Electric locomotives at Marhowrah and 12,000 HP electric locomotives at Madhepura are being planned under Public Private Partnership mode. BHEL is joining hands with global OEMs in these projects.

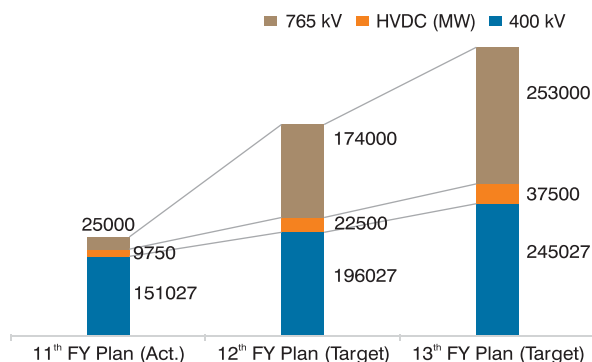
BHEL is also readying itself for manufacture and supply of IGBT based WAG-9 locomotives from Jhansi works in view of expected requirement from Indian Railways.

### 1.2.2.2 Transmission

#### Business Environment & Opportunities

During 12<sup>th</sup> five year plan, an addition of 2,70,000 MVA substation capacity and 12,750 MW HVDC capacity has been planned with an investment of around ₹ 1.8 Lac Crore. Out of this 87,201 MVA substation capacity and 9,000 MW HVDC capacity is to be achieved during the balance period of 12<sup>th</sup> plan.

**Transmission Sector Opportunities  
(AC-Substation Transformation Capacity + HVDC)**



Source : CEA

In a drive to strengthen transmission network in the country, plans for various large size projects and schemes are in place like 11 Nos. High capacity Power Transmission Corridor (HCPTC), 9 new UHCTC projects are proposed up to the year 2030 for catering to 199 GW Renewable Energy power generation, Desert Plan 2050 for evacuating 270 GW RE Power from Four desert areas, etc.

## 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 Switchgear, Ceramic and Composite Insulators, etc. Other critical equipment such as Capacitor Banks, Control & Protection equipment and Thyristor Valves are also in its manufacturing range.

BHEL has indigenously developed and commercialized Gas Insulated Switchgear (GIS) up to 400 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 UHV 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 networks, BHEL has indigenously developed Phase Shifting Transformer. 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

- Secured order from POWERGRID for 765/400 kV substation at Agra on turnkey basis against competitive bidding. The scope of works include construction of 765/400 kV green field substation at Agra. This order will further strengthen BHEL's presence in the EPC segment of 765 kV UHV substations
- Secured order from PGCIL for supply of 9 nos. 400 kV 125 MVAR shunt reactors along with extension of 7 nos. 400 kV substation bays at various locations under the Eastern Region grid
- Booked orders for Power Transformers totalling more than 14500 MVA which comprises of following major orders:
  - Order from UPRVUNL Anpara for 4x200 MVA and 1x250 MVA, 400 kV Generator Transformers
  - Order from TANGEDCO for 2x250 MVA 220 kV Generator Transformers
  - Order from RRVPNL for 22x160 MVA, 220 kV Auto Transformers
  - Orders from OPTCL for 6x160 MVA 220 kV Auto Transformers, 6x40 MVA, 220 kV Power Transformers and 14x40 MVA, 132 kV Power Transformers
  - Order from WBSETCL for 9x160 MVA and 22x50 MVA, 132 kV Power Transformers
  - Order from GETCO for 7x100 MVA, 220 kV Power Transformers and 1x315 MVA, 400 kV Auto Transformers
  - Order from PSTCL for 3x160 MVA and 3x100 MVA, 220 kV Power Transformers
- Order from PGCIL for 400 kV Shunt Reactors

### Other Achievements

- Appreciation received from PGCIL for execution of 765/400kV Raichur substation six months ahead of contractual schedule
- During the year BHEL successfully type tested and supplied various ratings of 765 kV transformers & reactors, which include:
  - 275 MVA single phase Generator

Transformers for 660 MW unit of Lalitpur Power Project

- 105 MVA single phase Inter-Connecting Transformers for evacuation of power from Lalitpur Power Project
- 80 MVA single phase Reactor for POWERGRID substation at Wardha
- BHEL is executing world's largest  $\pm 800$  kV, 6,000 MW Multi-terminal HVDC NE-Agra project. The construction of Valve Hall building at Agra, which is the largest size built so far in India, is complete. The DC Hall, a Pre-Engineered building having clear span of 77m and height of 40m is also erected. This is yet another engineering landmark by BHEL in the field of HVDC Engineering



*DC Hall, a pre-engineered building at HVDC Agra terminal, is an engineering landmark by BHEL in the field of HVDC Engineering*

- BHEL has successfully developed, manufactured and commissioned India's first 'Phase Shifting Transformer' (PST) at



*India's first 'Phase Shifting Transformer' at Kothagudem developed & manufactured by BHEL*

Kothagudem TPS, Telangana. PST improves transmission efficiency, and is an outstanding smart grid solution

- BHEL has indigenously developed and successfully type tested 400 kV GIS



400 kV GIS indigenously developed and successfully type tested by BHEL

- BHEL has successfully tested 26 kA IPBDs for NTPC 800 MW Kudgi Project at CPRI (Highest rated current carrying capacity)

## Preparing for Growth

- **UHVAC & UHVDC Systems:** BHEL has augmented its manufacturing facilities for manufacturing UHVDC equipment (i.e. Converter Transformer, Thyristor Valves, Filter Capacitors etc.) and has supplied major UHV equipment like 765 kV Transformer, 765 kV Reactor. BHEL is focussing on future market requirements in UHVAC and UHVDC segments

- **Gas Insulated Switchgear (GIS):**

BHEL has successfully completed the development of 400 kV GIS and has secured the first commercial order for 400 kV GIS which is under execution. BHEL is now ready to address forthcoming GIS requirements

- **FACTS Solutions:**

BHEL has developed, supplied & commissioned Phase Shifting Transformer at APGENCO's Kothagudem TPS. BHEL has also developed and supplied 400 kV Control Shunt Reactor, Fixed series compensation schemes for transmission utilities & STATCOMs for Industry applications and is ready to address forthcoming requirements for power quality improvement solutions

## 1.2.2.3 Renewable Energy

### Business Environment & Opportunities

The JNNSM target, has been raised five-fold to 1,00,000 MW by 2022. This envisages capacity addition of 60 GW through large scale deployment of grid connected Utility Scale projects and 40 GW through Rooftop Projects.

The cumulative PV installations in the country have grown from 38 MW in 2010 to over 3,700 MW by end of FY15. Power generated from solar energy is gradually moving towards grid parity as a result of softening of input costs and competition. Policy initiatives such as mandatory Renewable Purchase Obligation (RPO) and grant of priority sector lending status by RBI will drive demand and investment in the sector.

### Offerings

- BHEL offers EPC solutions from concept to commissioning for grid connected and standalone PV applications ranging from kW to MW size plants which include supply of PV modules and Balance of System (BOS), Civil, E&C and O&M. Additionally, BHEL manufactures space grade solar panel and space grade batteries in association with ISRO. All Indian satellites launched by ISRO are equipped with BHEL manufactured solar panels since 2002 and batteries since 2005
- BHEL is also geared up for offering Power Block on EPC basis for Concentrated Solar Thermal Power projects

### Achievements during the year

#### Order Receipt

- Highest ever rating order for 20 MWp Solar PV Plant from GEDCOL, Orissa
- Order for 10 MWp Solar PV Power Plant from KPCL, Karnataka
- Order for 10 MWp Solar PV Power Plant from NLC, Tamil Nadu

#### Project(s) Commissioned

- 15 MW SPV Plant for NTPC Singrauli has been commissioned in Dec'14
- 5 MW SPV plant for NEEPCO Monarchak has been commissioned in Feb'15



### Preparing for Growth

BHEL is planning to ramp up PV cell & module production capacity and enhance EPC capabilities to address the domestic market demand.



15 MW SPV Plant for NTPC Singrauli commissioned by BHEL

#### 1.2.2.4 Water

### Business Environment & Opportunities

On account of increasing water scarcity, Industries have started to opt for desalination & water recycling to meet their increasing water requirements. Policy related developments like enforcement of water discharge regulation and increase in industrial water tariff will result in stimulating the demand for water recycle and effluent treatment plants. Various government initiatives like cleaning of rivers, setting up of smart cities and developing industrial corridors will positively impact the water management business.

Water segment is an extremely competitive industry. Many new players are making their foray, conventional technology is preferred by the customers, however, market is tending towards membrane based technology owing to its advantages like less footprint area, low chemical consumption and reduced O&M requirements. EPC is a preferred project model for Water System in Power Plants. Industries prefer setting up independent water package with O&M requirement while municipalities go for projects through BOO / BOOT mostly with conventional technologies.

### Offerings

Complete Water Treatment Solutions for power plants, industries and other utilities for all feed water characteristics:

- Sea Water Reverse Osmosis (SWRO) plants and Demineralization (DM) Plants
- Treatment plants for Water/ Waste Water, Effluent & Sewage
- Zero Liquid Discharge (ZLD)

### Achievements during the year

#### Order Receipt

- Order for 13.5 MLD SWRO & 2.6 MLD DM plant for TANGEDCO Ennore TPP (2X660 MW)
- Order for 0.41 MLD RO-DM plant for KPCL Yelahanka CCPP (370 MW)

#### Project Commissioned

- 1000 cum/hr. treated water facility phase-1 commissioned at OPAL Dahej Raw Water Treatment Plant in Jan'15



1000 cum/hr. treated water facility phase-1 commissioned at OPAL Raw Water Treatment Plant

### Preparing for Growth

BHEL has identified water segment as a potential business area and is gearing itself to address water segment business comprehensively for Power & Industries. With a view to enhance its presence in the segment BHEL has already entered into a long term Manufacturing Associate Agreement (MAA) with GE India Industrial Pvt. Ltd. for membrane based technology. BHEL is also exploring the possibility of in-house development of identified critical equipment.

#### 1.2.2.5 Defence

### Business Environment & Opportunities

Through the "Make in India" initiative, government



aims at promoting self-reliance, indigenisation, technology upgradation and achieving economies of scale and developing capabilities for exports in the defence sector. As a step towards promoting Indian Defence Manufacturing, GOI has increased the Foreign Direct Investment (FDI) limit from 26% to 49%.

GOI is promoting the procurement of defence equipment through indigenous sources and has targeted to increase the indigenous procurement to 70% from current level of 30% over the next decade. The present business environment can be summarised as below:

1. Competitive bidding process initiated and MOD moving away from nomination route.
2. Private sector has started participating aggressively in defence business by entering into strategic partnerships with global defence OEMs.

### Offerings

BHEL has emerged as a reliable supplier of strategic equipment and services to Indian Defence and Para-military forces for over 20 years. BHEL, in order to meet Indian Defence requirements, has set up a large infrastructure which includes dedicated engineering & manufacturing facilities at various locations. Major products being manufactured by BHEL include Super Rapid Gun Mount, Integrated Platform Management System for Naval ships, Thermo-pressed components, Turret castings for T72 tanks and other strategic equipment.

### Achievements during the year

#### Order Receipt

- Highest value order of spares for 76/62 Super Rapid Gun Mount
- Order for forgings secured from M/s Midhani for the first time
- Order for Permanent Magnet (PM) based Motors received from Ministry of Defence

#### Other Achievements

- 76/62 Super Rapid Gun Mount (SRGM) and Auxiliary Control System (ACS) successfully commissioned on-board INS D-63, Kolkata



*Super Rapid Gun Mount (SRGM) mounted atop naval ship*

### Preparing for Growth

To cater to the upcoming opportunities in defence sector, long term tie-up with OEMs is being sought for Buy and Make India requirements. Further, BHEL is looking for joint working arrangement with DRDO and defence PSUs for joint development of products/ systems and business co-operation. MoU signed among BHEL, HSL & MIDHANI to address business opportunity of 06 nos. Submarines under P75 I programme of Indian Navy.

#### 1.2.2.6 Captive Power Plants

### Business Environment & Opportunities

CPP business which saw demand shrinkage in last few years is expected to witness increase in market demand with revival of industrial growth in India. New Urea policy with the objective to maximise indigenous urea production and promote energy efficiency in Urea units is providing business opportunities for CPP. Initiative by GOI for "Make in India" will also result in growth in domestic manufacturing of capital goods. Cogeneration and waste heat recovery are emerging as options for CPP as companies get the Clean Development Mechanism (CDM) benefits under this system in addition to achieving higher energy efficiency. The government has also targeted doubling of domestic coal production from current levels. Coal block auctioning has also removed the deadlock in the captive business with hopes of revival expected in this segment soon.

### Offerings

- Steam turbine based captive power plants up to 200 MW using coal, lignite, oil, natural gas or

a combination of these fuels

- Gas turbine based captive power plants (co-generation and combined-cycle), frame size up to 126 MW

### **Achievements during the year**

#### **Milestones achieved in design and performance of equipment**

- Improved design resulting in improvement in Heat Rate for 2% in 120-200 MW double cylinder steam turbines
- Design of 100% Blast Furnace Gas (BFG) fired boilers without oil support

#### **Order Receipt**

- 51 MW Combined Cycle Power Plant (CCPP) from ONGC Hazira
- 22.5 MW Gas Turbine based Cogen Plant from CPCL Manali
- 1x150 TPH Utility boiler (Gas & Oil fired) from CPCL Manali
- 2x36 MW Steam Turbine package from Sarda Energy & Minerals Ltd.
- 1x50 MW Steam Turbine package from Spectrum Coal & Power
- 1x30 MW Steam Turbine package, Emami Cement

#### **Projects Commissioned**

1,373 MW of captive power projects were synchronized during 2014-15.



376 MW captive power plant set up by BHEL at IOCL's Paradip refinery

#### **List of Major Projects Synchronised:**

- Anrak Aluminium Limited (Thyssen Krupp) Unit-3 (74.6 MW)
- Hindalco Industries Ltd. - Aditya Aluminium Unit-3 & 4 (300 MW)
- Hindalco Industries Ltd. - Mahan Aluminium Unit-4 (150 MW)
- ONGC Petro additions Ltd. GTG-1, 2 & 3 (101.25 MW)
- OPGS Kutch Gujarat Unit-1 (150 MW)
- IOCL, Paradeep Refinery GTG-1 & 2, STG-1 (232 MW)

### **Preparing for Growth**

To maintain and enhance its presence in captive power segment, BHEL has taken initiatives for improving the performance parameters of existing products. Thermal cycle optimisation and development of new competitive products (i.e. 150 MW Single Cylinder Steam Turbine, 200 MW Two Cylinder Steam Turbine, Wing walled & Cold Cyclone CFBC Boilers, etc.). Further, new business opportunities in Municipal Solid Waste & Washery rejects based power plants, petcoke fired CFBC boilers, etc. are also being explored.

#### **1.2.2.7 Industrial Products (including Oil & Gas)**

#### **Business Environment & Opportunities**

In the year 2014, India's Oil Production stood at 895,000 bpd against consumption of 3.8 million bpd. To bridge this gap between demand and supply, country imported about 78% of crude oil and about 33% of Natural Gas. To reduce the quantum of huge imports, it is imperative to accelerate the exploration & production activities and realise our full potential with the appraisal of 100% of the Indian Sedimentary area from current level of 48.04% in line with India Hydrocarbon vision 2025. GOI has also adopted a multipronged strategy for providing momentum to exploration and production efforts in the country. Government is focussing on development of alternate sources of Hydrocarbon like Coal Bed Methane & Shale Gas and R&D for new sources like Gas Hydrates which are positive enablers for BHEL.

The Indian refinery Industry has established itself as a major player globally with current refining capacity of 215 MMTPA which exceeds the domestic demand. India is emerging as a refinery hub for exports. India is the largest exporter of Petroleum products in Asia since 2009. Also, upgradation of refineries to Euro-V and higher grades are expected in near future.

Comprehensive New Urea Policy 2015 for the next four financial years has the objective of maximizing indigenous urea production, thus creating good opportunities for domestic manufacturers of equipment for Fertilizer Industry. Therefore, Oil & Gas and Fertilizer industry in India hold promising growth opportunities for various value chain partners.

In Oil & Gas Upstream Sector, there is a declining trend of crude oil prices, hence subdued market position. Though there is some initial backlash in procurement of capital equipment i.e. Drilling Rigs but acquisition of new rigs is essential in view of thrust on increasing the domestic crude oil production and ageing of rig fleet of ONGC and OIL.

Also, the idea of upgrading the existing rigs to ultra-modern technology equipment has been mooted by BHEL so that the advantages of latest generation AC VFD rigs is available to customer with minimum investment.



*On-shore drilling rig with AC-SCR and AC-VFD technology*

'Make in India' initiative of GoI is likely to accrue business potential for Offshore Compressors, Drilling Equipment and Natural gas Pipeline compressors in oil and gas sector.

In Oil & Gas Downstream Sector, the upgradation of refineries to Euro-V norms is likely to yield business potential for compressors, Columns & Reactors, Pressure Vessels & Heat Exchangers.

In fertilizer sector, present production level of Urea is 23 MTPA against demand of 31 MTPA. GoI has planned to cover up the gap by recently approving the various revival projects of Fertilizer Units viz. FCI Sindri, Ramagundam, Talcher, Gorakhpur & HFCL Barauni, and have also approved setting up of new Amonia-Urea complex at Namrup. GoI's above measures will result in new business opportunities for BHEL compressors with suitable drives and H<sub>2</sub> & N<sub>2</sub> separation units.

The HT motor business of the company saw limited opportunities due to continued slowdown in its traditional markets of Power, Refineries and Cement. However demand is expected to pick up by Q3 of FY16, on the back of overall economic recovery. Potential has also been seen in the irrigation sector where there is a growing requirement for HT machines.

### Offerings

- **Oil Rigs** - A variety of on-shore drilling rigs with AC-SCR and AC-VFD technology for drilling up to depths of 9,000 metres, work-over rigs for servicing up to depths of 6,100 metres, mobile rigs for drilling up to depths of 3,000 metres. Beside complete rig package, BHEL also supplies on-shore drilling rig equipment like draw works, rotary table, travelling block, swivel, mast & substructure, mud systems, Refurbishment and upgradation of BHEL and non-BHEL make oil rigs and rig electrics to leading oil and natural gas exploration companies of India
- **Well Heads and X-mas Trees** - Up to 10,000 psi, Mud Line Suspension, Choke and Kill manifold, CBM Well heads, DSPM H-Manifold Assembly, Mud valves, ESP hangers, Block type X-mas Trees & Landing Bases for Casing Heads
- **Compressors** - Manufacturing and service of various types of multi stage Centrifugal compressors as per API 617, flow up to





Multi-stage centrifugal compressor manufactured & supplied by BHEL

3,00,000 m<sup>3</sup>/hr & pressure up to 350 bar for application in Fertilizers, Refineries, Petrochemicals, Pipelines, Gas processing, Steel industries, etc. BHEL has the capability to produce Centrifugal Compressors to handle all types of process gases.

- **Mechanical Packages** - These include fabricated equipment like Air separation Units, Cryogenic systems, Column and Reactors, Pressure Vessels, Heat Exchangers, Fired Heaters and Purge Gas Recovery Unit.
- **Electrical Machines** - These include AC Squirrel cage, Slip Ring, Synchronous Motor (for safe and hazardous area application), Variable speed motors, Industrial Alternators, Special-purpose machines.

### Achievements during the year

#### Order Receipt

- First ever order received for Centrifugal Turbo Blower Package for Blast Furnace application in Steel Plants from M/s Essar Projects India Ltd for SAIL Rourkela
- 1 No. Motor driven Booster Compressor from M/s BPCL Kochi.
- Prestigious order for Purge Gas recovery unit received from M/s NFL Vijaipur.
- Entered into rate contract with M/s ONGC for a period of 2 years for supply of 125 Nos. Alternators.
- Entered into rate contract with M/s ONGC for a period of 3 years for supply of 850 Nos. Well Heads & 550 Nos. Xmas Trees to various assets of ONGC.

- 5 nos. 15-30 MW Synchronous motors along with Static Frequency Converter from WPIL Ltd. for Pranahita Chevella Lift Irrigation Scheme (LIS).
- 12 nos. 4.7 MW Synchronous motors along with static excitation system and spares from Megha Engineering Infrastructure Ltd for Pattisam LIS.

### Preparing for Growth

BHEL is focussing on enhancing presence in irrigation sector which has growing requirement for motors for Lift Irrigation schemes. BHEL is also exploring new market segment in offshore drilling rig equipment. ●

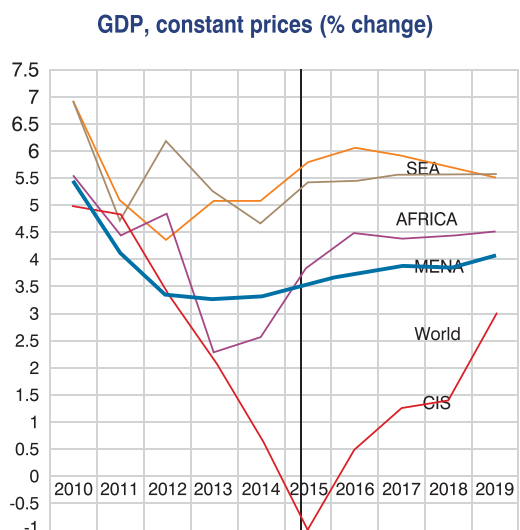
# International Operations

## 1.2.3 International Operations

### Macro opportunities

By the latest estimate of the International Monetary Fund (IMF) world, GDP growth was measured at 3.3 percent for 2014 and is likely to grow by between 2.8 and 3.8 percent in 2015-16 - about one percentage point lower than last year's forecasts. World Power Generation Scenario estimates that electricity demand will grow by 2.1% per year on average over a period of next 15 years. This would translate into increase of the present installed capacity from about 6000 GW to 10,700 GW by 2040. However, global power mix sees a significant transformation with renewable energy (including hydro) share to become almost half and more than that of coal & gas combined. Power systems remain one of the most important element of energy supply which underpins economic growth and prosperity of a region. Though in developed economies, demand growth is expected to be slow, Industrialization, rising incomes & expanding population are pushing rapid demand growth in emerging economies.

On the other hand, increasing geopolitical instability may become a leading risk for global growth. Also, fluctuating oil prices weigh heavily on growth prospects as well as investment sentiments. The Eurozone crisis is still continuing resulting in slow investments worldwide. Power sector structural reforms across emerging countries remain major concern.



Source: World Economic Outlook

The world is moving towards a better consensus on global warming issue and there is a renewed thrust on higher efficiency and clean coal technologies in the fossil fuel segment. Consequently, nearly one-third of the investments in energy supply is in construction of new power plants.

### **Current Business Environment**

Global economy in the year 2014-15 remained sluggish not gaining expected pace due to various factors. Some of the factors not helping growth of infrastructure sector i.e. turmoil in parts of the Middle East, conflict between Russia and Ukraine and Greece debt crisis etc. Global energy trends not being so optimistic; challenges over the security and sustainability of energy supply are expected to still persist. This would have a major impact on our immediate business prospects.

Despite the uncertain current economic environment, focused efforts have helped BHEL in consistently enhancing its global footprints. Major generation capacity addition is planned in emerging economies to sustain high growth. South East Asia, Middle East, CIS countries and Africa are emerging as markets for BHEL. However, funding remains a challenge apart from political instability in some of these target regions. ASEAN is one of the fastest growing regions today and after China & India, Indonesia, Vietnam, Thailand and Malaysia are going to add huge amount of generation capacity in the near future. In Africa around 600 million people are without electricity and huge potential for capacity addition exists though funding remains an issue. The CIS countries (erstwhile USSR) have increasing demands for renovation and modernization of ageing power plants along with exploring the untapped hydro potential. BHEL has a strong presence in neighboring countries and it would always remain a target market providing significant opportunities for thermal & hydro sectors. With the thrust on renewables, BHEL is also gearing up to address the potential in this field, especially solar, worldwide.

### **Our experience in exports**

BHEL has been the flag bearer of Indian engineering enterprises across the globe for over four decades. Continuing its focus on globalization, BHEL has achieved consistent growth in its exports. Our references encompass almost the entire range of

BHEL's 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 equipment stands at close to 10 GW in overseas market. The first large turnkey project export by an Indian company was done by BHEL in Libya (1977) and since the past few decades, BHEL has been expanding its operations in the field of exports. Currently, we have established references in 77 countries across the globe with major contributions in the power sector of various countries. With the growing impetus on the renewables sector worldwide, BHEL has reinforced its presence in this segment with recent orders from Turkey and Nigeria.

### **Achievements during the year**

#### **Order Receipts:**

During the year, BHEL secured the following prestigious orders:

#### **Comoros – Entry into new country**

Secured order for 18 MW HFO based Diesel Thermal Power Plant from Comoros Islands (First ever order for Diesel based power project from Africa).

#### **Turkey – New product in existing market - Hydro**

Secured first ever order from M/s EÜAŞ, Turkey for rehabilitation of 8x183 MW Keban Hydropower project (first ever order from hydropower segment in Middle East).



*Keban Dam, Turkey*



## Global Footprints of BHEL



### AFRICA

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

### ASIA

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

SRI LANKA  
SYRIA  
TAIWAN  
TAJIKISTAN  
THAILAND  
UAE  
VIETNAM  
YEMEN

### EUROPE

BELARUS  
BULGARIA  
CYPRUS  
FINLAND  
FRANCE  
GEORGIA  
GERMANY  
GREECE  
IRELAND  
ITALY  
MALTA  
POLAND

ROMANIA  
RUSSIA  
SWEDEN  
SWITZERLAND  
TURKEY  
UKRAINE  
UK

### NORTH AMERICA

CANADA  
TRINIDAD AND TOBAGO  
USA

### OCEANIA

AUSTRALIA  
NEW CALEDONIA  
NEW ZEALAND  
SAMOA

### SOUTH AMERICA

SURINAME

### Nigeria – Largest order for Solar Products

Largest order for solar products from the Kaduna State Government, Nigeria was secured for supply of 50 kVA Solar Power Mini Grid and Substation to Nigeria; which is also the first ever order for solar products from Africa.

### Italy, Algeria & Trinidad & Tobago - New product in existing market

Maiden order for motors was secured from Italy. Also, secured maiden order for the supply of Transformer bushings to Algeria and to Trinidad & Tobago.

### **Belarus – Largest order for Capital Spares from CIS Region**

Secured BHEL's largest order for export of Capital Spares from Belarus (largest in CIS).

### **Myanmar – Regaining customer confidence**

After a gap of several years, BHEL secured orders for supply of well-heads and x-mas trees for MOGE (Myanma Oil and Gas Enterprises).

### **Repeat orders**

#### **Kenya - Motors**

Mombasa Cement Ltd., Kenya has once again chosen BHEL with repeat orders for Motors for the 4<sup>th</sup> consecutive year.

#### **USA – Control Equipment**

Metso Automation, USA has placed a repeat order for supply of Control Equipment on BHEL for the 4<sup>th</sup> consecutive year.

### **After sales service**

Orders have been received from across the globe for spares & after sales services, including Bangladesh, Bhutan, Indonesia, Iraq, Ireland, Kazakhstan, New Caledonia, New Zealand, Oman, Sri Lanka, Tanzania, UAE and Zambia.

### **Overseas Project Execution:**

A major milestone of the year was the commissioning of power plants in Ethiopia, Oman, Rwanda and Sudan totaling to 319 MW. Major projects executed during the year are:



126 MW Qarn Alam-3 Power Project executed by BHEL at Oman

- Rwanda - 28 MW Nyabarongo Hydro-Electric Power Project

- Sudan – 3<sup>rd</sup> unit of 125 MW Kosti Thermal Power Project
- Ethiopia - 2x20 MW Tendaho Sugar Factory power plant
- Oman - 126 MW Qarn Alam-3 Power Project

### **Accolades:**

- BHEL successfully commissioned 2x14 MW Nyabarongo Hydro Electric Project, Rwanda. The plant was formally inaugurated by H.E. the President of Republic of Rwanda. This being biggest Hydro Electric Project in Rwanda enhanced the power capacity of the country by 21%. Both the units achieved higher performance than the guaranteed parameters



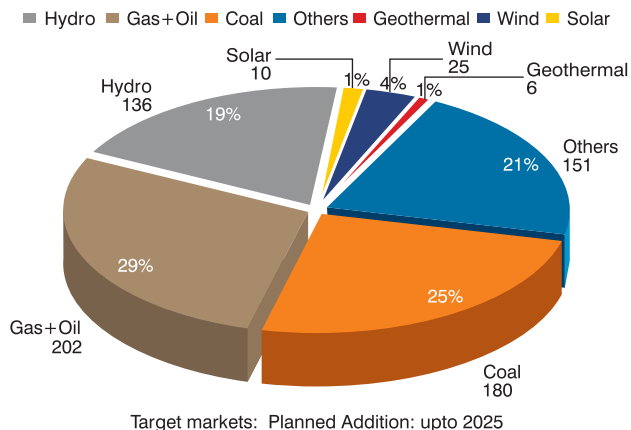
2x14 MW Nyabarongo Hydro Electric Project commissioned by BHEL in Rwanda

- For 24<sup>th</sup> consecutive year in succession, BHEL has been conferred the 44<sup>th</sup> EEPC India Regional Award for the 'Top Exporter for the year 2011-12, Gold Trophy (Large Enterprise)'

### **Preparing for Growth**

Exports remain a focus area for BHEL as geographical diversification is one of the key strategies of the company and thus, adequate thrust is being given to enhancing International Business. Towards this objective, detailed action plan is in place to achieve growth in overseas business with identification of the target markets. This has been instrumental in expanding successfully the presence of BHEL in overseas markets, year by year.

The company has been successful in meeting the requirements of international markets in terms of complexity of work as well as technology, quality



Target markets: Planned Addition: upto 2025

Source: WEO/Platts Database 2014

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
- Targeting new opportunities by means of localisation in target countries as well as looking into mergers and acquisitions to enhance markets
- Forging opportunity-specific and market-specific alliances to attempt large projects and strengthen BHEL's role as an EPC Contractor in the International market
- Exploring and Leveraging financing options 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. ●



## 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. 2014-15	F.Y. 2013-14
Authorised Share capital	2000	2000
Issued, subscribed & Paid up Share Capital	490	490

Govt. shareholding remained at same level at 63.06%.

##### Reserves & Surplus

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Capital Reserve	37	37
General Reserve	32350	31350
Surplus of Profit & Loss	1209	1171
	33596	32558

A sum of ₹ 1000 Crore has been transferred to General Reserve out of profit for the year 2014-15.

##### Borrowings

(₹ in Crore)

	F.Y. 2014-15			F.Y. 2013-14		
	Long Term	Short Term	Total	Long Term	Short Term	Total
Unsecured Loans- Financial lease obligation	61	0	61	105	0	105
Secured Loan- Rupee export packing credit	0	0	0	0	2550	2550
	61	0	61	105	2550	2655

Repayment of Short term secured borrowing in the form of Rupee export packing credit during 2014-15 resulting to overall reduction in borrowings.

## Other Long Term / Current Liabilities

(₹ in Crore)

	F.Y. 2014-15			F.Y. 2013-14		
	Other Long Term Liabilities	Current Liabilities	Total	Other Long Term Liabilities	Current Liabilities	Total
Trade payables (Incl. Acceptances)	702	8799	9501	765	8718	9483
Deposits from contractors & others	94	517	611	75	538	613
Advances Received from customers & others	4563	6969	11532	5760	8902	14662
Other payables/ liabilities	0	1637	1637	0	2005	2005
	5359	17922	23281	6600	20163	26763

Decrease in liabilities (both current & non-current) is mainly due to lower level of operation and decrease in advances from customers.

##### Provisions

(₹ in Crore)

	F.Y. 2014-15			F.Y. 2013-14		
	Long Term	Short Term	Total	Long Term	Short Term	Total
Provision for employee benefits	2706	574	3280	2438	570	3008
Provision for contractual obligation	3598	2511	6109	4693	944	5637
Proposed Dividend (Incl. Div. tax)		183	183		435	435
Other Provisions	451	1017	1468	365	881	1246
	6755	4285	11040	7496	2830	10326

# DIRECTORS' REPORT



Increase in total provisions is mainly due to increase in provisions for contractual obligation and marginal increase in provision for employees benefits.

## Fixed Assets

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Gross Block	12589	12050
Less: Depreciation/ amortisation	8451	7360
Less: Lease Adjustment Account	(2)	(3)
Net Block	4141	4693
Capital Work-in-Progress	501	622
Intangible assets under development	17	20
	4658	5335

## Non Current Investments

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Long Term Trade Investments	418	420

The investment made with M/s Latur Power Company Ltd. (under liquidation) has been received back resulting in reduction in Long term trade investments.

## Deferred Tax Assets (Net)

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Deferred Tax Assets (Net)	2221	1969

The net increase in Deferred Tax Assets is mainly on account of items which are in the nature of timing difference including impact of revised depreciation policy.

## Loans & Advances

(₹ in Crore)

	F.Y. 2014-15			F.Y. 2013-14		
	Long Term	Short Term	Total	Long Term	Short Term	Total
Loans & Advances	1219	2225	3444	1167	2024	3191

Increase in loans & advances is mainly on a/c of increase in deposits/ advances with statutory authorities.

## Inventories

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Inventories	10102	9798

Increase in inventory is mainly on a/c of induction of material pending conversion to FG.

## Receivables

(₹ in Crore)

	F.Y. 2014-15			F.Y. 2013-14		
	Long Term	Trade Receiva- bles	Total	Long Term	Trade Receiva- bles	Total
Trade Receivables (Net)	11414	26224	37638	11881	28072	39953

Decrease in receivables is in line with reduced level of operations.

## Cash and bank balances

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Cash & bank balances	9813	11873

The cash and bank balances as at 31-03-2015 is ₹ 9813 Crore as against ₹ 9323 Crore (net of short term borrowings) as at 31-03-2014.

## Other Current Assets

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Other Current Assets	175	253

Other current assets represent Interest accrued on banks deposits.

### 1.3.1.2 Statement of Profit & Loss

#### Revenue from Operations

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Gross Turnover	30947	40338
Less : Excise Duty	920	1342
Less : Service Tax	485	607
Revenue from operations (Net)	29542	38389

In the year 2014-15, Power segment and Industry segment contributed 77% and 23% respectively for the total revenue of the company as against 80% and 20% last year.

#### Other Operational Income

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Export Incentive	100	27
Scrap Sales	244	285
Others	297	408
	641	720

Decrease in other operational income is on a/c of decrease in insurance and freight income due to reduced level of operations.

#### Other Income

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Exchange variation (net)	0	659
Interest Income	811	631
Others	409	326
	1220	1616

Decrease in other income is mainly on a/c of exchange variation loss (net) incurred during FY 2014-15. The exchange variation loss (net) is shown under other expenses of Manufacturing, Administration, Selling & Distribution.

#### Cost of Material consumption, Erection & Engineering Expenses

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Cost of consumption of raw material & components	13704	17141
Consumption of stores & spares	472	569
Erection & Engineering Expenses	3582	4393
	17758	22103

Material consumption as percentage of net turnover after adjustment of accretion/decretion to WIP & FG is 59.90% as against 59.67% in 2013-14.

#### Employee Benefits Expense

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Employee Benefits Expense	5450	5934

Reduction of 8% in employee benefits expenses is mainly on a/c of decrease in manpower strength by 2620 (net).

#### Finance Costs

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Interest and other borrowing costs	92	133

Reduction in Finance cost is due to lower borrowings.

#### Other Expenses of Manufacturing, Administration, Selling & Distribution

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Other expenses of Manufacturing, Administration, Selling & Distribution	3637	3309

Increase in other expenses is mainly due to exchange variations loss (net) incurred in FY 2014-15.

#### Provisions (Net)

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Provisions (Net)	1604	2259

Reduction in provisions includes provision for contractual obligations and other provisions created/withdrawn in line with applicable accounting standards and guidelines.

#### Depreciation

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Depreciation	1077	983

Increase in depreciation is mainly on account of impact of the revised depreciation policy during the year.



## Tax Expense

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Income Tax-Current Year	1005	1900
-Earlier Years	(54)	11
Deferred tax charge/ (credit)	(230)	(357)
Tax Expenses (Net)	721	1554

Decrease in tax expense (Net) is in line with dip in profit for the year.

## Profit after Tax

(₹ in Crore)

	F.Y. 2014-15	F.Y. 2013-14
Profit after Tax	1419	3461

## 1.3.2 Financial Review of Subsidiary Company

### BHEL Electrical Machines Ltd.

A subsidiary Company has been incorporated on 19<sup>th</sup> 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 2014-15, BHEL EML recorded a loss of ₹ 3.96 Crore on a turnover of ₹ 21.88 Crore.

(₹ in Crore)

Particulars	F.Y. 2014-15	F.Y. 2013-14
BHEL's Investment in Equity	5.36	5.36
Turnover	21.88	37.03
Profit after Tax	(3.96)	(1.06)

## 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 and 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. 2014-15	F.Y. 2013-14
BHEL's Investment in Equity	2.38	2.38
Orders booked during the year	506.90	576.05
Turnover	592.70	782.62
Profit After Tax	68.70	75.75
Net Worth	221.91	193.59

For the year 2014-15, BGGTS paid interim dividend at 510 % and proposed final dividend of 200% on the equity share capital of ₹ 4.76 Crore.

### NTPC BHEL Power Projects Pvt. Ltd. (NBPL)

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 is implementing Phase-I of the investment for carrying out EPC and manufacture of Balance of Plant (BoP) equipment for power plants. The facility for manufacturing of BoP equipments at Mannavaram, AP has commenced production since Dec 2014. NBPL has an ongoing technology collaboration agreement with M/s DMW, USA for manufacture and supply of Coal Handling Plants. The JVC is executing an EPC contract for 1x500 MW Feroze Gandhi Unchahar Thermal Power Project received from NTPC in August 2013. In the financial statements for 2014-15, the Company has reported contingent liability of ₹ 43.95 Crores against risk & cost to BHEL for Namrup Project. The financial highlights are as under:

(₹ in Crore)

Particulars	F.Y. 2014-15*	F.Y. 2013-14
BHEL's investment in equity	50.00	50.00
Turnover	588.60	85.70
Profit after tax	1.66	9.15

\* Based on provisional unaudited figures

### Raichur Power Corporation Limited (RPCL)

BHEL has promoted a Joint Venture Company by the name of “Raichur Power Corporation Limited” on April 15<sup>th</sup>, 2009 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 original project cost for 2x800 MW Yeramarus Project was estimated at ₹ 9015 Crore with debt: equity ratio of 80:20. The final equity holding would be KPCL 50%, BHEL 26% and IFCI 24%.

Execution of 2x800MW Yeramarus project is in advanced stages and it is expected that both the units will achieve synchronization during 2015-16. The LOA for 1x800MW Edlapur project valuing ₹ 3600 Crore was received earlier but Notice to Proceed would be issued after MOEF clearance which has been pending for want of firm coal linkage.

The financial highlights are as under:

(₹ in Crore)

Particulars	F.Y. 2014-15*	F.Y. 2013-14
BHEL's Investment in Equity	331.52	331.52
Net Block	107.59	40.31
Capital Work in Progress (Including advances for capital expenditure)	9246.48	6535.81

\*Based on provisional unaudited figures

### Dada Dhuniwale Khandwa Power Limited (DDKPL)

BHEL has promoted a Joint Venture Company with Madhya Pradesh Power Generating Company Ltd. (MPPGCL) for setting up of a 2x800MW 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. The paid up equity capital is ₹ 45 Crore, with BHEL and MPPGCL each having subscribed to ₹ 22.5 Crore. In spite 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 Board of Directors of DDKPL in the meeting held on 27.03.2015 has recommended for voluntary winding up of the JVC. The proposal for winding up has also been approved by BHEL Board in the meeting

held on 26.05.2015. Approval of MPPGCL Board is expected to be sought in the next Board Meeting.

(₹ in Crore)

Particulars	F.Y. 2014-15	F.Y. 2013-14
BHEL's Investment in Equity	22.50	22.50
Net Block	0.01	0.03
Capital Work in Progress	13.36	1.68

### Latur Power Company Limited (LPCL)

BHEL 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."

Due to non availability of coal linkage and domestic gas also not being available, both the promoters (BHEL and MAHAGENCO) had approved for voluntary winding up of the JVC by mutual consent. The winding up process was accordingly initiated in Sept 2014 and joint liquidators were appointed to carry out the winding up in line with relevant provisions of the Companies Act. Subsequent to completion of necessary activities, the JVC has returned ₹ 2.68 Crore each to the promoter companies in February 2015 against equity investment of ₹ 2.50 Crore each. The winding up process is expected to be completed shortly.

### Power plant Performance Improvement Limited (PPIL)

The Joint Venture Company, Power plant 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 the two pending contracts. Winding up process would be initiated after closure of pending contracts.

## 1.3.4 Consolidated Financial Statement (CFS)

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)

	Financial Year	
	2014-15	2013-14
<b>Statement of Profit &amp; Loss</b>		
Turnover	31555	40802
Profit Before Tax	2187	5078
Profit After Tax	1452	3503
<b>Balance Sheet</b>		
Sources of Funds		
Shareholders fund	34207	33157
Share Application money pending allotment	0	14
Minority Interest	2	4
Non current liabilities	13863	16072
Current liabilities	22817	25997
<b>Total</b>	<b>70889</b>	<b>75244</b>
Application of Funds		
Net Block (incl. CWIP)	6852	7660
Non Current Investments	6	6
Deferred Tax Assets	2230	1976
Other Non current assets	12760	13207
Current Assets	49041	52395
<b>Total</b>	<b>70889</b>	<b>75244</b>

## 1.4 Capital Investment

BHEL has invested a sum of ₹ 395 Crore in the company's assets with focus continuing on the Productivity Enhancement, Indigenization & Capability Building in specific areas. The major

highlights of Capital Investment Include:

- State-of-the-art Transformer Test Facilities comprising 450 kJ Impulse Generator, 170 kV Test Points with advanced GIS System and PLC Controls meeting latest Indian Standards as well as IEC International Standard set up at BHEL Bhopal
- Series Resonant Tester with capability for testing of 1200 kV Class Power Transformers installed at BHEL Bhopal. This will be used for testing of  $\pm 800$  kV HVDC transformers being manufactured by BHEL Bhopal for the first time in India



Series Resonant Tester with capability for testing of 1200 kV class power transformers installed at HEP, Bhopal

- CNC 6 Axis Taping Machine for quality taping of insulations installed at HPEP Hyderabad enhancing Turbo Generator manufacturing capability



CNC 6 Axis Taping machine installed at HPEP, Hyderabad for enhancing Turbo Generator manufacturing capability

- Strengthening the in-house manufacturing



capability for quality forgings, Vertical Shaft Furnace for heat treatment of more than 10M long forgings established at CFFP Haridwar



Vertical Shaft Furnace for heat treatment of more than 10M long forgings established at CFFP, Haridwar

- As part of modernization of plant 20 Torch Panel Welding Station, Automatic Tube Cutting & Edge Preparation Machine, CNC Multi-Plane Pipe Cold Bending Machine, Tube Bending Machine, Long Seam/Cir Seam Grinding Machine installed at HPVP Vishakapatnam
- Showcasing our dedication in preserving environment, BHEL is establishing a Sewage Treatment Plant at BHEL Hyderabad with an aim of Zero Discharge. The under construction plant with latest MBR technology will ensure Zero Discharge of Industrial effluents

Attention is continued on rebuilding and retrofitting of existing facilities to enhance their life, accuracy and productivity through an additional investment of ₹ 42 Crores.

## 1.5 Quality Performance Highlights

### Customer Satisfaction Survey:

- Customer Satisfaction Survey for Power Sector completed by M/s IMRB International. CSS index for Power Sector is 71 out of 100 against the last year score of 67 (% improvement is 5.97%)
- Customer Satisfaction Survey for Industry Sector completed by M/s TNS India Pvt Ltd. CSS for Industry Sector is 76 out of 100 against the last year score of 65 (% improvement is 16.9%)

### 25<sup>th</sup> BHEL Annual Quality circle Convention:

- The 25<sup>th</sup> BHEL Annual Quality Circle Convention was held at HEEP, Haridwar during 19–20<sup>th</sup> November, 2014. 50 circles from various MUs participated in the convention. 22 models under manufacturing category were displayed in the convention
- QC no. 18 (category- manufacturing) of EPD-Bengaluru bagged Shri S R Udpa Trophy for best Quality Circle

### Centralized Online SAR/CAR System:

- Centralized online system launched for capturing & resolution of Site Action Request (SAR) & Commissioning Action Request (CAR) for all divisions

## 1.6 Human Resource Management

### 1.6.1 Industrial Relations

- The Industrial Relations scenario in the various Manufacturing Units and the Business Sector/ Offices of the Company remained harmonious and peaceful during the year 2014-15. No mandays were lost during the year
- The thrust on participative culture and communication continued during the year. Three meetings of the apex level bipartite forum, namely "The Joint Committee for BHEL" were held during the year. There were 72 meetings of the Plant Councils and 485 meetings of the Shop Councils. In addition, 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. The main thrust was on the issues related to increasing the productivity of the employees, cost reduction, quality and sequential delivery in order to meet the customer commitments
- A two day Workshop for Representatives of Supervisors was also organized to apprise the Supervisory Association Members about the challenges being faced by the Company as also the role of the Supervisors to overcome

these challenges. The Workshop focused on evolving strategies to meet the challenges and customer commitment. The response from the Members has been overwhelming. The suggestions made during this Workshop by the Syndicate groups was sent to all the Units/ Divisions for sharing at the grass root level as well as for implementation

- The employees of the company showed solidarity with their fellow citizens distressed by natural calamities which struck different parts of the country during the year by contributing the amount as mentioned below:-
  - a) “Devastating Floods” in - ₹ 6.09 Crores  
Jammu & Kashmir State
  - b) “Hudhud” cyclone in - ₹ 4.42 Crores  
Andhra Pradesh State



*BHEL employees contributed a sum of ₹ 4.42 Crores to Andhra Pradesh Chief Minister's Relief Fund for Hudhud cyclone affected people*

## 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 Advanced Technical Training Education Centre at Hyderabad and Human Resources Development Centre (HRDCs) at different units. Just as every function in the organization plays its role to contribute its best to the organizational goals, HRDI responds by keeping people in a state of “Readiness” to meet with the Business challenges.

Following seven core areas for improvement have been identified based on the stake-holder's expectation study using surveys and focused group

discussion tools in 2014-15. Road map for these areas are being developed with continuous support from cross functional teams across organization.

1. Enhancing focus on Technical Programs
2. Introduction of E-learning
3. Program Evaluation and Post Training Effectiveness
4. Training Need Identification and Nomination Process
5. Induction Training for all levels
6. Content, Methodology and Duration of Core Programs
7. Infrastructure Development of HRDI and HRDCs

To make full use of current technologies available in the field of learning and development, the organization has made a maiden entry in the field of e-learning by launching two initiatives on leadership and project management. The company has tied up with Harvard business publishing for its premier e-learning module on leadership titled Harvard Manage Mentor for its 1000 executives (E3-E5) who are undergoing the course. An in-house module on Project Management has been developed by Trichy in collaboration with Project Management Group for E1 & E2 across the organization. 900 executives have successfully completed the module.

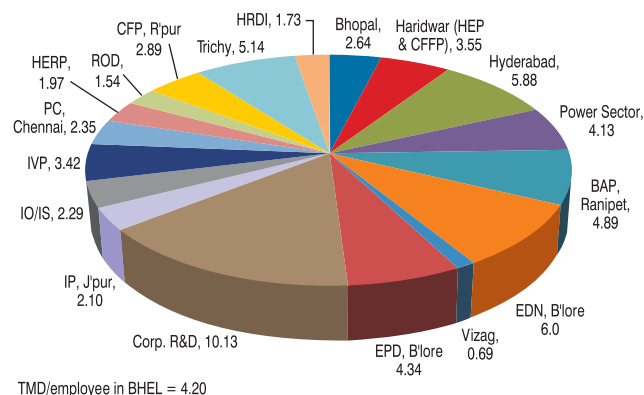
An apex committee was formed consisting of GMs to identify technical training needs of the organization in line with the strategic plan, MoU and business needs. Based on the recommendation of the committee new areas in the field of technical training were identified and three programs viz. Solar Energy Technologies, W/s on Transportation System Technology and Multidisciplinary Simulation for Power plant components were conducted at HRDI, Noida. To lay consistent focus on technical training, a separate technical cell has been formed at major HRDCs and HRDI and continuous efforts have been made to strengthen these cells with the required manpower and adequate resources.

To align the core programs with the business objective of the organization the structure of the programs (content, methodology, duration and eligibility) have been reviewed. Based on the need of the hour some new programs like resilient leadership and winning together have also been designed, implemented and successfully included as a part of the core programs.

## Year at a Glance

### A GLIMPSE OF TRAINING AT BHEL

**BHEL Employee Training Man-days (TMDs):** Training Man Days per employee in BHEL achieved is 4.20



### 1.6.3 Manpower strength

The manpower strength of the Company as on 31.03.2015 was 44905.

### 1.6.4 Performance and career development

BHEL has identified People Development as the key area through Technical/ Functional and Behavioural Competency assessment to prepare and align young employees to face Company's Challenges. To enhance performance, develop potential and to encourage healthy competition BHEL is taking new initiatives like Young Executive of the quarter and High Potential Employees Scheme.

A strong need was being felt in the organisation for identification & grooming of individuals with high potential in a systematic and time bound manner. To meet the career development aspirations of Individuals and also to build a pipeline of potential candidates to feed into the Succession Planning process a scheme for High Potential employees was conceptualized and prepared at New Initiative Cell of Corporate Office.

A scheme has been designed and is being implemented during 2015-16.

### Disclosure under section 134 (3)(p) of the Companies Act.

As per Section 134 (3)(p) of the Companies Act, 2013, the Board's Report of a Listed Company shall include a statement indicating the manner of formal

annual evaluation of Board, individual directors etc. The MoU signed between the company and the Govt. of India details out the parameters and initiatives that the company is required to undertake during that financial year. This MoU is evaluated at the end of the year by the Govt. and a performance rating is assigned to BHEL based on its performance on the spelt out parameters. The terms of reference of Board Level Committees are approved by the Board. The minutes of Board Level Committees are placed before the Board for its perusal. Further, there is a well laid down procedure for evaluation of CMD and Functional Director's performance. Department of Public Enterprises (DPE) has designed a format and laid down a procedure for filling up and evaluation of the Director's performance. As soon as the concerned Director does self assessment, his evaluation is done next by CMD, then by Secretary, Heavy Industries and closed by the Minister-in-charge. The tenure of Functional Directors as spelt out in their Terms and Conditions of Appointment is five years or the date of their superannuation, whichever is earlier.

As per Schedule IV of the Companies Act, 2013, on the basis of performance evaluation of Independent Directors, it shall be determined whether to extend or continue their term of appointment. Since the appointment of the Independent Directors is decided by the Govt. of India and as the tenure of Independent Directors is normally for a period of three years, also as decided by the Govt. of India, the Board is not in a position to decide their continuance or otherwise on the basis of performance evaluation. Recently, MCA has vide its notification dated 5<sup>th</sup> June, 2015 notified the [HYPERLINK "http://www.mca.gov.in/Ministry/pdf/Exemptions\\_to\\_govt\\_companies\\_05062015.pdf"](http://www.mca.gov.in/Ministry/pdf/Exemptions_to_govt_companies_05062015.pdf) Exemptions to Government Companies from the provisions of the Companies Act, 2013 which inter-alia provides that Sec. 134(3)(p) regarding statement on formal annual evaluation shall not apply to Government Companies in case the directors are evaluated by the Ministry which is administratively in-charge of the company as per its own evaluation methodology. Further, in line with above exemptions, Sub-Sections (2), (3) & (4) of Sec. 178 regarding appointment, performance evaluation and remuneration shall not apply to Directors of Government Companies.



## 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 Govt. However, there is no direct impact of these guidelines on the financial position of the company.

#### 1. Activities of the company for welfare and advancement of SCs and STs

During the year 2014-2015, various Community Development activities focused on Socio-Economic development for those below poverty line including SCs, STs OBCs and physically handicapped, have been carried out in identified areas under BHEL Scheme of Corporate Social Responsibility.

#### 2. Representation of SC/ST employees

The overall representation of SC/ST/OBC employees in total manpower was 19.93%, 6.21% and 27.91% for SCs, STs and OBC respectively as on 31/12/2014. However, the percentages in direct recruitment during the year are 18.39% for SCs, 6.32% for STs and 28.62% for OBCs

The Annual Statement in the prescribed format showing the representation of SCs, STs and OBCs as on 31/12/2014 and number of appointments made during the preceding calendar year, as furnished to the Government, is given at **Annexure - A**.

#### 3. Manpower strength of Physically Challenged employees as on 31/12/2014

As on 31/12/2014, we have a total of 945 Physically Challenged employees in BHEL. The group wise manpower strength of Physically

Challenged employees in the Company as on 31/12/2014 is given at **Annexure - B**.

### 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 9<sup>th</sup> 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. A poster has been designed, which includes key provisions of the Act, Duties of the Employer, Complaints Redressal Mechanism, Action for Malicious Complaints & various misconceptions about Sexual Harassment and was circulated to all units for display at conspicuous places. Posters in Hindi, English and Regional languages have been displayed in all units. 130 Workshops / awareness programmes were conducted in units on Gender Sensitization, self defence and on awareness about the Act. 7132 employees attended these workshops of which 1316 were women and 5816 were men. The Annual Report showing details on number of complaints of sexual harassment received during the year 2014-2015 and status thereof as on 31.03.2014 is given at **Annexure - C**.

Annexure - A

**Annual Statement Showing the Representation of SCs, STs and OBCs as on 1/1/2015 and No. of appointments made during the preceding calendar year**

Groups	Representation of SCs/STs/OBCs				No. of appointments made during the calendar year 2014											
	(As on 1/1/2015)				By Direct Recruitment				By Promotion*			By Deputation/ Absorption				
	Total No. of Employees	SCs	STs	OBCs	Total	SCs	STs	OBCs	Total	SCs	STs	Total	SCs	STs	OBCs	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Group A	13974	2260	939	2797	11	2	1	2				3			1	
Group B	9289	1665	419	1451												
Group C	21355	4895	1447	8179	859	158	54	247								
Group D (Excl. SW)	814	161	23	280												
Group D (SW)	105	95	1	1												
Total	45537	9076	2829	12708	870	160	55	249	0	0	0	3	0	0	1	

\* In BHEL, no appointments are made at induction level by promotion.

Annexure - B

**Representation of the persons with Disabilities as on 01/01/2015**

Groups	Number of Employees (Representation)				Direct Recruitment (During the calendar year 2014)								Promotion*							
	As on 01/01/2015				No. of Vacancies Reserved			No. of Vacancies Made (appointed)				No. of Vacancies Reserved			No. of Vacancies Made (appointed)					
	Total	VH	HH	OH	VH	HH	OH	Total	VH	HH	OH	VH	HH	OH	Total	VH	HH	OH		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		
Group A	13974	4	18	206				11												
Group B	9289	9	15	162																
Group C	21355	25	37	448	13	13	8	859	2	2	12									
Group D	919	1	5	15																
Total	45537	39	75	831	13	13	8	870	2	2	12									

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.

## Annexure - C

### Annual Report on Safeguard of Women at Workplace 2014-15

1	No. of complaints received during the year 2014-15	3 + 2 B/f from previous year
2	Number of complaints disposed off during the year 2014-15	5
3	Number of cases pending for more than ninety days	0
4	Number of workshops or awareness programme against sexual harassment carried out	130
5	Nature of action taken by the employer on recommendations of ICC	
	<ul style="list-style-type: none"> <li>Punishment was imposed on the respondent by reducing his pay by one stage for 1 year (B/f previous year)</li> </ul>	Case closed
	<ul style="list-style-type: none"> <li>Inquiry completed and concluded that Complaint is not covered under Sexual Harassment Act (B/f previous year)</li> </ul>	Case closed
	<ul style="list-style-type: none"> <li>Inquiry completed. Respondent got retired</li> </ul>	Case closed
	<ul style="list-style-type: none"> <li>Respondents pleaded guilty. Case solved amicably. Both the complainant and the respondent transferred to different division</li> </ul>	Case closed
	<ul style="list-style-type: none"> <li>On enquiry, it was established that the respondent had discussed on rumours pertaining to complainant's activities outside BHEL premises. Respondent was issued warning letter.</li> </ul>	Case closed

### 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 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 Steering Committee on RTI constituted by Standing Conference of Public Enterprises (SCOPE).

The CPIOs and the other stakeholders involved are sensitized regularly about their obligations under the Act through various trainings and workshops. BHEL organized its Annual workshop on Right to Information Act, 2005 on 21.3.2015 for the benefit of new and existing CPIOs/CAPIOs. The key note address was delivered by Prof (Dr.) M. Sridhar Acharyulu, Hon'ble Central Information Commissioner.

BHEL received 1351 RTI applications and 321 appeals during the year 2014-2015 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 reviews & evaluates 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. 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 also been 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 support its overseas M&A endeavours, BHEL has a panel of leading global investment banks, consultants and law firms as M&A advisors. The panel comprises Financial Advisors, Accounting & Tax Due Diligence Advisors and Legal Due Diligence Advisors.

## **1.10 Opportunities and Threats**

The global economy continued to expand during 2014 across major countries and regions at a moderate but uneven pace and still shrouded in uncertainty. The recurring theme is that the global economy is struggling to generate the desired traction necessary for maintaining a consistent growth trajectory. Economy of United States, is expected to improve in 2015 with real GDP growth projected at 3.6% aided by improving labour and housing market conditions. Economic condition in Euro region remain weak although some pick-up is expected supported by lower crude prices and the depreciation in the euro as well as increased bank lending. Japan too, is still struggling with growth contraction.

Potential spillovers from Geopolitical tensions and the weaker-than-expected performance of developed economies and domestic supply-side constraints have impacted the emerging economies over the past year. Geopolitical tensions in Iraq, Libya, Yemen, the Syrian Arab Republic and Ukraine have already had economic impacts at the national and sub-regional levels. Most of the world's major oil-producing countries are still grappling with investment decisions, and subdued output despite modest rebound after the almost collapse in international crude oil prices. In this context, even with increase in oil production by the United States to render resilience to the global oil market, major downside risk due to sudden and drastic stoppage of exports by major supplier countries cannot be ruled out.

India's coal consumption was at 11.1 per cent in 2014. Even with 301 billion tonnes of coal reserves, yet, India has been struggling to increase coal supplies to meet the growing requirements of its power and other industries. Fuel availability for new projects is still a concern. E-auction / allocation of coal blocks and Govt's objective to double domestic coal production by 2020 is likely to improve the prospect of fuel availability for existing projects. Land acquisition remains a complex issue as the existing and new projects still await clearances affecting take-off. Evacuation infrastructure, another issue, is critical to meet the 1.5 billion tonnes production target by 2020.

The subdued growth of the core industries has remained a drag on industrial production. Eight core industries, constituting 38% in Index of Industrial Production, have decelerated further after registering only 3.59% Y-o-Y growth, the lowest in the last five years, due to a decline in crude oil, natural gas production and steel.

Apart from these issues, climate change is going to be one of the foremost factors impacting the industry in near future. With the spurt in unexpected climate events across the world, global population has started experiencing its adverse impact which will compel various countries to commit to reduction of emissions. Further, acceptability of the fact that global warming is majorly human induced will provide the additional thrust to reduce the emissions further. This trend presents a lot of opportunities for companies like BHEL and at the same time, presents many challenges, particularly related to 'Green technology' development.

But economy is experiencing a turnaround and the initiatives initiated by the new government would act as enablers for resolution of impending issues. Allocation of Coal Blocks through e-auction, rationalization of gas prices, Single Window Concept, Coal Swapping etc. are likely to improve the fuel availability for existing power projects. Demand for electrical transmission equipment is expected to improve with more and more generation, transmission and distribution projects taking off aided by the Distribution reforms such as feeder segregation and separation of content and carriage in distribution. The Government has proposed 100 GW capacity addition in solar and 60 GW in wind by 2022. Transportation sector is likely to see a lot of traction in the days to come. The positive steps taken by the government are likely to translate into more business opportunities and finalization of several new opportunities in the near and medium term. Moreover, the “Make in India” initiative by the Government is poised to catapult Indian Industry into a new phase of growth trajectory by strengthening business confidence and investment climate. The opportunities have been discussed in detail in the respective chapters on Business Sectors under Annexure-1 of Management Discussion and Analysis.

The overall business scenario is improving at a moderate pace and BHEL would certainly leverage the opportunities arising out of the next phase of economic growth.

## 1.11 Positioning for future

With a sturdy foundation of 50 illustrious years of engineering excellence, BHEL has been the forebearer of India's success in achieving self-sufficiency in the indigenous manufacture of heavy electrical equipment. BHEL's 55% share in India's total installed capacity and 62% share in the country's total generation from thermal utility sets (coal based) as of March 31, 2015 stand testimony to its valuable contribution towards nation building.

Amidst the difficult external economic and business environment, BHEL continues to face challenges in the current year also. Nevertheless, the company has developed considerable resilience to leverage its engineering strength and manufacturing prowess to regain growth momentum in next phase of Indian economic growth. Overall business scenario is improving and the 'Make in India' initiative of Government of India is poised to drive the

manufacturing sector into a new phase of growth.

- To enhance the share of business in power sector, 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 Desulfurization (FGD), Water Management system, Air Cooled Condenser, and other Balance of Plant (BoP) systems. Company is fully harnessing potential in Spares & Services area and forging partnerships with other value chain partners. Increasing level of indigenization in Supercritical Technology and development of Adv. Ultra Supercritical Technology are major strategies in Power Sector
- Diversification of business has been the focus of the Management in recent years so as to enhance share of Industry Segment in business-mix. BHEL has taken various initiatives in recent past to expand its presence in Transportation (Rail), Solar, Defence 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. BHEL has demonstrated its capability to design and offer all variants of 765 kV class Transformers and Shunt Reactors and is well positioned to capitalize on the premium 765 kV voltage segment
- BHEL's products and systems are technology intensive and thus, the company has adopted R&D and technology development as the central driver for implementing its strategy. We have maintained R&D expenditure at plus 2.5% of the turnover for more than 5 years. Recently your company has indigenously designed and developed Fuel Flexible Boiler which is capable of blending & firing any percentage mix of imported & indigenous coals. BHEL has successfully developed, manufactured and commissioned India's first 'Phase Shifting Transformer' (PST) at Kothagudem TPS in Telangana. The PST improves transmission efficiency and is an outstanding solution for smart grid ensuring multiple benefits for transmission networks
- BHEL will continue to pursue its key strategy of accelerating project execution. Company is also focusing on intermediate milestones, delivery cycle reduction, central monitoring system and deployment of additional Tools &

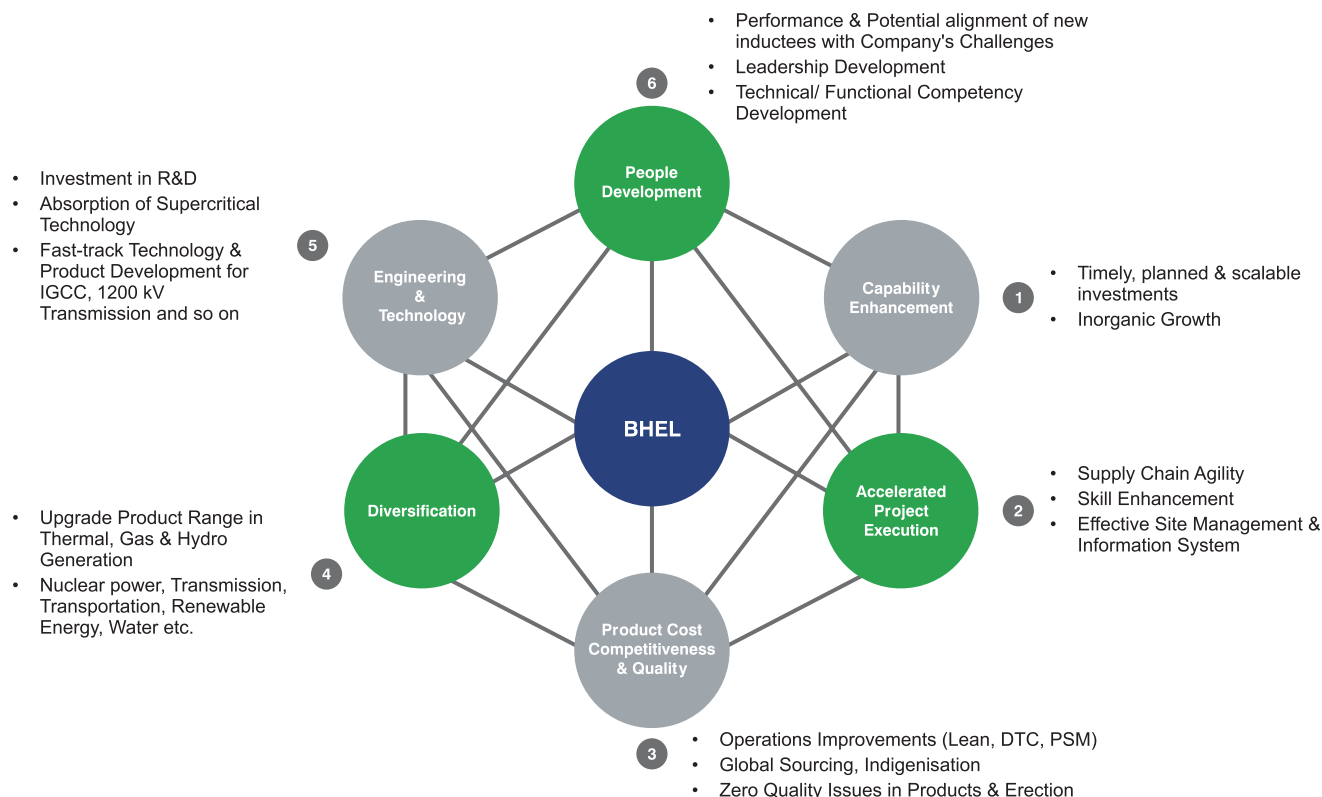
Plants. The significant achievements in execution include commissioning of first indigenously manufactured 660 MW supercritical thermal set at NTPC Barh, commissioning of first indigenously manufactured 800 MW supercritical boiler at APPDCL Krishnapatnam. We have also commissioned 736 MW of hydro projects during 2014-15. Notably, this is 100% of hydro projects commissioned in India during the year and also the country's highest in last 10 years

- To address prevailing pricing pressures, company is focusing on cost optimization measures in different areas of operations through competitive buying, increased localization, design/layout optimization, supply risk mitigation, IT applications, operations improvement and better employee productivity
- BHEL has been in the field of Photovoltaics, a strategically important area of non-conventional energy and has been contributing to the national effort for developing and promoting renewable energy based products on a sustained basis. The company has generated expertise in the critical parts of the silicon value chain, viz., Silicon

Wafer to Cell, Cell to PV Module and in EPC & O&M of MW-size Solar PV power plants offering turnkey solutions for Solar PV plants. BHEL has a dedicated R&D group in the area of semiconductor materials, Nano-and thin-film devices at their plants in Hyderabad and Gurgaon

- In line with the growing aspirations of millennial generation of the company, the People Development strategy of BHEL is focusing on developing each person's competencies in alignment with business plans through implementation of initiatives like e- learning modules for developing Leadership competencies in association with Harvard Business School, performance linked pay, career planning and succession planning
- BHEL 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 6-Point agenda to harness the opportunities arising out of improved economic and business conditions

## Six-Point Agenda





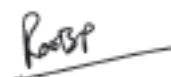
## 1.12 Risks and Concerns

BHEL has in place a Board approved Risk Management Charter & Policy (RMCP) which provides overall framework for Risk Management (RM) in the company. In line with revised Clause 49 of Listing Agreement, we have a Board Level Risk Management Committee (BLRMC) in place. The role of BLRMC is to assist the Board in the company's management of key risks as well as formulation and implementation of guidelines, policies and processes for monitoring and mitigating such risks. Further, a Risk Management Steering Committee (RMSC) is in place with responsibility for implementing the RM framework across the organization. Chief risk Officer (CRO) is the convener of RMSC and BLRMC and is responsible for periodic reporting to BLRMC/ Board based on the deliberations in RMSC.

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

Risk Statement	Mitigation Strategies
Order Book Reduction due to increasing competition, excess domestic manufacturing capacities and low business sentiments.	<ul style="list-style-type: none"> <li>- Focus on EPC business</li> <li>- Enhancing techno-commercial competitiveness</li> <li>- Increasing scope of offer</li> <li>- Improving performance parameters</li> </ul>
Delayed delivery of projects leading to LDs, penalties, and customer dissatisfaction.	<ul style="list-style-type: none"> <li>- Shifting focus to intermediate milestones</li> <li>- Delivery cycle reduction</li> <li>- e-procurement implementation</li> <li>- Central monitoring system</li> <li>- Deployment of additional Tools &amp; Plants</li> <li>- Building agile supply chain</li> </ul>
Online data & information security breach leading to loss and critical information infrastructure breakdown.	<ul style="list-style-type: none"> <li>- Policies in place for Technical controls</li> <li>- Implementation of Cyber security incident capturing system across the company</li> <li>- Third party audit as per ISO27001 ISMS Standards</li> <li>- Business Continuity Plan (BCP) &amp; Disaster Recovery (DR) strategy in place</li> <li>- Setting up of Security Operations centre</li> <li>- Crisis Management Grouping place</li> </ul>
Impact of External Factors viz. Govt. Policy, infrastructure inadequacy, constrained BoP inputs etc. may adversely impact the business.	<ul style="list-style-type: none"> <li>- Policy advocacy through Administrative Ministry &amp; Industry Associations</li> <li>- Liaison with key business partners</li> </ul>
Rising debtors and shrinking order book may lead to working capital pressure.	<ul style="list-style-type: none"> <li>- Special Groups to accelerate cash collections</li> <li>- Swift closure of punch-points with customers</li> <li>- Better scheduling of supplies</li> <li>- Taking up with financial institutions for direct payments</li> <li>- Flagging the issues with government in case of State Utilities</li> </ul>

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



Place : New Delhi  
Dated : 24.07.2015

**(B. Prasada Rao)**  
Chairman & Managing Director

# Annexure-II

## CEO and CFO Certification (As per Clause 49(IX) of Listing Agreement)

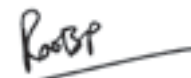
To,

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 31<sup>st</sup> March, 2015 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 2014-15 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 during the year 2014-15;
  - (ii) significant changes in accounting policies during the year 2014-15 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.



**(P.K. Bajpai)**  
Director (Finance)



**(B. Prasada Rao)**  
Chairman & Managing Director

Place: New Delhi  
Date: 26.05.2015

# Sustainable Development

## Annexure-III

### Sustainable Development

For BHEL, sustainability is about achieving prosperity by balancing social equity and staying within the carrying capacity of the environment. 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. Sustainability 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.

### 3.1 Our Sustainability Performance- Environmental

#### 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.

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 in-house activities.

Key projects & initiatives are undertaken in the areas of Renewable energy generation through Solar Power





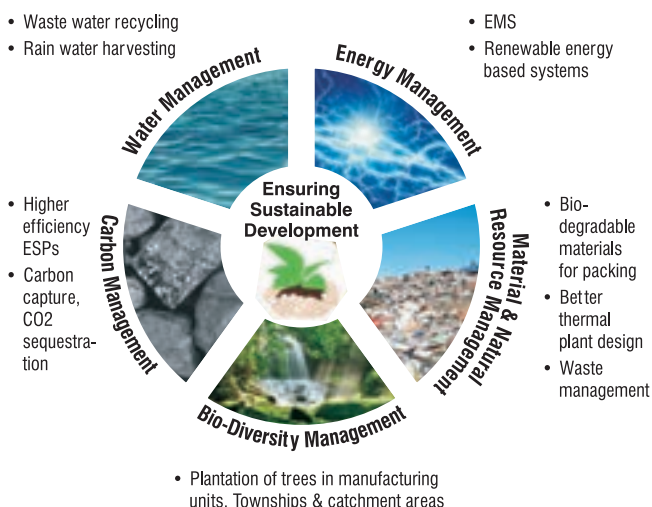
Plants & other solar systems, tree plantation, water conservation, energy efficiency, workplace environment improvement by installing Fumes Extraction Systems, Noise Level Reduction Systems, Resource Conservation Systems.

### 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



### Responsible Consumption of Natural Resources and Other Materials.

There is continued stress on conservation and effective utilization of various natural resources in manufacturing activities and at project site.

The Company has a strong institutionalized mechanism to recycle the products and wastes to the extent feasible. For example, each MT of the molten steel produced at our CFFP unit contains 54% of the recycled scrap (of CFFP) and 45% of MS Scrap (from other BHEL units), thus making it an almost 100% recycled product.

Overall, more than 70 projects have been taken across various units of BHEL in 2014-15 related to reduction/recycling/reuse of waste across BHEL

with an objective of reducing use of virgin material and consequently reducing the environmental footprint of BHEL. Some of the activities related to material and natural resource management carried out during 2014-15 include:

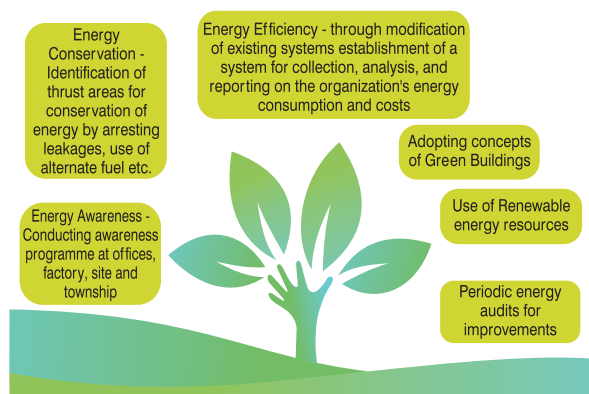
- Bhopal Unit: Recycling of cutting fluid [coolant] used in machining
- HPEP Unit, Hyderabad: Recycling of Ferrous and non-ferrous scrap, enhancement of shelf life of paint through additives and fabrication of a 20MT Gantry Crain using waste material
- TP, Jhansi: Use of oil skimmer for collection of waste oil from drainage water
- PPPU Thirumayam: Development of Hydraulic and lubrication oil reclamation system
- Reuse of 200 MT cut bit steel pipes as raw material @ PPPU Thirumayam
- EPD Bengaluru: Recycling of fired-rejected insulators for making Grog granules which is used in CAP & Disc shell assembly in manufacturing process
- HEEP Haridwar: About 31MT of used /waste oil has been recovered from coolant recovery system and with the help of oil skimmers fitted on main waste water drain
- HPEP Hyderabad: Recycling of 368.5 MT of MS scrap and nearly 30% reduction in paper usages

In addition to these activities, under Swachh Bharat Abhiyaan, a total of 1.5 million documents were scanned and fed to a documents management system, WRENCH for easy storage and retrieval of documents at our ISG Bengaluru facility. It has helped the unit in moving towards becoming a paperless office and thus reducing use of paper which is a precious natural resource.

### Managing energy requirements at workplace

As the country grapples with shortage of electricity, it is imperative that industries need to consume energy in a more responsible manner. BHEL being a major supplier of power plant equipments is very much aware of its social responsibility towards making conscious efforts in moving towards use of sustainable energy mix in its operations. Thus, thrust on energy conservation and energy efficiency is identified as strategic business need. Use of renewable energy [solar power] in our manufacturing activities is gradually going up on account of generation of solar energy.

Thrust areas in BHEL pertaining to generation/ use of Renewable Energy are:



Focus areas of energy conservation/efficiency efforts in BHEL

- Installation of Roof Top Solar PV Systems
- Installation of Solar Water Heating Systems
- Installation of Grid interactive SPV Power Plant (sub MW and MW scale)
- Installation of Solar Street light

BAP Ranipet unit is the first unit to install a 5 MWp grid interactive solar power plant which has generated nearly 6.23 Million Units of green electricity during 2014-15 resulting in mitigation of carbon footprint to the extent of 5600 MT CO<sub>2</sub>-e additionally. A 1.5 MWp solar power plant is also under installation at our Hyderabad unit.

Some of the activities pertaining to energy efficiency/ conservation and renewable energy undertaken during 2014-15 include:

- EPD Bengaluru: Usages of Variable Frequency Drive (VFD) for Kiln motors
- Trichy unit: Installation of 2x50 kWp rooftop grid connected solar PV plant and 80 nos. 40W Solar powered LED street lights
- HEEP Haridwar: Replacement of 700 M<sup>2</sup> of metallic sheets with polycarbonate sheets at selected location of block roof for better natural lighting & conservation of energy
- HPEP Hyderabad: Installation of 50 nos. Solar Street Lights in factory area and more than 100 LED lamps
- PPPU Thirumayam: Installation of 20 nos. of 36 Watt LED Street Light with Solar PV Modules

## Managing Water & Bio-diversity within Our Premises

At BHEL, water and waste water systems are sustainably managed to meet the needs of a

growing community through emphasis on recycling and reusing of water at workplace. In line with the India's National Water Policy 2012 which lays emphasis on water recycling & reuse and Zero Liquid discharge (ZLD), many of our units are already ZLD and others are taking steps in that direction. Some of the activities undertaken in 2014-15 for water management include:

- Bhopal Unit: Creation of rainwater recharge pond near Gadia.
- IVP, Goindwal: Modification in existing sewage disposal system and installation of 100 KLD capacity sewage treatment plant.
- EPD Bengaluru: Recycling of Ceramic Insulator trade effluent and reusing it for pebble washing, filter press cloth washing, Patas washing and gardening.

With respect to its concern for environmental protection and soil conservation, BHEL has undertaken afforestation activities such as mass tree plantation and development of green belt which has resulted in development of nearly 4.7 million M<sup>2</sup> of green coverage and plantation of more than 3 million trees till date. It has resulted in 1°- 2° lower temperature in our premises as compared to its vicinity. Some of the activities undertaken for afforestation in our units during 2014-15 include:

- Trichy Unit: Development of Golden jubilee Biodiversity Park "Vanavil".
- Bhopal Unit: Plantation of 8000 trees and development of 800 M<sup>2</sup> green cover.
- HPEP Hyderabad : Tree planation by all superannuating employees 1000 Nos.
- Power Sector Northern Region: Tree plantation at Bara and Lalitpur project sites.

## Emissions and Carbon Management

BHEL units have initiated quantification of relevant gaseous emissions. However, the emission level of NO<sub>x</sub>, SO<sub>x</sub>, SPM & other significant parameters are well within the limits prescribed by respective State Pollution Control Boards. Monitoring and control of emissions from boiler & gas plant furnaces are undertaken regularly to maintain pollution levels below the permissible limits.

- As a part of MoU 2014-15 commitment, BHEL has avoided a carbon foot-print of 2410 MT CO<sub>2</sub>-e due to various energy efficiency measures and generation/use of renewable energy. Additionally a 5 MWp capacity grid

interactive solar power plant at BAP Ranipet has helped in avoidance of carbon Footprint to the extent of 5600 MT CO<sub>2</sub>-e during 2014-15

- In addition to generation of renewable energy at our premise, the usages of cleaner fuels is also one of the factors which is helping us in mitigating our carbon footprint
- EPD Bengaluru unit has stopped using LPG completely and switched over to natural gas (RLNG) which is safer and is having negligible emission to atmosphere w.e.f. December 2014. HEEP Haridwar unit has switched over to natural gas from producer gas
- CFFP Haridwar unit has converted Oil-fired burners to Natural Gas fired burners

## 3.2 Our Sustainability Performance- Social

### 3.2.1 Our sustainability performance- Social

The major focus of Corporate Social Responsibility (CSR) is inclusive growth aimed at capacity building, empowerment of communities, environment protection, development of backward regions and upliftment of the marginalized & 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. Our focus areawise major CSR activities undertaken by the company is as follows:

#### HEALTHY INDIA

- BHEL joined hands with HelpAge India by providing them with 05 Mobile Medical Units (MMUs) for operation in the vicinity of remote project sites of its 04 Power Sector Regions - PSNR, PSSR, PSER and PSWR and 01 at Guruharsahai, Ferozepur district (Punjab). The MMUs are fully equipped with basic diagnostic equipments such as Stethoscope, BP Apparatus, Glucometer for measuring blood-sugar levels, weighing machine etc. including medicines for common ailments such as Hypertension, Diabetes, Arthritis, etc. and are operating at Nimoo Bazgoo in Leh, Angul

(Odisha), Durgapur (West Bengal), Nagpur (Maharashtra) & Guruharsahai in Ferozepur district (Punjab)

- BHEL is continuing with its dream CSR project titled 'Heal a Soul' that involves providing medical assistance to people including children suffering from Hemophilia. The initiative is focused mainly on patients coming from below-the-poverty line (BPL) families located in the vicinity of TBG projects/sites
- BHEL has conducted two Eye check-up camps at Chowari and Tissa tehsils of Chamba district, Himachal Pradesh along with Doctors from Rotary Eye Hospital, Palampur (Maranda) on 30<sup>th</sup> and 31<sup>st</sup> March 2015 respectively. The Company will be providing financial support for a total 100 identified cataract surgeries at Rotary Eye Hospital, Maranda, Palampur
- Provided financial support for construction of "Ganga Prem Hospice" – a 30-bed cancer hospice (a home providing palliative care to terminally ill cancer patients) near Rishikesh through an NGO named "Shradha Cancer Care Trust"
- Provided financial support for palliative care to terminally ill patients including cancer patients in Delhi/NCR region and Bhopal coming from poor background and with inadequate means of subsistence through an NGO named "Global Cancer Concern India (GCCCI)"
- Deployed two Mobile Medical Vans – One each for operation in flood-ravaged state of Jammu & Kashmir (J&K) and Hudhud cyclone-affected regions of Andhra Pradesh (AP)



BHEL deployed two Mobile Medical Vans for relief operations in regions affected by natural calamities in the states of Jammu & Kashmir and Andhra Pradesh



## CLEAN INDIA

- BHEL contributed ₹ 20 Crore to 'Swachh Bharat Kosh' under the 'Clean India Initiative' of the Govt. of India
- The company has undertaken a prestigious CSR project under the Govt. of India's Clean India Initiative' by signing MoU with FICCI for installation of 25 Bio-digester toilet clusters on the banks of river Ganges near Rishikesh & Haridwar
- The employees pledged to work 2 Hours every week under Swachh Bharat Abhiyaan and this campaign is being run across the whole of BHEL



₹ 20 Crore contributed by BHEL to 'Swachh Bharat Kosh' under 'Clean India Initiative' of the Govt. of India

## EDUCATED INDIA

- BHEL supported a project 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 (both



NGO Bal Sahyog's learning through remedial teaching initiative for slum children supported by BHEL

boys and girls) living in ten slum clusters of Delhi. Appropriate teaching & learning materials, visual aids, puppets, stories, songs, educational games, etc. have been prepared for imparting joyful and child-centric learning environment for the children. Bridge courses and cooperative learning are also included in the curriculum to support quick learning and also improve their functional literacy

- BHEL is providing financial support for education of more than 20,000 school children in 23 schools located in the premises of the township of its various Units viz. Haridwar, Jhansi, Bhopal, Ranipet, RC Puram, Hyderabad, Trichy and Jagdishpur
- Provided financial support for Renovation and Modernization of Library at National College, Trichy (Tamil Nadu)

## RESPONSIBLE INDIA

- Undertook a project "Technology-based advanced agricultural interventions" in tribal dominated Khargone district of Madhya Pradesh for upliftment and economic empowerment of marginalized farmers
- Provided financial support for installation of R.O. Plants (10 Nos.) for providing Safe Drinking Water to the rural community by de-flouridization in the villages located in the vicinity of BHEL's Bhandara Unit through the NGO named 'Safe Water Network (India)'
- Carried out infrastructure development activities such as Construction/ Renovation of Community Centres, Construction of Toilets, Construction of Classrooms in Schools, Installation of Solar Lights etc. in the nearby villages of Haridwar, Bhopal, Trichy and PSER Sites. Each activity has been completed in 5 or more villages totalling 28 activities covering a spread of more than 15 villages

## GREEN INDIA

- Provided financial support for setting up of a 60 kW multiple-grid interactive SPV Power Plant in two rural Akal Academies – schools for children coming from poor & rural background (30 kW each in Akal Academy, Dadehar Sahib and Akal Academy, a Teja Singh Wala of Tarn Taran district, Punjab) through Kalgidhar Trust (a non-profit charitable organisation)

- BHEL has supported “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), which is poverty-stricken and predominantly inhabited by tribal and OBCs with drastically poor irrigation facilities
- Installed Solar Water Heaters in Guru Granth Sahib Sri Vidya Kendra, Chattarpur, Delhi for the benefit of interned orphaned children who are being imparted Value education & vocational training

### HERITAGE INDIA

Signed MoU with National Culture Fund and Archaeological Survey of India for refurbishment of Swatantrata Sangram Sangrahalaya in Red Fort premises of Delhi – a CSR initiative of BHEL under its thrust area titled ‘Heritage India’



*MoU signing with National Culture Fund and Archaeological Survey of India for refurbishment of Swatantrata Sangram Sangrahalaya at Red Fort, Delhi*

### DISASTER MANAGEMENT

#### Efforts made in Hudhud:

- BHEL’s HPVP unit at Vizag was a victim of the cyclone. All the production shops and offices were damaged. Due to uprooting of thousands of trees, there was no power and water supply to the factory and township. All the roads were clogged by fallen trees. The teams of volunteers from BHEL armed with power saws and cranes, joined in the rescue/relief operations clearing the roads blocked by the uprooted/fallen trees. The team restored normal operation on roads in just 3 days.
- On receiving SOS requests from GVMC,

APEPDCL, Post Office, SBI a BHEL-HPVP team was quickly pressed into service for their assistance. Alternate office accommodation was arranged for Post Office. Meals & food supplements were arranged for the NDRF teams, police personnel and Fire Brigade Personnel

- In association with HelpAge India organized Emergency Health Camps in 09 villages near Visakhapatnam – under Kanthi PHC like Gangwaram, Yarada, Thikkavanipalem, Mutyalamma Palem, Dibbapalem (V. Cheepurupalli), Chepala Palem, Palavalasa, Dana Boina Palem, Marikavalasa through MMU from 17<sup>th</sup> to 22<sup>nd</sup> September 2014. More than 700 patients benefitted from these health camps
- In addition to this, BHEL has started a CSR Project “Deployment of Mobile Medical Van” for one year in Hudhud affected area of Visakhapatnam in association with an NGO named Wockhardt Foundation
- A team from BHEL-PSSR had distributed essential items such as food, medicines and water in the flood-affected areas of Visakhapatnam viz. MVP Labor Colony, Shramik Nagar, China Waltair, Jallara Peta, Beach Road after consultation with the local authorities

#### Support during J&K Disaster:

- BHEL plunged into action to alleviate the sufferings of people severely affected by unprecedented floods in the state of Jammu



*Medical aid provided to patients in the Medical Mobile Van deployed by BHEL in the disaster-affected areas of J&K*

& Kashmir (J&K). To support the humanitarian cause, the company had rushed two of its HelpAge run Mobile Medicare Units operating in Guruharsahai (Punjab) and Leh (Nimoo Bazgo) to effectively engage in medical relief operations for the flood-ravaged people of the J&K

- One Mobile Medical Van is currently deployed in Jammu & Kashmir's flood-affected areas for one year through the NGO, M/s Wockhardt Foundation for providing medical assistance to the needy people of flood-affected areas

### 3.2.2 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 Compact Network, India. BHEL continued to remain in the forefront in all activities of the network as its Secretary and was one of the silver sponsors of its 10<sup>th</sup> national convention on the theme “Sustainable transformation for India: 2015 and beyond”. Further, the company continued with its commitment to the UNGC Programme through regular pooling of Communication of Progress (COP).

### 3.2.3 Occupational Health & Safety

Dedicated Safety and Occupational Health Centres are being run in the factory premises taking care of safety and health issues at the work place. Some of the initiatives taken in our units to build and maintain safety and health culture at work place during 2014-15 are:

- Sponsoring BHEL officials for 1 year advanced Diploma course in Industrial Safety conducted by Central / Regional Labour institute at Mumbai, Kanpur, Kolkata, Chennai and Faridabad
- Periodic Health and Safety awareness campaigns
- Regular health and safety related training programmes
- Display of posters and safety instructions

- Safety pledge & Tool box meetings
- Regular Plant Safety Inspections
- Encouraging use of Personal Protective Equipment
- Mock Drills in identified hazardous areas at specified frequency
- Publication of in-house magazines and hand books on various safety topics
- Work Permit system for carrying out critical activities
- Conducting periodic safety drills, Internal audits & 3<sup>rd</sup> party audits
- Job Safety Analysis for identified activities
- Monthly departmental Safety Committee meetings and plant safety committee meetings
- 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
- Making available Material Safety Data Sheet (MSDS) for all the hazardous chemicals and safe work procedures are followed
- Developing operation control procedures (OCPs) and providing it to the concerned for effective implementation

Annual Safety Heads Meet was conducted at Corporate Office on 16<sup>th</sup> & 17<sup>th</sup> September, 2014 for sharing of experience amongst the people directly involved in ensuring safety at their respective workplaces.

## 3.3 Sustainable Development – way forward

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”. 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. With its committed workforce and enabling framework in place, BHEL is poised to move ahead towards the journey of Sustainability with more vigour.



### 3.4 Reporting of Corporate Social Responsibility (CSR)

1. Period for which CSR is being reported: 01/04/2014 to 31/03/2015.
2. Information does not include any CSR data/information regarding any BHEL's subsidiary or Joint Venture.
3. No information is included about any other entity pertaining to CSR activities.
4. BHEL is having its own CSR Policy. A brief outline of the company's CSR policy, including overview of projects or programs undertaken and a reference to the web-link to the CSR policy and projects or programs is enclosed as **Annexure –A**.
5. The composition of CSR committee at BHEL: CSR Committee at BHEL is called Board Level Committee (BLC) for CSR and consists of Director (HR), Director (Finance), one Part-time Official Director and at least one Independent Director. Chairman of the Committee is an Independent Director. Decision with regard to change in composition or re-constitution of CSR Committee is done with approval from the Board. The constitution of the BLC for CSR during Financial Year 2014-15 was as below:

Name (S/Sri)	Designation	Position in CSR Committee
Ms. Harinder Hira	Part-time Non-official Director	Chairperson
Ambuj Sharma	Part-time Official Director	Member (Up to 21.12.2014)
Rajesh Kumar Singh	Part-time Official Director	Member (Since 22.12.2014)
P. K. Bajpai	Director (Finance)	Member
R. Krishnan	Director (Human Resources)	Member

6. Average net profit of the company for last three financial years (2011-12, 2012-13, 2013-14) calculated in accordance with Section 198 of the Companies Act, 2013 is ₹ **8222.33 Crore**
7. Prescribed CSR Expenditure (2% of the amount

as in item 6 above) comes to ₹ **164.45 Crore**, in view of which Board approved the CSR budget for 2014-15 as ₹ **165 Crore**.

8. Details of CSR spend during the financial year (2014-15):
  - a. Total amount to be spent under CSR: ₹ **165 Crore**
  - b. Expenditure incurred : ₹ **102.06 Crore**
  - c. Amount committed but unspent (Carried forward): ₹ **62.94 Crore**
  - d. Manner in which the amount spent in 2014-15 is detailed in **Annexure-B**
9. Reasons for delay in spending:
  - I. Section 135 of Companies Act, 2013 relating to expenditure on CSR activities, Schedule VII & CSR Rules came into force w.e.f. 1<sup>st</sup> April, 2014. However, throughout the year, several clarifications & amendments were issued with regard to CSR provisions in the Act as well as in the Rules.
  - II. The new section & Rules mandated that a CSR policy is to be formulated and recommended to the Board by a CSR Committee which shall indicate the activities to be undertaken by the Company, as specified in Schedule VII of the Act.
  - III. The Board thereafter was required to approve the CSR policy taking into account the recommendation of the CSR Committee.
  - IV. As such any expenditure on CSR activity in FY 2014-15 could only be incurred after formulation of the CSR Policy. Even the on-going projects were also required to be ratified by the Board in line with the new policy.
  - V. Though BHEL was one of the first CPSEs to formulate the CSR Policy (in August, 2014), there was less time available for execution of the projects. Further, certain infrastructure development projects being of longer duration, can only be completed in subsequent years.
  - VI. Moreover, BHEL being a CPSE, had to

revise its CSR Policy in line with DPE Guidelines on CSR & Sustainability issued in October, 2014.

- VII. In spite of the above, BHEL allocated funds for more than the budgeted amount and was able to spend about 62% of the CSR budget of 2014-15 in 50% of time available for spending i.e. Q3 & Q4 of FY2014-15 after approval of revised CSR policy.
- VIII. It is pertinent to mention that the unspent CSR amount shall not lapse and will be carried forward to 2015-16 for utilisation for the purpose for which it was allocated,

in line with DPE Guidelines on CSR & Sustainability, issued in October, 2014.

10. We, hereby, declare that the implementation and monitoring of CSR Policy, is in compliance with CSR objectives and Policy of the company.



**(B. Prasada Rao)**  
Chairman & Managing  
Director



**(Harinder Hira)**  
Chairperson, CSR  
Committee

New Delhi  
24<sup>th</sup> July, 2015

**Annexure - A**

**BHEL Corporate Social Responsibility (CSR) Policy Outline**

A brief outline of the company's CSR policy, including overview of projects or programs undertaken and a reference to the web-link to the CSR policy and projects or programs are:

**CSR Vision:**

A responsible corporate citizen working towards a better tomorrow

**CSR Mission:**

To sincerely & effectively discharge company's responsibility in the identified CSR thrust areas and other areas listed out in the Companies Act, 2013

**Objectives of the Policy:**

The objectives of BHEL's CSR Policy are:

- To define CSR projects or programs which BHEL plans to undertake and which fall within the purview of the Companies Act 2013, the Companies (CSR Policy) Rules, 2014 and the prevailing DPE Guidelines;
- Modalities of execution of such CSR projects or programs;
- Monitoring process of such CSR projects or programs;
- To make the stakeholders aware about CSR practices in BHEL.
- To work keeping in mind the larger objective of sustainable development in conduct of business and in pursuit of CSR agenda

**Salient Points of the Policy:**

The salient features of BHEL's CSR Policy are:

- It covers the requirements stated in the Companies Act, the Companies (CSR Policy) Rules, 2014 and DPE Guidelines on CSR & Sustainability 2014;
- Thrust areas for CSR activities have been identified and included in Chapter-2 (CSR Policy Statement), based on the activities mentioned in Schedule VII of the Companies Act, 2013. The same are: 1) Inclusive India 2) Healthy India 3) Clean India 4) Educated India 5) Responsible India 6) Green India 7) Heritage India;

- Policy specifies 2% of average profit of the company computed in the manner prescribed in the Act during the three immediately preceding financial years as CSR Budget for CSR activities (Chapter-3);
- The company shall give preference to the local areas (district in which Unit is present and the adjoining districts) for spending at least 75% of the amount earmarked for CSR activities.
- Generally CSR initiatives shall be taken up in project mode.
- A project whose total value (whether or not extending over one or more FYs) is more than ₹ 2 Crore will be termed as 'Mega Project'. Impact assessment of such projects will be mandatory by an external agency;
- Provision to reserve 5% of the annual CSR budget as Emergency Fund has been made for carrying out relief activities for any disaster/calamity;
- In line with the Companies (CSR Policy) Rules, 2014, and DPE Guidelines, 2014, up to 5% of CSR Budget of the year shall be kept as a reserve for capacity building including administrative overheads. This fund shall be utilized for capacity building of the company personnel as well as those of its implementing agencies (through Institutions with established track record of at least three financial years), base line survey & Impact assessment and CSR staffs' salary;
- Implementation, monitoring & reporting mechanism has been defined;
- 3-tier CSR structure at Corporate Level (consisting of Board Level Committee (BLC), Level – 1 Committee and Level – 2 Committee, along with their members and roles) and CSR Nodal officer (the concerned Unit Head) & CSR Committees at Units/Regions/Divisions level (along with their roles) have been defined.

**Web-Link to CSR Policy:**

BHEL CSR Policy is hosted on the Company's website at [http://www.bhel.com/CSR/csr\\_policy.php](http://www.bhel.com/CSR/csr_policy.php) under CSR section.



# DIRECTORS' REPORT



## Annexure-B

(₹ in Lakhs)

S. No.	CSR Project or activity identified	Sector in which the project is covered	Project or programs Local area or other (Specify the State and district where projects or programs were undertaken)			Amount outlay (budget) project wise	Amount spent on the project or programs	Cumulative-expenditure up to the reporting period	Amount spent directly or through implementing agency	"Name of Implementing Agency"
			Area	State	District / Area					
1	Palliative Care through Palliative Clinic and Mobile Unit	Health	Local	Haryana	Gurgaon	44.00	24.70	26.70	Implementing Agency	Global Cancer Concern India
2	School Expenditure	Education	Local	Tamil Nadu	Vellore	91.81	91.81	91.81	Direct	BAP, Ranipet Unit
3	Skill Development Expenses	Skill Development	Local	Tamil Nadu	Vellore	91.75	91.75	91.75	Direct	BAP, Ranipet Unit
4	Providing R.O. Water facility for Government Girls Higher Secondary School, Sholingur	Safe Drinking water	Local	Tamil Nadu	Vellore	1.73	1.73	1.73	Direct	BAP, Ranipet Unit
5	Construction of toilet, providing drinking water and improvement of layout for the benefit of local vendors who put up vegetable, fruits and meat stalls etc. At shanties located inside BHEL township premises	Sanitation & Safe Drinking water	Local	Tamil Nadu	Vellore	11.85	10.62	11.12	Direct	BAP, Ranipet Unit
6	Construction of toilet and water tank for Sr. Ambedkar Memorial Charitable Trust	Sanitation	Local	Tamil Nadu	Vellore	2.80	2.43	2.93	Direct	BAP, Ranipet Unit
7	Providing RCC roof for Nursery class room in BHEL SRK School in place of existing asbestos roofing which is damaged condition.	Education	Local	Tamil Nadu	Vellore	9.05	6.47	6.47	Direct	BAP, Ranipet Unit
8	Construction of toilet with septic tank in Govt. Hr. Secondary School at Guruvarajapet	Sanitation	Local	Tamil Nadu	Vellore	7.42	3.30	3.30	Direct	BAP, Ranipet Unit
9	Construction of toilet without septic tank in Govt.Hr.Secondary School at Rendadi.	Sanitation	Local	Tamil Nadu	Vellore	6.86	1.71	1.71	Direct	BAP, Ranipet Unit
10	Construction of computer class room / lab for Govt. Hr. Secondary School at Kodaikkal.	Education	Local	Tamil Nadu	Vellore	15.11	4.59	4.59	Direct	BAP, Ranipet Unit
11	Construction of Compound wall for Govt. Girls Higher Secondary School Walajapet.	Education	Local	Tamil Nadu	Vellore	10.00	2.55	2.55	Direct	BAP, Ranipet Unit
12	Construction of Drinking water sump, 2 numbers of cup board for storing record books and barbed fencing for compound wall at Govt. Higher Secondary school in Arakonam	Safe Drinking water & Education	Local	Tamil Nadu	Vellore	3.24	1.97	1.97	Direct	BAP, Ranipet Unit
13	Construction of compound wall for Govt. Hr. Secondary School, Kodaikkal to improve safety of the school children	Education	Local	Tamil Nadu	Vellore	4.00	3.48	3.48	Direct	BAP, Ranipet Unit
14	Misc. Works and Admin Overheads	Capacity Building	Local	-	-	0.07	0.07	0.07	Direct	BAP, Ranipet Unit
15	ASA-Rain water harvesting at Bijawar Block, Distt. Chatarpur	Environmental sustainability	Other	Madhya Pradesh	Chhatarpur	305.52	52.63	162.47	Implementing Agency	Action for Social Advancement
16	"Mobile Van Project by Phd Chamber of Commerce and Industries"	Health	Local	Madhya Pradesh	Bhopal	66.00		-	Implementing Agency	PHD Rural Development Foundation
17	Agriculture Technology improvement Project at Khargone District by Manthan Gramin Vikas Seva Samiti	Livelihood Enhancement	Other	Madhya Pradesh	Khargone	395.96		23.70	Implementing Agency	Manthan Gramin Vikas Seva Samiti
18	Palliative care through palliative Clinic and Mobile Unit	Health	Local	Madhya Pradesh	Bhopal	20.00	11.85	11.85	Implementing Agency	Global Cancer Concern India
19	Construction of Concrete Cement Roads in 73 villages of Chhindwara	Rural Development	Other	Madhya Pradesh	Chhindwara	640.00	171.53	593.46	Implementing Agency	NBCC
20	Scholarship for Engg/MBBS (42 nos.)	Education	Local	Madhya Pradesh	Bhopal	0.20		-	Direct	HEP, Bhopal Unit

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			Area	State	District / Area					
21	"Skill Development programs like Beauty Parlour (DIET) Embroidery(DIET) Purse making(DIET) Web designing (EDI) 265000 Computer Hardware (EDI) (270000) Plumber (EDI) 215000 Flower Bouquet making, purse making, Beautician etc.(BHEL Ladies Club) 100000"	Skill Development	Local	Madhya Pradesh	Bhopal	5.16	2.14	5.15	Implementing Agency	"Entrepreneurship Development Institute of India (EDI), District Institute Of Education And Training (DIET)"
22	Adopting 20 Tribal children for providing education and related facilities along with lodging and boarding in Vivekananda Vidyapeeth, Piplani.	Education	Local	Madhya Pradesh	Bhopal	3.00	3.00	3.00	Direct	HEP, Bhopal Unit
23	Miscellaneous works like Website designing and development,	Capacity Building	Local	Madhya Pradesh	Bhopal	0.12	0.12	0.12	Direct	HEP, Bhopal Unit
24	Misc. Admin overhead exp	Capacity Building	Local	-	-	0.41	0.41	0.41	Direct	HEP, Bhopal Unit
25	Aarambh - Support to the Umeed Shelter Home	Education	Local	Madhya Pradesh	Bhopal	0.90	0.90	0.90	Implementing Agency	Aarambh Foundation
26	Miscellaneous works like Website designing and development, Documentation, training, seminars, Creation of a Record room for CSR, Digitalisation of records, Yoga training classes etc.	Capacity Building	Local	Madhya Pradesh	Bhopal	3.80	0.33	1.59	Direct	HEP, Bhopal Unit
27	Scholarships to orphans, widow wards and differently abled students	Education	Local	Madhya Pradesh	Bhopal	6.00	5.70	5.70	Direct	HEP, Bhopal Unit
28	Scholarships to engineering & MBBS students	Education	Local	Madhya Pradesh	Bhopal	5.00	4.56	4.56	Direct	HEP, Bhopal Unit
29	Scholarships to disabled students of ITI & Polytechnic	Education	Local	Madhya Pradesh	Bhopal	25.90	23.10	23.10	Direct	HEP, Bhopal Unit
30	Community development (Medical camps, Yoga classes, waste reduction awareness programs, support to schools etc., Infrastructure at anganwadi)	Health	Local	Madhya Pradesh	Bhopal	6.00	3.61	3.61	Direct	HEP, Bhopal Unit
31	Support to Vivekananda School, Awadhपुरi, Bhopal	Education	Local	Madhya Pradesh	Bhopal	3.00	3.00	3.00	Direct	HEP, Bhopal Unit
32	Aarambh - Umeed Shelter Home	Education	Local	Madhya Pradesh	Bhopal	2.00	2.00	2.00	Implementing Agency	Aarambh Foundation
33	Skill development programs	Skill Development	Local	Madhya Pradesh	Bhopal	12.90	12.88	12.88	Implementing Agency	EDI, DIET & Parivartan Sandesh
34	Construction of a Public Toilet at Panchi Vihar, Bhopal	Sanitation	Local	Madhya Pradesh	Bhopal	10.00		-	Implementing Agency	Bhopal Municipal Corporation
35	Support for construction of additional infrastructure facilities at Jyoti disabled school, Anand Nagar, Bhopal	Education	Local	Madhya Pradesh	Bhopal	15.00	15.00	15.00	Direct	HEP, Bhopal Unit
36	Repair and renovation works at Triveni Girls Hostel, Govindpura, Bhopal	Hostel for Women	Local	Madhya Pradesh	Bhopal	59.50	50.98	50.98	Direct	HEP, Bhopal Unit
37	Empowering children to prevent them from community/ culture based prostitution and sexual abuse, Rajgarh district, M.P.	Education	Local	Madhya Pradesh	Bhopal	4.00		-	Direct	HEP, Bhopal Unit
38	Repair and renovation works at Aanganwadi Kendra in Hostel no. 5 run by Madhya Pradesh Bal Kalyan Parishad	Education	Local	Madhya Pradesh	Bhopal	8.00		-	Direct	HEP, Bhopal Unit
39	Rain water harvesting with Stop dam in BHEL Sports Complex, Barkhera	Environmental sustainability	Local	Madhya Pradesh	Bhopal	10.70	2.14	2.14	Direct	HEP, Bhopal Unit

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			Area	State	District / Area					
40	Installation of Solar Street Lights at Kamla Nehru Park to develop it as energy park	Environmental sustainability	Local	Madhya Pradesh	Bhopal	15.00		-	Direct	HEP, Bhopal Unit
41	School Expenditure	Education	Local	Madhya Pradesh	Bhopal	1192.94	1192.94	1192.94	Direct	HEP, Bhopal Unit
42	School Expenditure - Infrastructure Improvement	Education	Local	Madhya Pradesh	Bhopal	283.80	178.39	178.39	Direct	HEP, Bhopal Unit
43	Skill Development Expenses	Skill Development	Local	Madhya Pradesh	Bhopal	117.33	117.33	117.33	Direct	HEP, Bhopal Unit
44	MoU Projects - Providing Solar utilities	Environmental sustainability	Local	Madhya Pradesh	Bhopal	60.00		-	Direct	HEP, Bhopal Unit
45	MoU Projects - Infra Improvement in School, Toilet and Classroom	Sanitation & Education	Local	Madhya Pradesh	Bhopal	70.00	6.31	6.31	Direct	HEP, Bhopal Unit
46	MoU Projects - Community Centre	Rural Development	Local	Madhya Pradesh	Bhopal	70.00		-	Direct	HEP, Bhopal Unit
47	Contribution to Swachh Bharat Abhiyaan	Sanitation	Local	-	-	2000.00	2000.00	2000.00	Direct	BHEL Corporate Office, Delhi
48	MDP by IICA for capacity building	Capacity Building	Local	Delhi	Delhi	0.35	0.35	0.35	Direct	BHEL Corporate Office, Delhi
49	Training for CSR - Centre for Development of HR	Capacity Building	Local	Delhi	Delhi	0.34	0.34	0.34	Direct	BHEL Corporate Office, Delhi
50	CSR Training Program	Capacity Building	Local	Delhi	Delhi	0.10	0.10	0.10	Direct	BHEL Corporate Office, Delhi
51	CSR Workshop for Unit Coordinators - Sep-14	Capacity Building	Local	Delhi	Delhi	0.17	0.17	0.17	Direct	BHEL Corporate Office, Delhi
52	Contribution to the Sustainability initiative - Global Compact	Capacity Building	Local	Delhi	Delhi	3.00	3.00	3.00	Direct	BHEL Corporate Office, Delhi
53	Distribution of books from ISKCON in Tihar Jail for the benefit of inmates	Education	Local	Delhi	Delhi	17.22	17.22	17.22	Implementing Agency	ISKCON
54	Payment to Noida School towards non-BHEL wards	Education	Local	Uttar Pradesh	Noida	5.09	5.09	5.09	Direct	BHEL Corporate Office, Delhi
55	Misc. Admin Expenses	Capacity Building	Local	-	-	6.42	6.42	6.42	Direct	BHEL Corporate Office, Delhi
56	Booking of Salary of CSR staff	Capacity Building	Local	-	-	336.71	336.71	336.71	Direct	BHEL Corporate Office, Delhi
57	installation of 100 nos. Solar Pumps for Irrigation	Environmental sustainability	Local	-	-	44.73	-	-	Implementing Agency	In collaboration with IIM-A
58	Special CSR "Providing Computers & Furniture to school".	Education	Local	Uttarakhand	Nainital	9.50	8.84	8.84	Implementing Agency	Paryavaran Evam Jan Kalyan Samiti
59	Medical Camp	Health	Local	Uttarakhand	Udham Singh Nagar	1.50	0.54	0.54	Implementing Agency	Garhwal Vikash Kendra
60	Toilet construction for girls dominated primary schools	Sanitation	Local	Uttarakhand	Udham Singh Nagar	3.05	3.05	3.05	Implementing Agency	Garhwal Vikash Kendra
61	Dress distribution to primary school children belonging to rural backward areas	Education	Local	Uttarakhand	Udham Singh Nagar	2.00	1.59	1.59	Implementing Agency	Paryavaran Evam Jan Kalyan Samiti
62	Desks and benches to primary school	Education	Local	Uttarakhand	Udham Singh Nagar	4.00	3.57	3.57	Implementing Agency	Paryavaran Evam Jan Kalyan Samiti
63	Misc. Admin Expenses	Capacity Building	Local	-	-	0.03	0.03	0.03	Direct	CFP, Rudrapur
64	Skill Development Expenses	Skill Development	Local	Uttarakhand	Haridwar	0.42	0.42	0.42	Direct	CFFP, Haridwar Unit
65	Study material like note books	Education	Local	Karnataka	Bengaluru	0.98		-	Direct	EDN, Bengaluru Unit
66	Sweet for Children Day	Capacity Building	Local	Karnataka	Bengaluru	0.07		-	Direct	EDN, Bengaluru Unit
67	Health Awareness program	Health	Local	Karnataka	Bengaluru	0.13		-	Direct	EDN, Bengaluru Unit



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			Area	State	District / Area					
68	Solar powered UPS for School	Environmental sustainability	Local	Karnataka	Bengaluru	0.54		-	Direct	EDN, Bengaluru Unit
69	Braille books for NAB	Education	Local	Karnataka	Bengaluru	1.91		-	Direct	EDN, Bengaluru Unit
70	Aids for differently abled children	Community Development	Local	Karnataka	Bengaluru	0.32		-	Direct	EDN, Bengaluru Unit
71	"Van" for Akshay Patra Scheme	Education	Local	Karnataka	Bengaluru	5.19		-	Direct	EDN, Bengaluru Unit
72	Equipment for School, Lab in Box (12-13 project)	Education	Local	Karnataka	Bengaluru	8.82		-	Implementing Agency	Agastya International Foundation
73	Skill Development Expenses	Skill Development	Local	Karnataka	Bengaluru	39.55	39.55	39.55	Direct	EDN, Bengaluru Unit
74	Boundary walls/ roofs at schools in adopted villages at Doddagularhatti & Bairagi Colony	Education	Local	Karnataka	Bengaluru	10.00		-	Direct	EDN, Bengaluru Unit
75	Supply of boards and tree guards to Pollution Control Board	Environmental sustainability	Local	Karnataka	Bengaluru	10.00		-	Direct	EDN, Bengaluru Unit
76	Classroom furniture at Bachehalli & Ramesandra, Dodda Basti Govt School	Education	Local	Karnataka	Bengaluru	5.00		-	Direct	EDN, Bengaluru Unit
77	Aid for differently abled persons at Snehadeep, Dibyajyoti & Mobility India	Community Development	Local	Karnataka	Bengaluru	5.00	4.36	4.36	Direct	EDN, Bengaluru Unit
78	RO plant at school in Doodagullarhatti	Safe Drinking Water	Local	Karnataka	Bengaluru	2.00	0.87	0.87	Direct	EDN, Bengaluru Unit
79	Uniforms/ School bags/ Stationery and Study Material to Schools in adopted villages	Education	Local	Karnataka	Bengaluru	4.00	0.39	0.39	Direct	EDN, Bengaluru Unit
80	Medical camps at Doddagullarhatti/ Bairagi Colony	Health	Local	Karnataka	Bengaluru	1.00		-	Direct	EDN, Bengaluru Unit
81	Providing medicines for MMU (Karuna Trust)	Health	Local	Karnataka	Bengaluru	4.00		-	Implementing Agency	Karuna Trust
82	Sports equipment to schools	Education	Local	Karnataka	Bengaluru	2.00		-	Direct	EDN, Bengaluru Unit
83	Providing books/ furniture/ facilities for library	Education	Local	Karnataka	Bengaluru	4.00	0.23	0.23	Direct	EDN, Bengaluru Unit
84	Construction of Classrooms at Sphoorthidama Ambedkar Memorial Campus	Education	Local	Karnataka	Bengaluru	20.00		-	Direct	EDN, Bengaluru Unit
85	Plantation & its Maintenance at Kakarpara Site, Tapi, Gujarat	Environmental sustainability	Other	Gujarat	Tapi	4.50		-	Direct	EDN, Bengaluru Unit
86	Support to Day Care Centre working for rehabilitation of children afflicted with cerebral palsy	Day Care Centre	Local	Maharashtra	Thane	5.00	4.32	4.32	Implementing Agency	Swayam Rehabilitation Trust
87	Construction of one Anganwadi (Crèche building) for children of daily wage earning women of rural village at Devanhalli Tq., Karnataka	Day Care Centre	Local	Karnataka	Bengaluru	7.00	6.76	6.76	Direct	EPD, Bengaluru Unit
88	"Construction of Girl's toilet at Govt. High School, Ramanagara & Construction of Anganwadi building at Hospalya, Kumbalgodu Grama Panchayat, Bidadi Hobli, Ramangara Tq."	"Sanitation & Day Care Centre"	Local	Karnataka	Bengaluru	19.00	14.90	14.90	Direct	EPD, Bengaluru Unit
89	Opening of 3 cycle stations in Malleshwaram through "Ride a Cycle Foundation" for promoting cycling as a means of commute and transport in our neighbourhood, Malleshwaram	Environmental sustainability	Local	Karnataka	Bengaluru	6.00		-	Implementing Agency	Ride-a-Cycle Foundation
90	Providing both Boarding & Lodging facility to Intellectually Disabled Children, while they undergo Data Entry Training at AMBA Foundation	Day Care Centre	Local	Karnataka	Bengaluru	1.00	0.88	0.88	Direct	EPD, Bengaluru Unit

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			Area	State	District / Area					
91	Implementing Community Based RO Water Purification plants at - Musturu and Siddihalli Villages	Safe Drinking Water	Local	Karnataka	Devangere	19.50		-	Direct	EPD, Bengaluru Unit
92	Implementing Community Based RO Water Purification plants at Moodal Machikere Village	Safe Drinking Water	Local	Karnataka	Devangere	6.00		-	Direct	EPD, Bengaluru Unit
93	Three free medical camps in adopted/neighbouring villages	Health	Local	Karnataka	Bengaluru	1.52	1.52	1.52	Direct	EPD, Bengaluru Unit
94	Skill Development Expenses	Skill Development	Local	Karnataka	Bengaluru	16.44	16.44	16.44	Direct	EPD, Bengaluru Unit
95	Construction of Ganga Prem Hospice (30-bedded) for terminally ill cancer patients near Raiwala, Rishikesh	Health	Local	Uttarakhand	Rishikesh	243.00	66.63	87.27	Implementing Agency	Shraddha Cancer Care Trust
96	PHD Rural Development Foundation for Mobile Medical Van	Health	Local	Uttarakhand	Haridwar	66.01	14.64	45.45	Implementing Agency	PHD Rural Development Foundation
97	Udayan Care - Scholarship to 100 Girls students	Education	Local	Uttarakhand	Haridwar	99.00	13.45	33.82	Implementing Agency	Udayan Care
98	Financial support for Mobile Science Labs (3 Nos.) for schools - AGASTYA	Education	Local	Uttarakhand	Haridwar	56.19	11.46	11.46	Implementing Agency	Agastya International Foundation
99	installation of 25 sets of Community Bio-digester Toilets Cluster (₹ 465 Lakh) along with drinking water facility (₹ 100 Lakh) - FICCI & DRDO	Sanitation	Local	Uttarakhand	Haridwar	565.00	95.00	95.00	Implementing Agency	FICCI & DRDO
100	Construction of physiotherapy hall (approx. area 800sqft) along with toilet for old age people at community centre Phase-I, Shivalik Nagar (civil & elect.).	Health	Local	Uttarakhand	Haridwar	15.00	13.25	16.75	Direct	HEEP, Haridwar Unit
101	Modification/renovation of toilets of school buildings in township	Sanitation	Local	Uttarakhand	Haridwar	11.70	6.45	8.20	Direct	HEEP, Haridwar Unit
102	Beautification At Har Ki Pauri Haridwar In Association With Other Agencies	Protection of site of historical importance	Local	Uttarakhand	Haridwar	20.00	18.00	18.00	Direct	HEEP, Haridwar Unit
103	Repair, Maintenance & Security of working women hostel	Hostel for Women	Local	Uttarakhand	Haridwar	10.00	9.84	9.84	Direct	HEEP, Haridwar Unit
104	Skill Development In Various Traits Like: Tailoring, Beauty Parlour, Purse Making, Flower Bouquet Making, Beautician, Etc.	Skill Development	Local	Uttarakhand	Haridwar	2.16	2.15	2.15	Direct	HEEP, Haridwar Unit
105	Conducting Plastic Surgery operations For The Needy And Poor People Through Rotary Club	Skill Development	Local	Uttarakhand	Haridwar	5.15	5.15	5.15	Implementing Agency	Rotary Club
106	Electrification Of Cremation Ground	Community Development	Local	Uttarakhand	Haridwar	1.00		-	Direct	HEEP, Haridwar Unit
107	Misc. Admin overheads, small CSR activities and Project related expenses	Capacity Building	Local	-	-	5.00	3.61	3.61	Direct	HEEP, Haridwar Unit
108	School Expenditure	Education	Local	Uttarakhand	Haridwar	2,205.22	2,205.22	2,205.22	Direct	HEEP, Haridwar Unit
109	School Expenditure - Infrastructure Improvement	Education	Local	Uttarakhand	Haridwar	67.80	12.36	12.36	Direct	HEEP, Haridwar Unit
110	Skill Development Expenses	Skill Development	Local	Uttarakhand	Haridwar	40.77	40.77	40.77	Direct	HEEP, Haridwar Unit
111	MoU Projects - Providing Solar utilities	Environmental sustainability	Local	Uttarakhand	Haridwar	20.00	11.69	11.69	Direct	HEEP, Haridwar Unit
112	MoU Projects - Infra Improvement in School, Toilet and Classroom	Sanitation & Education	Local	Uttarakhand	Haridwar	30.00	44.35	44.35	Direct	HEEP, Haridwar Unit
113	MoU Projects - Community Centre	Rural Development	Local	Uttarakhand	Haridwar	150.00		-	Direct	HEEP, Haridwar Unit
114	Misc. Admin Overheads	Capacity Building	Local	-	-	0.09	0.09	0.09	Direct	HERP, Varanasi Unit

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			Area	State	District / Area					
115	Construction of two Community halls at Siddharthnagar (U.P.)	Rural Development	Other	Uttar Pradesh	Siddharthnagar	51.18	20.00	30.00	Implementing Agency	Rural Engineering Division
116	IRCS, Deoghar Project	Health	Other	Bihar	Deoghar	50.74		-	Implementing Agency	Indian Red Cross Society
117	Construction of 6 baby friendly toilets at Aanganwadi centres	Sanitation	Local	Uttar Pradesh	Varanasi	2.31	1.16	2.31	Implementing Agency	Sulabh Sanitation Mission Foundation, New Delhi
118	Corrective surgery and rehabilitation for children affected with cerebral palsy and polio at M/s. Kiran Society and INSTALLATION of SOLAR water Heating System	Health	Local	Uttar Pradesh	Varanasi	7.35	6.89	6.89	Implementing Agency	KIRAN Society
119	Provision for Braille Machine, Hostel Materials & Gym Equipment Jeevan Jyoti Institute, Varanasi to National Assoc. for Blind (Braille); Ram Lawlin Singh & Assoc (Bed); Kalia Sports (Gym Equip)	Community Development	Local	Uttar Pradesh	Varanasi	5.65	5.65	5.65	Implementing Agency	Divya Jyoti Society
120	Skill Development Expenses	Skill Development	Local	Uttar Pradesh	Varanasi	2.39	2.39	2.39	Direct	HERP, Varanasi Unit
121	Education Scholarship to mentoring students belonging to BPL and disabled category. Project duration 5 years. - FAEA	Education	Local	Delhi	Delhi	600.00	105.27	204.11	Implementing Agency	Foundation for Academic Excellence and Access
122	"Graded value education program, Ramakrishna Mission"	Education	Local	"Delhi Madhya Pradesh"	Bhopal	228.60	50.11	188.21	Implementing Agency	Ramakrishna Mission
123	Financial supports towards interiors of basement auditorium meant for music education - KSS	Promoting Art & Culture	Local	Delhi	Delhi	35.00	14.00	14.00	Implementing Agency	Karnataka Sangeetha Sabha
124	Udaan: Skill Development Project	Skill Development	Local	-	-	68.00	4.08	4.08	Direct	"EDN, Bengaluru Unit PSSR Region, Chennai HRDI, Noida"
125	Construction of Oncology & Surgical Block, King George Hospital, Visakhapatnam (KGH)	Health	Local	Andhra Pradesh	Vizag	1500.00		-	Implementing Agency	King George Hospital
126	Running of MMU for disaster affected area for a period of one year	Health	Local	Andhra Pradesh	Vizag	27.00	5.18	5.18	Implementing Agency	Wockhardt Foundation
127	Building Model Houses (96) for Hud-Hud affected people in partnership with Govt. of A.P.	Community Development - Disaster related	Local	Andhra Pradesh	Vizag	500.00	-	-	Implementing Agency	Govt. of A.P.
128	Hud Hud Relief	Community Development - Disaster related	Local	Andhra Pradesh	Vizag	20.00	7.46	7.46	Direct	HPVP, Vizag Unit
129	Medical Camp	Health	Local	Andhra Pradesh	Vizag	1.00	1.05	1.05	Direct	HPVP, Vizag Unit
130	Furniture for School	Education	Local	Andhra Pradesh	Vizag	4.00	3.71	3.71	Direct	HPVP, Vizag Unit
131	School Expenditure	Education	Local	Andhra Pradesh	Vizag	131.34	131.34	131.34	Direct	HPVP, Vizag Unit
132	ITI Adoption under PPP. Mentor BHEL Hyderabad.	Skill Development	Other	Maharashtra	Latur	128.98	16.00	38.91	Direct	HPEP, Hyderabad Unit
133	RAMKY Foundation - Water plant in Nalgonda	Safe Drinking Water	Local	Telangana	Nalgonda	14.17	10.02	10.02	Implementing Agency	Ramky Foundation
134	Construction of 16 Class room & Compound wall.	Education	Local	Telangana	Medak	40.71		-	Direct	HPEP, Hyderabad Unit
135	Development works in Parking area at main check post maintained by M/s. Abhilasha	Day Care Centre	Local	Telangana	Medak	13.10	4.54	12.55	Direct	HPEP, Hyderabad Unit
136	Construction of Additional Class rooms and Toilet at First floor in Special care school	Sanitation & Education	Local	Telangana	Medak	7.90	7.89	7.89	Direct	HPEP, Hyderabad Unit



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			Area	State	District / Area					
137	Construction of Hostel for SC/ST girls at Chitkul	Education	Local	Telangana	Medak	13.70	0.45	13.78	Direct	HPEP, Hyderabad Unit
138	Construction of Hostel for SC/ST girls at Ongole	Education	Local	Andhra Pradesh	Ongole	45.00	29.25	40.50	Implementing Agency	District Administration, Prokasam thru APEWIDC
139	Setting Up Adolescent counselling centre and career guidance centre in BHEL T/s by M/s Urivi Vikram Charitable Trust	Education	Local	Telangana	Medak	9.60	3.84	6.72	Implementing Agency	Urivi Vikram Charitable Trust
140	Support for Govt. Degree College for Women, Sangareddy- Construction of Additional Class rooms, Furniture, Toilets & Drinking water	Education	Local	Telangana	Medak	26.50		-	Direct	HPEP, Hyderabad Unit
141	Support for Mandal Upper Primary School Madinaguda- Construction of Additional Class rooms, Furniture, Toilets & Drinking water	Sanitation & Education	Local	Telangana	Medak	12.15		-	Direct	HPEP, Hyderabad Unit
142	Support to LWC for running Spoken English and Computer classes in Science Library premises for benefit of under-privileged children from nearby Schools and colleges	Education	Local	Telangana	Medak	2.00	1.00	1.00	Implementing Agency	Helping Hands
143	Providing furniture & other equipment for BHEL-UVCT Adolescent Counselling Centre	Education	Local	Telangana	Medak	1.00	1.06	1.06	Direct	HPEP, Hyderabad Unit
144	Support to SAHI – Foundation for undertaking Cochlear implant surgeries for 3 nos. hearing impaired children	Health	Local	Telangana	Medak	16.00	16.05	16.05	Implementing Agency	Society to Aid Hearing Impaired (SAHI)
145	Screening Medical Camps and health care support for under-privileged persons in surrounding areas of the unit	Health	Local	Telangana	Medak	5.00	2.40	2.40	Direct	HPEP, Hyderabad Unit
146	Construction of Public toilets in Wednesday and Saturday market areas of Township	Sanitation	Local	Telangana	Medak	12.00		-	Direct	HPEP, Hyderabad Unit
147	Expenditure towards need assessments and Impact assessments for CSR projects to be undertaken	Capacity Building	Local	-	-	4.00	2.00	2.00	Implementing Agency	National Institute for Micro Small & Medium Enterprises (NI-MSME)
148	Providing spares and repairs for running of Toy Train Services (Train donated by BHEL in 80's) in Nehru Zoological Park Hyderabad	Environmental sustainability	Local	Telangana	Medak	9.10	3.65	3.65	Direct	HPEP, Hyderabad Unit
149	RO plant at school in Pati Village and Development of Dump Yard as park	Safe Drinking Water	Local	Telangana	Medak	20.50		-	Direct	HPEP, Hyderabad Unit
150	School Expenditure	Education	Local	Telangana	Medak	15.43	15.43	15.43	Direct	HPEP, Hyderabad Unit
151	School Expenditure - Infrastructure Improvement	Education	Local	Telangana	Medak	236.00	228.47	228.47	Direct	HPEP, Hyderabad Unit
152	Skill Development Expenses	Skill Development	Local	Telangana	Medak	147.30	147.30	147.30	Direct	HPEP, Hyderabad Unit
153	MoU Projects - Providing Solar utilities	Environmental sustainability	Local	Telangana	Medak	25.00		-	Direct	HPEP, Hyderabad Unit
154	MoU Projects - Infra Improvement in School, Toilet and Classroom	Sanitation & Safe Drinking water	Local	Telangana	Medak	40.00		-	Direct	HPEP, Hyderabad Unit
155	MoU Projects - Community Centre	Rural Development	Local	Telangana	Medak	135.00		-	Direct	HPEP, Hyderabad Unit
156	Skill Development Expenses	Skill Development	Local	Delhi	Delhi	2.58	2.58	2.58	Direct	IO Division, Delhi
157	School Expenditure	Education	Local	Uttar Pradesh	Jagdishpur	147.14	147.14	147.14	Direct	IP, Jagdishpur Unit

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158	Skill Development Expenses	Skill Development	Local	Uttar Pradesh	Jagdishpur	4.19	4.19	4.19	Direct	IP, Jagdishpur Unit
159	PHD Rural Development Foundation for Mobile Medical Van	Health	Local	Uttar Pradesh	Jagdishpur	66.01	14.45	36.02	Implementing Agency	PHD Rural Development Foundation
160	Installation of 100 Hand Pumps & 100 solar street lights	Rural Development	Local	Uttar Pradesh	Barabanki	55.00	16.50	44.00	Implementing Agency	National Charitable Welfare Society
161	Construction / installation of borewells, water tanks, solar dual pumps and beautification of area in Raebareli district.	Rural Development	Local	Uttar Pradesh	Raebareli	275.00	93.17	137.22	Implementing Agency	Zilla Parishad
162	Computer installation 2 No. BARABANKI	Education	Local	Uttar Pradesh	Barabanki	1.77	0.63	1.75	Direct	IP, Jagdishpur Unit
163	Construction of boundary wall in BHEL Kendriya Vidyalaya	Education	Local	Uttar Pradesh	Jagdishpur	10.00	10.03	10.03	Direct	IP, Jagdishpur Unit
164	Construction of platform and shed in the cremation ground	Rural Development	Local	Uttar Pradesh	Jagdishpur	1.50	-	-	Direct	IP, Jagdishpur Unit
165	Providing computers for blind students of Jeevan path vidyalaya, Phoola singh block, Amethi	Education	Local	Uttar Pradesh	Amethi	1.50	-	-	Direct	IP, Jagdishpur Unit
166	Misc. Admin Expenses	Capacity Building	Local	-	-	0.02	0.02	0.02	Direct	IP, Jagdishpur Unit
167	Refurbishment of Swatantrata Sangram Sangrahalaya	Protection of National Heritage	Local	Delhi	Delhi	200.00	40.00	40.00	Implementing Agency	National Cultural Fund
168	Misc. Admin Expenses	Capacity Building	Local	-	-	1.52	1.52	1.52	Direct	Industry Sector, Delhi
169	Construction of one side of Kambala Stadium in Karnataka (Agreement yet to be signed)	Rural Development	Other	Karnataka	Udupi	25.00	10.00	10.00	Implementing Agency	Udupi Nirmithi Kendra
170	Construction of RCC Deck Slab Bridge at Makali to Horokyanahalli Road, Dasanapura Hobli, Dasanapura Grama Panchayath, Bengaluru North	Rural Development	Other	Karnataka	Bengaluru	80.00	-	-	Implementing Agency	Panchayat Engineering Division
171	Providing various items at Govt. Model Primary School, Atiguppe, Banaglore-38	Education	Other	Karnataka	Bengaluru	1.00	0.33	0.99	Direct	ISG, Bengaluru Unit
172	Providing medicines for children suffering from epilepsy at Mathushree Manovikasa Kendra, Bengaluru	Health	Other	Karnataka	Bengaluru	1.25	0.75	1.19	Direct	ISG, Bengaluru Unit
173	Providing various items at Govt. Higher Primary School, Ahalokottai, Magadi Taluk, Ramanagara district	Education	Other	Karnataka	Ramanagar	0.76	0.09	0.78	Direct	ISG, Bengaluru Unit
174	Providing various items at Govt. Higher Primary School, Hollahally, Harrowhally Hobli, Kanakpura Taluk, Ramnagar district	Education	Other	Karnataka	Ramanagar	1.00	0.47	0.79	Direct	ISG, Bengaluru Unit
175	Providing various items at Govt. Primary School-B, Narayanpura, Bengaluru	Education	Other	Karnataka	Bengaluru	1.00	0.26	0.84	Direct	ISG, Bengaluru Unit
176	Providing various items at Govt. Higher Primary School, Hoodi, Bengaluru	Education	Other	Karnataka	Bengaluru	1.00	0.26	0.84	Direct	ISG, Bengaluru Unit
177	Providing various items at Govt. Higher Primary School, Aloor, North Bengaluru	Education	Other	Karnataka	Bengaluru	1.00	0.26	0.90	Direct	ISG, Bengaluru Unit
178	Providing training kit, water purifier, TV sets and indoor sports items at Manav Charities, NGO for differently abled children	Community Development	Other	Karnataka	Bengaluru	1.50	1.50	1.50	Implementing Agency	Manav Charities
179	Providing computer sets and its peripherals at Govt. Higher Secondary School, Madavara	Education	Other	Karnataka	Bengaluru	2.00	2.16	2.16	Direct	ISG, Bengaluru Unit

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			Area	State	District / Area					
180	Providing Cots, tables, chairs etc. at New Ark Mission of Hope	Community Development	Other	Karnataka	Bengaluru	2.00	2.16	2.16	Direct	ISG, Bengaluru Unit
181	Medical camps in the villages of Nelamangala Taluk	Health	Other	Karnataka	Bengaluru	2.00	1.80	1.80	Implementing Agency	New Ark Mission of India
182	Providing almirahs, aqua guard, uniforms, sports items and library books to Govt. High School, Muddenahally	Education	Other	Karnataka	Chikkaballapur	1.50	0.67	0.67	Direct	ISG, Bengaluru Unit
183	Providing various items at Govt. High School, B. Narayanpura	Education	Other	Karnataka	Bengaluru	2.00	2.08	2.08	Direct	ISG, Bengaluru Unit
184	Providing various utility items at Ashray Seva Trust	Community Development	Other	Karnataka	Bengaluru	1.01	0.56	0.56	Direct	ISG, Bengaluru Unit
185	Providing training in tailoring through Dr. B.R.Ambedkar Yuvaka Sangh	Skill Development	Other	Karnataka	Bengaluru	2.50	2.59	2.59	Direct	ISG, Bengaluru Unit
186	Providing desks and benches, water filter and podium at Govt. First Grade College	Education	Other	Karnataka	Bengaluru	2.00	2.15	2.15	Direct	ISG, Bengaluru Unit
187	Impact Analysis Expense	Capacity Building	Other	-	-	3.39	3.39	3.39	Direct	ISG, Bengaluru Unit
188	Multiple -Grid Interactive SPV Power plants of total 10 KWP in rural schools in Taran Taran district of Punjab.	Environmental sustainability	Other	Punjab	Tarn Taran	67.00	40.92	67.00	Implementing Agency	Kalgidhar Trust
189	Mobile Medicare Unit (MMU) through PHDRDF	Health	Local	Punjab	Goindwal	66.01	20.28	37.81	Implementing Agency	PHD Rural Development Foundation
190	Mobile Medical Vans in the rural areas in the vicinity of Goindwal through HelpAge India	Health	Local	Punjab	Firozpur	60.86	14.06	28.95	Implementing Agency	Helpage India
191	Donation of 100 benches, 01 water filter and water cooler to Elementary school, Goindwal Sahib (Near Baoli Sahib Gurudwara)	Safe Drinking water & Education	Other	Punjab	Tarn Taran	2.06	1.44	1.44	Direct	IVP, Goindwal Unit
192	Ceiling fans, stabilizer and swings in Govt. Elementary school, Goindwal Sahib	Education	Local	Punjab	Goindwal	0.63	0.90	0.90	Direct	IVP, Goindwal Unit
193	Donation of 30 benches and water unit plus swings, etc. to the Govt. Elementary school, Hansawala	Education	Local	Punjab	Goindwal	1.61	0.97	0.97	Direct	IVP, Goindwal Unit
194	Donation of water cooler and water filter to Navodaya Vidyalaya, Goindwal Sahib	Education	Local	Punjab	Goindwal	0.97	0.97	0.97	Direct	IVP, Goindwal Unit
195	"Red Cross, Tarn Taran a) Donation of 50 Tri-Cycles b) Wheel Chair, 4 in No. c) Stretchers, 4 in No."	Community Development	Other	Punjab	Tarn Taran	2.65	2.56	2.56	Direct	IVP, Goindwal Unit
196	Tree plantation in Govt. Elementary School	Environmental sustainability	Local	Punjab	Goindwal	0.02	0.02	0.02	Direct	IVP, Goindwal Unit
197	Donation of 100 benches and water unit plus swings, etc. to the Govt. Elementary school (Boys), Baoli Sahib	Education	Other	Punjab	Tarn Taran	2.06	1.61	1.61	Direct	IVP, Goindwal Unit
198	Donation of 30 benches and water unit plus swings, etc. to the Govt. Elementary school (Boys), Chohla Sahib	Education	Other	Punjab	Tarn Taran	1.76	0.56	0.56	Direct	IVP, Goindwal Unit
199	School Expenditure	Education	Local	Uttar Pradesh	Jhansi	315.51	315.51	315.51	Direct	TP, Jhansi Unit
200	Skill Development Expenses	Skill Development	Local	Uttar Pradesh	Jhansi	2.36	2.36	2.36	Direct	TP, Jhansi Unit
201	Environment Awareness program & Education for children of Labours.	Education	Local	Uttar Pradesh	Jhansi	3.10	-	-	Implementing Agency	Nav Jyoti Shiksha Avem Samaj Kalyan Samiti
202	Financial support for Mobile Science Labs (3 Nos.) for schools - Agastya	Education	Local	Uttar Pradesh	Jhansi	56.19	11.46	11.46	Implementing Agency	Agastya International Foundation



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203	Cutting and Tailoring Training for poor village girls/ ladies	Skill Development	Local	Uttar Pradesh	Jhansi	4.00	1.26	1.26	Implementing Agency	Nav Jyoti Shiksha Avem Samaj Kalyan Samiti
204	Distribution of scrap wood furniture to schools in nearby villages	Environmental sustainability	Local	Uttar Pradesh	Jhansi	2.00	1.62	1.62	Direct	TP, Jhansi Unit
205	Creating sports and education infrastructure in the village schools	Education	Local	Uttar Pradesh	Jhansi	1.00	1.00	1.00	Direct	TP, Jhansi Unit
206	Providing water hand pumps in nearby villages	Rural Development	Local	Uttar Pradesh	Jhansi	2.00		-	Direct	TP, Jhansi Unit
207	Provision of Bus Stop	Rural Development	Local	Uttar Pradesh	Jhansi	3.00		-	Direct	TP, Jhansi Unit
208	Construction of cremation ground with shed in a nearby village	Rural Development	Local	Uttar Pradesh	Jhansi	3.00		-	Direct	TP, Jhansi Unit
209	Bal Sahyog Project - Education in Slum	Slum Development	Local	Delhi	Delhi	17.31	4.31	4.31	Implementing Agency	Bal Sahyog
210	Disabled friendly wheelchair accessible mini-bus for facilitating mobility/ transport of students with disabilities in the campus	Community Development	Local	Delhi	Delhi	30.35	20.00	20.00	Implementing Agency	JNU, Delhi
211	Medical camp at Primary School, Sector-12, Noida, Bal Sahyog Campus, Suthiana Village	Health	Local	Uttar Pradesh	Noida	1.50	0.97	0.97	Direct	PEM Division, Noida
212	Providing Miscellaneous items for school/society	Community Development	Local	-	-	0.50		-	Direct	PEM Division, Noida
213	Sevac - 50 Bedded Mental Hospital-cum Rehabilitation Centre, Day Care Centre, Education Wing for at least 500 mental patients	Health	Local	West Bengal	Kolkata	100.00	5.00	100.00	Implementing Agency	SEVAC
214	HelpAge Mobile Medicare Unit	Health	Local	West Bengal	Bardhaman	62.71	14.81	44.30	Implementing Agency	Helpage India
215	Jharkhand CSR project	Community Development	Local	Jharkhand	Bokaro	15.37	11.65	11.65	Direct	PSER Region, Kolkata
216	To arrange de-addiction training programmes near our project sites, in association with specialized NGOs. The result might well have positive impact upon the theft activities near project sites.	Community Development	Local	Project Sites	Project Sites	1.00		-	Direct	PSER Region, Kolkata
217	Training of 5-10 welding trainees belonging to the Govt. ITI, nearest to their newly opened project sites, in WRI Trichy, on the practical aspects of hands on training on latest welding technology.	Skill Development	Local	Project Sites	Project Sites	1.00		-	Direct	PSER Region, Kolkata
218	Misc. Admin Expenses	Capacity Building	Local	-	-	4.38	0.25	0.25	Direct	PSER Region, Kolkata
219	Sustainability - Tree Plantation at Suratgarh Site	Environmental sustainability	Local	Rajasthan	SriGanganagar	8.25		-	Direct	PSER Region, Kolkata
220	MoU Projects - Providing Solar utilities	Environmental sustainability	Local	West Bengal	Kolkata	40.00		-	Direct	PSER Region, Kolkata
221	MoU Projects - Infra Improvement in School, Toilet and Classroom	Sanitation & Education	Local	West Bengal	Kolkata	50.00	7.17	7.17	Direct	PSER Region, Kolkata
222	MoU Projects - Community Centre	Rural Development	Local	West Bengal	Kolkata	110.00		-	Direct	PSER Region, Kolkata
223	HelpAge Mobile Medicare Unit	Health	Other	Jammu & Kashmir	Leh	67.80	17.16	48.94	Implementing Agency	Helpage India
224	Running of MMU for disaster affected area for a period of one year	Health	Other	Jammu & Kashmir	Srinagar	27.00		-	Implementing Agency	Wockhardt Foundation
225	Distribution of utilities in backward schools, Mirzapur	Education	Local	Uttar Pradesh	Mirzapur	0.09	0.09	0.09	Implementing agency	Gramin Uthan Samiti, Shankargarh

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226	Community based Rehabilitation programme for the differently abled persons with the help of DISHA a non profit organisation	Community Development	Local	Rajasthan	Jaipur	7.50	7.50	7.50	Implementing agency	Disha Foundation
227	Eye check-up and cataract surgery - i care	Health	Local	Haryana, Uttar Pradesh, Delhi	NCR	4.06	4.06	4.06	Implementing agency	I Care Noida
228	Eye check-up and cataract surgery camp at remote site areas. Mela Mal Sood	Health	Local	Himachal Pradesh	Chamba	7.14	6.50	6.50	Direct	PSNR Region, Noida
229	Donating RO plants to the schools in the vicinity of the remote sites.	Safe Drinking Water	Local	"Uttar Pradesh Uttarakhand"	Unchahar, Aligarh, Lalitpur, Shankargarh	5.40	5.65	5.65	Implementing agency	TWIF
230	Institute of Applied Sciences and Rural Development: training and capacity building in schools in field of environment preservation and sustainability	Environmental sustainability	Local	Uttar Pradesh	Amroha	9.00	9.00	9.00	Implementing Agency	Institute of Applied Sciences and Rural Development
231	Misc. Admin Expenses	Capacity Building	Local	-	-	0.11	0.11	0.11	Direct	PSNR Region, Noida
232	HelpAge Mobile Medicare Unit	Health	Local	Odisha	Angul	61.43	15.10	44.86	Implementing Agency	Helpage India
233	Environment & Species Protection through reforestation the Ramdurga, Koppal Dt., Karnataka for 5 years - Wildlife SOS	Environmental sustainability	Local	Karnataka	Koppal	40.00	3.90	32.50	Implementing Agency	Wildlife SOS
234	"Infrastructure improvement for Primary School, Mirzapur village, Dongalia, Dohad, Bhaisava - MALWA SITE"	Education	Local	Madhya Pradesh	Khandwa	6.14	6.14	6.14	Direct	PSSR Region, Chennai
235	Infrastructure improvement for Govt. Primary School, Chikusguru	Education	Local	Karnataka	Raichur	1.49	1.49	1.49	Direct	PSSR Region, Chennai
236	Setting up Diagnostic Centre at Kudathini Village	Health	Local	Karnataka	Bellary	11.00	9.39	9.39	Direct	PSSR Region, Chennai
237	Infrastructure Improvement in schools at Yerasmus site	Sanitation & Education	Local	Karnataka	Raichur	17.08	18.80	18.80	Direct	PSSR Region, Chennai
238	Infrastructure Improvement in schools at Tuticorin site	Education	Local	Tamil Nadu	Tuticorin	22.50	22.37	22.37	Direct	PSSR Region, Chennai
239	Equipment to NGO for vocational training of mentally challenged students, Secunderabad	Skill Development	Local	Telangana	Secunderabad	3.00	2.72	2.72	Direct	PSSR Region, Chennai
240	Specialised equipment for hospice, RMD Pain and Palliative Care Trust, Chennai	Health	Local	Tamil Nadu	Chennai	3.68	3.68	3.68	Implementing Agency	RMD Pain and Palliative Care Trust
241	Distribution of mobility aids to physically challenged	Community Development	Local	Tamil Nadu	Cuddalore	6.42	6.42	6.42	Implementing Agency	Freedom Trust
242	R.O Unit, Solar Lights, Flush cots, Rehoboth, Chennai	Safe Drinking Water & Community Development	Local	Tamil Nadu	Chennai	5.69	5.69	5.69	Implementing Agency	Rehoboth
243	Equipment for Laboratory, Little Drops Chennai	Health	Local	Tamil Nadu	Chennai	5.50	5.50	5.50	Implementing Agency	Little Drops Public Charitable Trust
244	Supporting Leprosy Affected Persons, R K Math, Chennai	Health	Local	Tamil Nadu	Chennai	3.50	3.50	3.50	Implementing Agency	Ramakrishna Math
245	Relief Measures for Vizag - "Hud Hud"	Community Development - Disaster related	Local	Andhra Pradesh	Vizag	0.85	0.85	0.85	Direct	PSSR Region, Chennai
246	Water Facility to School Toilets, Monnet	Safe Drinking Water	Local	Odisha	Angul	0.40	-	-	Direct	PSSR Region, Chennai
247	Repair works for Govt. Residential School for Visually Challenged Girls, Vizag	Education	Local	Andhra Pradesh	Vizag	3.00	-	-	Direct	PSSR Region, Chennai

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248	Installation of RO Plants at Ongole	Safe Drinking Water	Local	Andhra Pradesh	Ongole	10.00		-	Direct	PSSR Region, Chennai
249	Misc. Admin Expenses including impact analysis expense	Capacity Building	Local	-	-	3.61	3.61	3.61	Implementing Agency	NR Management Consultancy Services
250	Infrastructure activities - Bhandara Project	Rural Development	Local	Maharashtra	Bhandara	429.00	216.47	374.38	Implementing Agency	PWD, Bhandara
251	HelpAge Mobile Medicare Unit	Health	Local	Maharashtra	Nagpur	60.86	20.11	42.93	Implementing Agency	Helpage India
252	SAFE WATER NETWORK - Pure water for districts in Bhandara	Safe Drinking Water	Local	Maharashtra	Bhandara	145.00	145.00	145.00	Implementing Agency	Safe Water Network
253	Cataract Operation at Old Age Home through Help Age India for 200 people.	Health	Local	Maharashtra	Nagpur	3.00	3.00	3.00	Implementing Agency	Helpage India
254	Support for Slum area development in Nagpur through registered NGO/ external agency/organization	Slum Development	Local	Maharashtra	Nagpur	3.50		-	Implementing Agency	-
255	Setting up/support to school at Nagpur by providing drinking water facility and sanitation/toilet facility through registered NGO.	Safe Drinking Water & Sanitation	Local	Maharashtra	Nagpur	8.00	7.49	7.49	Implementing Agency	Ashwamegh Gramin Panlot Kshetra Vikas Va Shaikshanik Sanstha
256	Carrying out Tree plantation with Tree guards	Environmental sustainability	Local	Maharashtra	Nagpur	3.75		-	Implementing Agency	Sahyadri Gamin Vikas Va Bahuuddeshiya Yuvak kalyan Sanstha
257	Organizing a "Multi speciality Camp" in collaboration with Hospital (Hanumant Hospital) nearby village at Pipavav site.	Health	Local	Gujarat	Amreli	2.30	1.28	1.28	Implementing Agency	Hanumant Seva Medicare Trust
258	Organizing a "Multi speciality Camp" in Nagpur for underprivileged Children	Health	Local	Maharashtra	Nagpur	0.45	0.36	0.36	Direct	PSWR Region, Nagpur
259	Misc. Admin Expenses	Capacity Building	Local	-	-	0.54	0.54	0.54	Direct	PSWR Region, Nagpur
260	Coordinating CATARACT operations 500 nos. In 3 years(14 operations per month) with Goparaju Trust	Health	Other	Andhra Pradesh	Guntur	5.00	1.51	2.84	Implementing Agency	Goparaju Trust
261	Part funding of Teachers salary at " Aarambh" working for autism affected children	Education	Local	Telangana	Hyderabad	0.50	0.48	0.48	Implementing Agency	Aarambh Foundation
262	50% funding of 3 nos. special educators honorarium for one year for teaching hearing impaired children by Ashray-Akruti at Gandhi Hospital, Hyderabad	Education	Local	Telangana	Hyderabad	1.80	1.80	1.80	Implementing Agency	Ashray-Akruti
263	Salary of Gram Vikas Seva Samiti to run school and distribution of books, uniforms, etc. - Chanda Nayak Nagar School	Education	Local	Telangana	Hyderabad	2.53	2.06	2.06	Direct	R&D Division, Hyderabad
264	Boundary Wall - Chanda Nayak	Education	Local	Telangana	Hyderabad	3.00	2.59	2.59	Direct	R&D Division, Hyderabad
265	Installation of Solar Water Heating system for Old age home and SC/ ST Hostel	Environmental sustainability	Local	Telangana	Medak	1.84	1.80	1.80	Direct	R&D Division, Hyderabad
266	Provision of 150 dual desks for students of Zilla Parishad schools at Athamaru village, Krishna district	Education	Local	Telangana	Krishna	4.65	5.61	5.61	Direct	R&D Division, Hyderabad
267	Organizing 06 medical camps for the underprivileged in the vicinity of Hyderabad	Health	Local	Telangana	Hyderabad	1.35	0.84	0.84	Implementing Agency	Ashray-Akruti
268	Providing 19 steel almirahs for use by inmates in the old age home and orphanage run by Sai Seva Sangh, Moosapet, Hyderabad	Community Development	Local	Telangana	Hyderabad	1.33	1.33	1.33	Direct	R&D Division, Hyderabad



# DIRECTORS' REPORT



S. No.	CSR Project or activity identified	Sector in which the project is covered	Project or programs Local area or other (Specify the State and district where projects or programs were undertaken)			Amount outlay (budget) project wise	Amount spent on the project or programs	Cumulative expenditure up to the reporting period	Amount spent directly or through implementing agency	"Name of Implementing Agency"
			Area	State	District / Area					
269	Misc. Admin Expenses	Capacity Building	Local	-	-	0.02	0.02	0.02	Direct	R&D, Hyderabad
270	Providing items for Sai Kripa, Noida - Serving Slum Children	Slum Development	Local	Uttar Pradesh	Noida	1.85	1.85	1.85	Implementing Agency	Saikripa
271	Providing items for Social & Dev. Research Action group working for child rights and education	Education	Local	Uttar Pradesh	Noida	1.10	1.10	1.10	Implementing Agency	Social & Development Research & Action Group
272	Providing items for Jan Kalyan Trust - Old Age Inmates	Community Development	Local	Uttar Pradesh	Noida	0.91	0.91	0.91	Implementing Agency	Jan Kalyan Trust
273	Providing bicycles for poor children by Bd. For research Educ. & Dev. - Serving Slum Children	Slum Development	Local	Uttar Pradesh	Noida	0.99	0.99	0.99	Implementing Agency	Bd. For Research Education & Development
274	Heal and Soul (Haemophilia Federation) - continuing Project	Health	Local	Across India	Across India	72.00	0.19	72.00	Implementing Agency	Heal a Soul Foundation
275	DISHA(Education for Street Child)	Education	Local	Delhi	Delhi	26.76	13.73	26.74	Implementing Agency	Disha Foundation
276	Heal and Soul (Haemophilia Federation) - New Project	Health	Local	Across India	Across India	320.10	50.40	50.40	Implementing Agency	Heal a Soul Foundation
277	Kalyanam Karoti - Distribution of Artificial Limbs & Medical Aids to needy people in Agra Region	Community Development	Local	Uttar Pradesh	Agra & Mathura	10.15	10.15	10.15	Implementing Agency	Kalyanam Karoti
278	providing and installing Solar Water heating system and solar home lighting system in Sri Guru Granth Sahib Vidya Kender Society	Environmental sustainability	Local	Delhi	Delhi	3.85	3.85	3.85	Implementing Agency	Sri Guru Granth Sahib Vidya Kender Society
279	Project related admin expenses	Capacity Building	local	-	-	1.36	1.36	1.36	Direct	TBG Division, Noida
280	Impact Analysis Expense	Capacity Building	Local	-	-	0.80	0.80	0.80	Direct	TBG Division, Noida
281	Financial support for Mobile Science Labs (3 Nos.) for schools - Agastya	Education	Local	Tamil Nadu	Tiruchirapalli	56.19	11.80	11.80	Implementing Agency	Agastya International Foundation
282	To sponsor feeding cost of one Indian Elephant (Saravanan) and few rare animals in Arignar Anna Zoological Park, Chennai.	Environmental sustainability	Other	Tamil Nadu	Chennai	5.00	2.89	2.89	Direct	HPBP, Trichy Unit
283	Adopted Villages : Vaalayur- well with pump and Solar Lighting in Pachamalai hills.	Rural Development	Local	Tamil Nadu	Tiruchirapalli	12.70	12.69	12.69	Direct	HPBP, Trichy Unit
284	"To conduct Medical camps in Villages, Schools etc. Diabetes, Organ Donation, Eye Donation, Leprosy"	Health	Local	Tamil Nadu	Tiruchirapalli	7.35	1.64	1.64	Direct	HPBP, Trichy Unit
285	Providing Incinerator to Schools and Colleges	Sanitation	Local	Tamil Nadu	Tiruchirapalli	20.00	19.25	19.25	Direct	HPBP, Trichy Unit
286	Scholarship to students	Education	Local	Tamil Nadu	Tiruchirapalli	6.00	6.02	6.02	Direct	HPBP, Trichy Unit
287	Skill training at TREC-STEP	Skill Development	Local	Tamil Nadu	Tiruchirapalli	15.00	12.84	12.84	Implementing Agency	TREC-STEP
288	"To conduct Promotion of Art and Culture activities. Padathini South Zone Culture Centre"	Promoting Art & Culture	Local	Tamil Nadu	Tiruchirapalli	13.60	4.20	4.20	Direct	HPBP, Trichy Unit
289	Promotion of Arts through Dr. Chinnamoulana Trust	Promoting Art & Culture	Local	Tamil Nadu	Tiruchirapalli	3.00	2.63	2.63	Implementing Agency	Dr.Chinna Moulana Trust
290	Skill training to the prisoners at Central Jail, Tiruchirapalli	Skill Development	Local	Tamil Nadu	Tiruchirapalli	17.92	15.04	15.04	Direct	HPBP, Trichy Unit
291	To provide Solar home lighting system for Villages and Schools.	Environmental sustainability	Local	Tamil Nadu	Tiruchirapalli	12.00	-	-	Direct	HPBP, Trichy Unit
292	Construction of water tank at Thuvakudy Municipality for providing drinking water facility in Self Sufficiency Scheme	Rural Development	Local	Tamil Nadu	Tiruchirapalli	30.00	30.00	30.00	Implementing Agency	DC.Office

S. No.	CSR Project or activity identified	Sector in which the project is covered	Project or programs Local area or other (Specify the State and district where projects or programs were undertaken)			Amount outlay (budget) project wise	Amount spent on the project or programs	Cumulative-expenditure up to the reporting period	Amount spent directly or through implementing agency	"Name of Implementing Agency"
			Area	State	District / Area					
293	"Free Tuition Centre: Improving the education standard of villages thru NGOs, Puthiyathalaimurai Foundn & AID India"	Education	Local	Tamil Nadu	Tiruchirapalli	10.00	2.30	2.30	Implementing Agency	Puthiyathalaimurai Foundation
294	Promotion of Sports: Cricket & Tennis, Electronic Score Board	Promotion of Sports	Local	Tamil Nadu	Tiruchirapalli	6.00	4.00	4.00	Direct	HPBP, Trichy Unit
295	"Anbalayam - Guntur 4 wheeler for mentally ill people"	Community Development	Local	Tamil Nadu	Tiruchirapalli	6.37	5.72	5.72	Direct	HPBP, Trichy Unit
296	"Govt. girls School, Vallam RO System Library Books"	Safe Drinking Water & Education	Local	Tamil Nadu	Tiruchirapalli	2.50		-	Direct	HPBP, Trichy Unit
297	Providing Sewing Machine, Iron Boxes, Agri. Hand Tool & blankets to the needy through Lion's Club	Community Development	Local	Tamil Nadu	Tiruchirapalli	14.50	14.94	14.94	Implementing Agency	Lion's Club
298	World Class community park at Panchapoor Amphi Theatre in 2 Acre	Environmental sustainability	Local	Tamil Nadu	Tiruchirapalli	25.00		-	Direct	HPBP, Trichy Unit
299	School Expenditure	Education	Local	Tamil Nadu	Tiruchirapalli	190.23	190.23	190.23	Direct	HPBP, Trichy Unit
300	School Expenditure - Infrastructure Improvement	Education	Local	Tamil Nadu	Tiruchirapalli	1107.80	70.44	70.44	Direct	HPBP, Trichy Unit
301	Skill Development Expenses	Skill Development	Local	Tamil Nadu	Tiruchirapalli	167.09	167.09	167.09	Direct	HPBP, Trichy Unit
302	Sanitary Napkins to school	Sanitation	Local	Tamil Nadu	Tiruchirapalli	1.50		-	Direct	HPBP, Trichy Unit
303	Leprosy Home -item donation	Community Development	Local	Tamil Nadu	Tiruchirapalli	0.41	0.41	0.41	Direct	HPBP, Trichy Unit
304	Deaf Foundation -item donation	Community Development	Local	Tamil Nadu	Tiruchirapalli	0.84	0.84	0.84	Direct	HPBP, Trichy Unit
305	Misc. Admin Exp on Leaflets, Events, etc.	Capacity Building	Local	Tamil Nadu	Tiruchirapalli	8.25		-	Direct	HPBP, Trichy Unit
306	Misc. Exp. Related to School events	Capacity Building	Local	Tamil Nadu	Tiruchirapalli	2.00	0.17	0.17	Direct	HPBP, Trichy Unit
307	Impact Analysis Expense	Capacity Building	Local	Tamil Nadu	Tiruchirapalli	5.00	1.83	1.83	Direct	HPBP, Trichy Unit
308	Vision to all - Misc. Exp.	Capacity Building	Local	Tamil Nadu	Tiruchirapalli	2.00	0.82	0.82	Direct	HPBP, Trichy Unit
309	MoU Projects - Providing Solar utilities	Environmental sustainability	Local	Tamil Nadu	Tiruchirapalli	65.00	35.22	35.22	Direct	HPBP, Trichy Unit
310	MoU Projects - Infra Improvement in School, Toilet and Classroom	Sanitation & Education	Local	Tamil Nadu	Tiruchirapalli	65.00	64.55	64.55	Direct	HPBP, Trichy Unit
311	MoU Projects - Community Centre	Rural Development	Local	Tamil Nadu	Tiruchirapalli	70.00	14.76	14.76	Direct	HPBP, Trichy Unit
312	Cons. of Class room at Govt Elem. School, Neduvasal	Education	Local	Tamil Nadu	Pudukottai	15.00		-	Direct	PPPU, Thirumayam Unit
313	Providing Livelihood means to PLHIV	Livelihood Enhancement	Local	Tamil Nadu	Pudukottai	6.00	6.00	6.00	Implementing Agency	"Government Hospital, Thirumayam and District AIDS Prevention and Control Unit"
314	Providing of Teaching Aids for Mentally challenged School at Ambattur	Education	Local	Tamil Nadu	Pudukottai	1.50		-	Direct	PPPU, Thirumayam Unit
<b>TOTAL</b>						<b>19551.46</b>	<b>10206.00</b>	<b>11790.44</b>		

**Note:**

The expense booked in 2014-15 is spent on the CSR projects/activities except for the Capacity building expenditure which are classified as an overhead expenditure.

# Annexure-IV

## Business Responsibility Report 2014-15

### 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:** 2014-15
7. **Sectors that the Company is engaged in:** Refer to 'Corporate Profile', Annual Report 2014-15
8. **List three key products/services that the Company manufactures/provides:**
  - a) Steam Turbine, Generators, Boilers & accessories for Thermal power plant
  - b) Locomotives, propulsion equipments, traction motors/alternators, Transformers, VCBs for Transportation Sector
  - c) 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 6 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.

10. **Markets served by the Company:** BHEL serves national as well as international markets.

### Section B: Financial Details of the Company (2014-15)

1. Paid up capital : ₹ 489.52 Crores
2. Total Turnover : ₹ 30947 Crores
3. Total Profit after Tax : ₹ 1419 Crores
4. Total expenses incurred on CSR & SD : ₹ 165 Crores  
(which includes ₹ 62.94 Crores - amount yet to be spent on committed projects)
5. List of activities in which expenditure on CSR has been incurred: Refer to Annexure 1 of 'Reporting of Corporate Social Responsibility (CSR)' under **Annexure-III** on 'Sustainable Development'

### Section C: Other Details

1. **Does the Company have any Subsidiary Company/ Companies?**  
Yes, BHEL has one subsidiary company-BHEL Electrical Machines Ltd. (BHEL-EML), Kasargod as on 31-03-2015
2. **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 marginalized.
- 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	P3	P4	P5	P6	P7	P8	P9
1	Do you have policy/policies for	Y	Y	Y	Y	Y	Y	N	Y	Y
2	Has the policy being formulated in consultation with the relevant stakeholders?	Y	Y	Y	Y	Y	Y	N	Y	Y
3	Does the policy conform to any national /international standards? If yes, specify? (50 words)	Y	Y	Y	Y	Y	Y	N	Y	Y
4	Has the policy being approved by the Board? Is yes, has it been signed by MD/owner/CEO/ appropriate Board Director?	Y	Y	Y	Y	Y	Y	N	Y	Y
5	Does the company have a specified committee of the Board/ Director/Official to oversee the implementation of the policy?	Y	Y	Y	Y	Y	Y	N	Y	Y
6	Indicate the link for the policy to be viewed online?	Links have been provided wherever applicable								
7	Has the policy been formally communicated to all relevant internal and external stakeholders?	Y	Y	Y	Y	Y	Y	N	Y	Y
8	Does the company have in-house structure to implement the policy/policies?	Y	Y	Y	Y	Y	Y	N	Y	Y



S.No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
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	N	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	N	Y	Y

## Notes:

1. 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.
3. Policies and procedures of the organization 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 this principle, 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 & review the performance of CSR activities in BHEL, the Board Level Committee for CSR met 6 times during 2014-15. While BHEL Board met 4 times in 2014-15 for assessment & review of CSR activities in BHEL

Additionally, the minutes of the various committees' meetings, particularly Stake-

holders Relationship 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?

BHEL publishes its Sustainability Report annually. Last 3 years' reports can be accessed on Corporate Webpage through the following link: [http://www.bhel.com/healthsafety/global\\_compact.php](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\\_of\\_Business\\_Conduct\\_and\\_Ethics.pdf](http://www.bhel.com/investor_relations/pdf/Code_of_Business_Conduct_and_Ethics.pdf)

In addition, as part of BHEL's persisting endeavor 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 and CAG audit under section 139 of the Companies Act, 2013. The company has also signed MoU with Transparency International to adopt 'Integrity Pact' to make public procurement and contracting more transparent by binding both the parties to ethical conduct. A panel of three Independent External Monitors have been appointed to oversee implementation of Integrity Pact in BHEL with due approval of Central Vigilance

Commission. 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 Stakeholders Relationship Committee specifically to look into matters related to redressal of shareholders and investors complaints. As reported by M/s Karvy Computershare Private Limited (RTA), 759 complaints were received from the shareholders during the year under review and all complaints were redressed up to 31<sup>st</sup> March, 2015.

In addition, a total of 142 public grievance complaints were received from the general public under the Centralized Public Grievance Redressal and Monitoring Scheme during 2014-15. All the grievances were disposed off 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 are 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 desulfurization (FGD), Solar Photovoltaic and Electrostatic Precipitator (ESP).

BHEL is implementing e-procurement in phased manner as business improvement and sustainable business practice. Adding another milestone towards green initiative by leveraging technology, BHEL has launched its in-house developed "Online Supplier Registration Portal" at [www.bhel.com](http://www.bhel.com). The portal enables prospective suppliers to submit their registration forms online to BHEL units.

Reusable materials are being used for packing and other activities. Company has a strong institutionalized mechanism to recycle products and wastes. One of our units, Central Foundry Forge Plant (CFFP) manufactures Steel Forgings and Casings 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 Micro and Small Enterprises (MSE) through knowledge sharing, training and development and resource mobilization etc. During 2014-15, BHEL has procured about 17% of its total procurement from MSE in compliance to Public Procurement Policy-2012 for MSEs.

### **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 employee as on 31-03-2015: 44,905
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 organizational needs. The no. of workers with Contractors varies from time to time.
3. Number of permanent women employees as on 31-03-2015: 2506
4. Number of permanent employees with disabilities as on 31-03-2015: 935
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 recognized employee association is not available.
7. In 2014-15, the company received a total of 5 complaints of sexual harassment (including 2 brought forward from previous year) and all have been resolved satisfactorily. Further, no complaint of child labour/ forced labour/ involuntary labour/ discriminatory employment has been received.

8. During the year 2014-15, total number of training man-days per employee is 4.20. In non-BHEL personnel training category, 29,494 apprentices (trade, diploma, graduate apprentices) and 10510 vocational trainees were trained in different BHEL manufacturing units. Moreover training on Health Safety & Environment (HSE) aspect is an essential element of our induction training programme. In addition, separate programmes are regularly conducted at all our manufacturing units and project sites to train employees on HSE through internal and external faculty members.

### 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 units regularly organize Vendor Meets specifically for MSEs (including local suppliers) towards capacity and capability building, which also provides opportunities for open communication for mutual benefits and support.

BHEL has clearly identified the disadvantaged, vulnerable poor, needy & marginalized stakeholder in the vicinity of the BHEL manufacturing units / regions / divisions / sites / offices and their concerns are addressed as per BHEL's CSR Policy which is in compliance with section 135 & Schedule VII of the Companies Act, 2013 and Rules made thereunder as well as DPE Guidelines on CSR.

### 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 employee at the workplace. No instance of Human Rights abuse has been reported in the Company.

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 since 2001 through Communication on Progress (CoP). This CoP is web-hosted on UNGC website and can be accessed through the webpage: <https://www.unglobalcompact.org/COPs/active/86321>

The same is available and accessed from: [http://www.bhel.com/healthsafety/global\\_compact.php](http://www.bhel.com/healthsafety/global_compact.php)

### Principle 6: Environment

All major manufacturing units and Power Sector regions of BHEL have well established Environment Management Systems (EMS) accredited to international standard ISO 14001:2004. The organization has a corporate HSE Policy based on which all our manufacturing units and regions have derived their own HSE Policy. The HSE management system provides us an excellent framework for addressing environmental risks proactively by systematically identifying and ensuring compliance of applicable environmental, occupation health and safety related rules and regulations and drives us towards continual improvement in the system. Periodic audits are carried out by the certifying agencies to ensure effective implementation of the established system, including legal compliance. All applicable environmental consents & licenses are maintained and their terms & conditions are complied with.

BHEL has undertaken R&D initiatives towards CO<sub>2</sub> reduction and/or CO<sub>2</sub> capture through Oxy-fuel combustion, Biomass combustion, Ammonia based CO<sub>2</sub> sequestration systems etc.

As a responsible Corporate Citizen, BHEL acknowledges the strong link between Green House Gas emissions and Climate Change. To mitigate the risks of climate change, BHEL is progressively reducing the carbon footprint of its products & services as well as its internal processes across the organization. These efforts include switching over to cleaner fuels, energy conservation / efficiency measures, renewable energy measures like - setting up of grid interactive as well as rooftop solar power plants, using solar street lights, putting solar water heaters etc. Through various energy efficiency and renewable energy measures the organization has reduced its carbon footprint by 2410 MT CO<sub>2</sub>-e during 2014-15. Further, the grid interactive 5 MWp solar plant at our BAP Ranipet has generated 6.232 Million units of green electricity during 2014-15 and reduced the carbon footprint of BHEL considerably. Company has also taken number of projects related to water and energy conservation, tree plantation, waste management, resource conservation etc.

Under the aegis of the National Mission on Clean

Coal Technology, BHEL in association with IGCAR, NTPC and other organizations, 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) was pending as on 31-03-2015. Two show cause/legal notices received during 2014-15 from State PCBs (one each from Punjab PCB and Telangana State PCB) were duly responded to and as such there is no pendency on this account. However, 11 observations, received from Madhya Pradesh PCB during previous years, are pending as on 31-03-2015 for which various projects are under progress.

#### **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 via knowledge sharing. Company actively contributed through public advocacy towards policies meant for strengthening of technology base in country, skill development, development of Indian Power Sector and Indian Manufacturing Industry, and growth of Public Sector Enterprises through better governance.

#### **Principle 8: Inclusive Growth**

BHEL has well-structured organizational set-up, policy & processes through which various CSR programme towards inclusive growth and equitable development are being taken up. The company supports numerous social initiatives across the country by undertaking projects through specialized agency like NGOs, Govt. agencies etc. in line with the Schedule VII of section 135 of the Companies Act 2013. BHEL has undertaken several initiatives in areas such as Health, Education, Swachh Bharat Abhiyan, Environment Protection, Vocational Trainings, Skill Development Programmes, provided Infrastructure solutions and various community development programs which ultimately contributed

to holistic welfare and inclusive growth of the society. Close supervision, monitoring and Impact assessment of CSR initiatives are being carried out rigorously for effective implementation, to provide maximum benefits to the society and fruitfulness of the initiatives undertaken.

During 2014-15, five infrastructure development activities namely Construction / Renovation of Community Center, Installation of Solar Lighting System, Infrastructure improvements in school, Construction of classroom, and Construction of toilets in school were carried out covering more than 15 villages in the vicinity of BHEL's establishments.

#### **Principle 9: Customer Value**

What Gandhi ji said 'He (customer) is the purpose of it (business)' is enshrined in our corporate culture. Customer focus is part of our Vision, Mission and Values statements.

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

Given the diversified and large scale operations of BHEL, customer complaints are handled by respective business units / project divisions. The feedback of customer is taken regularly through customer satisfaction surveys, customers' meets and face-to-face interactions. Company is also offering single IT platform 'Customer Interaction Portal' with regard to customer's complaint and feedback on product or project.

There is no case filed by any stakeholder against the company regarding unfair trade practices, irresponsible advertising and/or anti-competitive behavior during the last five years and pending as on end of financial year i.e., 31-03-2015. ●



## Annexure-V

### R&D and Technological Achievements

#### 5.1 Innovation

Continuous product development is the cornerstone of strategy for meeting the challenges in today's environment. BHEL places strong emphasis on innovation and creative development, which are the important drivers of BHEL's R&D programmes for achieving growth. The R&D efforts of the company are not only aimed at improving the performance and efficiency of the existing products, but also developing new products using state-of-the-art technologies and processes.

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 requirements of Indian customers and internalising manufacturing at its own facilities. Today, with eleven ongoing collaborations, BHEL is focusing on successful adaptation and timely absorption of these technologies.

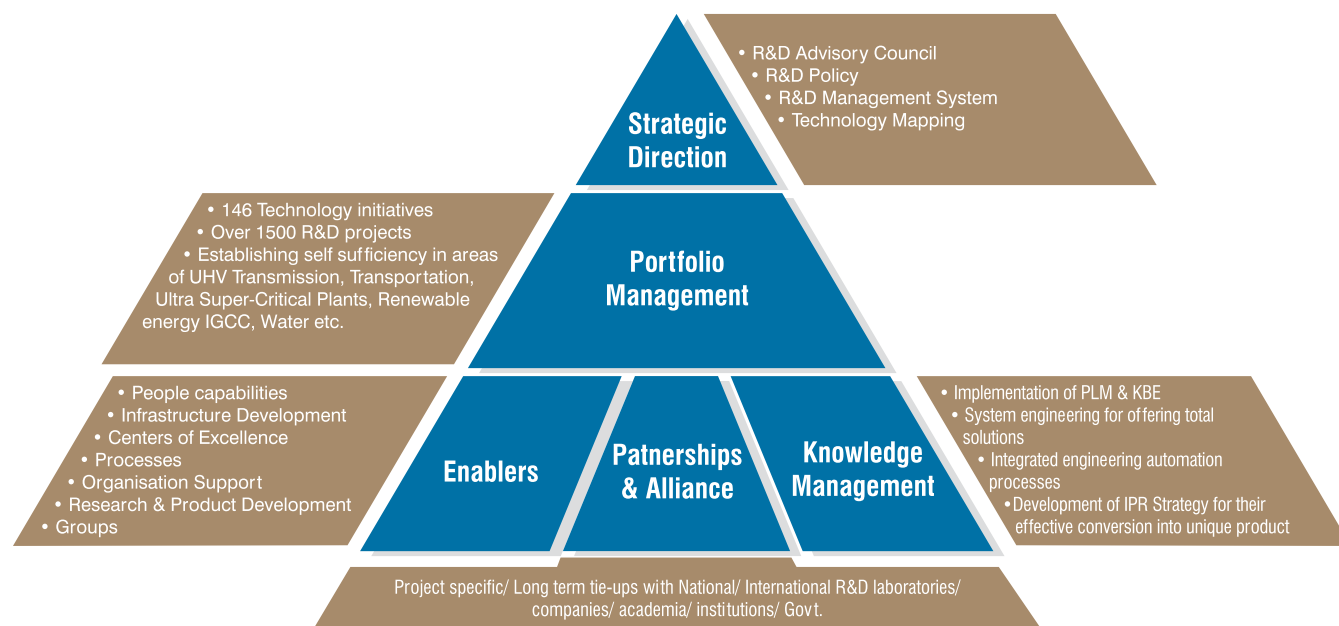
#### Ongoing Technology Collaborations (Partner / Product)

Alstom SA, France	Once through Boilers
Siemens AG, Germany	Steam Turbines, TG, Axial/ lateral condensers
Mitsubishi Heavy Industries Ltd., Japan	Pumps for Boiler Feed, Booster, Cooling Water, Condensate Extraction for supercritical power plants, FGD system
General Electric, USA	Gas Turbines
Oto Melara, Italy	76 mm SRGMs (Super Rapid Gun Mount)
Sheffield Forgemasters UK	Forgings
Metso, Finland	C&I Automation platform
Nuovo Pignone, Italy	Centrifugal Compressors
Vogt Power Intl, USA	HRSG
GE India Industrial	Water Treatment Equipment
TLT GmbH, Germany	Fans



## 5.2 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 focused manner through five pronged approach consisting of Strategic Direction, Portfolio Management, Partnerships & Alliances, Knowledge Management and Enablers.



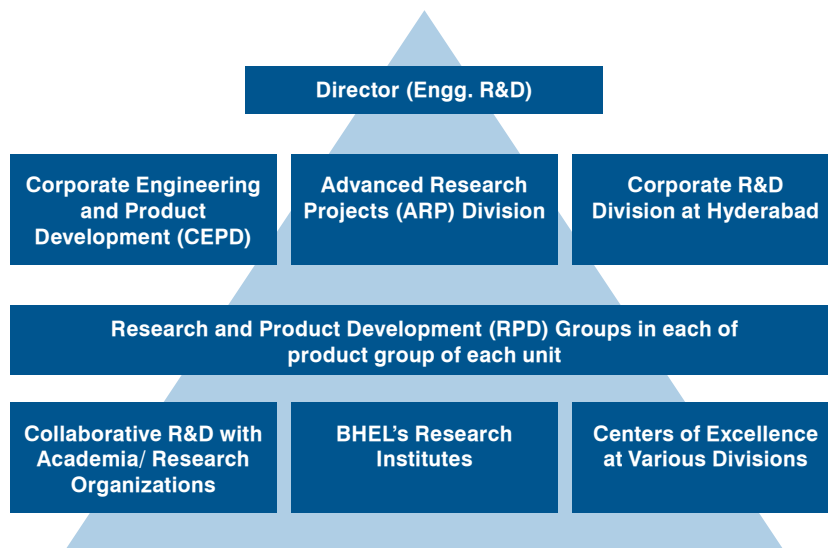
Strategic direction is provided to R&D through a policy framework under the guidance of R&D Advisory Council comprising of reputed Indian scientists, captains of industry and academia. A portfolio of 15 missions leading to 146 technology initiatives further cascaded down to 1500+ projects help the company to build and consolidate capabilities in emerging and existing areas. All these projects are executed and monitored for successful completion within the plan period ending in 2017.

### Major Mission Projects

1. 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 plant with matching BOS (Both Solar PV & Solar Thermal).
3. Develop in house capability for transmission HVDC ( $\pm$  800 kV) transmission products/ substations.
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.
6. Develop & commercialize applications in the area of Emerging technologies like High temperature Superconducting (HTSC) Motor, Fuel cell up to 2 kW rating, efficiency improvement of crystalline silicon solar cells from 16% to 25 %, etc.

## 5.3 R&D Structure

R&D organizational structure of the Company is headed by Director (E, R&D), supported by Corporate Engineering & Product Development (CEPD) at corporate level. Each product group in the Units has a dedicated Research & Product Development (RPD) group well complemented by a centralized Corporate Research & Development Division at Hyderabad.



## Collaborative R&D with Academia/ Research Organizations

- Indian Institute of Science, Bengaluru
- CSIR, New Delhi
- Central Institute for Plastics Engineering & Technology, Bhubaneswar
- Indian Institute of Technology Madras, Chennai
- Indian Institute of Technology, Kanpur
- Indian Institute of Technology, Delhi
- Indian Institute of Technology, Kharagpur
- Indian Institute of Technology, Guwahati
- Indian Institute of Technology, Bombay
- Indian Institute of Technology, Hyderabad
- BHEL R&D Gateway at IIT Madras Research park
- Joining and Welding Research Institute, Japan (JWRI)
- DVS – German Welding Society
- Leibniz University, Hanover, Germany

## BHEL's Research Institutes:

- Pollution Control & Research Institute (PCRI), Haridwar
- Welding Research Institute (WRI), Trichy
- Ceramic Technological Institute (CTI), Bengaluru
- Centre For Electric Transportation (CET), Bhopal
- Amorphous Silicon solar cell Plant, Gurgaon

## Centers of Excellence

- Intelligent Machines and Robotics
- Machine Dynamics
- Compressors & Pumps
- Nano-technology
- UHV Laboratory
- Simulators
- Computational Fluid Dynamics
- Surface Engineering
- Permanent Magnet Machines
- Advanced Transmission Systems
- Power Electronics and IGBT & Controller Technology
- Centre of Excellence for Control and Instrumentation
- Coal Research Centre
- Advanced Fabrication Technology

The Company has structured approach for strengthening R&D infrastructure, consisting of laboratories at Corporate R&D and manufacturing Units, Centres of Excellence, Specialised Research Institutes, etc., well equipped with state-of-the-art R&D infrastructure and benchmarked with the best in the world.

Infusing innovation in engineering processes including managing its knowledge base is identified

as focus area in these centers of innovation & technology development.

Continuing its focus on Knowledge Based Engineering (KBE) for reducing design cycle time and design optimization 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. Currently BHEL has Memorandum of Understanding (MoU) with over 10 leading academic research institutes. Company is also putting in place all enablers like people capabilities, infrastructure, processes and organization support to succeed in its ambitious technology endeavours.

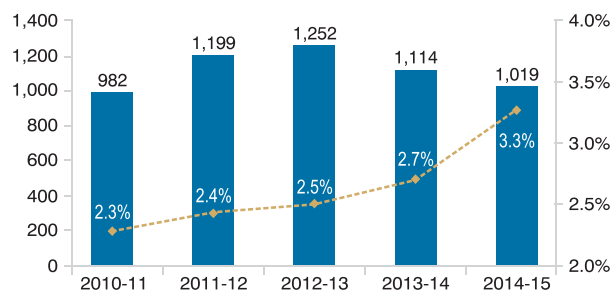
#### 5.4 Achievements during the year

BHEL has recorded significant achievements during the year. The R&D expenditure of the company for the current financial year is ₹ 1018.59 Crore which is 3.29% of the turnover. This also includes the expenditure incurred on R&D efforts gone into major modifications/ improvements in product/ designs against customer requirements which are not covered in R&D projects. The company filed 453 patent and copyright applications filed during the year 2014-15, enhancing the company's intellectual capital to 3010. A total of ₹ 7,300 Crore of the company's total turnover has been achieved from its in-house developed products and services.

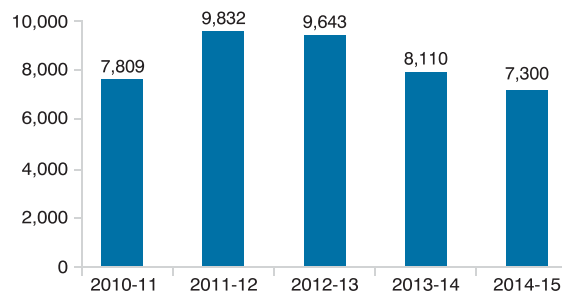
During the year, there have been significant developments / improvements in engineering, processes and products covering various business verticals like Power, Industry, Transportation and Renewables. Some notable achievements are:

- BHEL has developed Fuel flexible Boiler design that caters to blending & co-firing of imported and indigenous coals
- BHEL has developed Hot Re-Heat (HRH) line safety valve with larger orifice area for Once Through Supercritical (OTSC) application which meets all the requirements of ASME Section-I and IBR. The development has led to reduction in number of valves required for 660 and 800 MW OTSC boilers
- BHEL has developed thermal shock resistant and high temperature wear resistant special refractory liners for cold cyclone CFBC boilers. The newly developed liners are thinner (thickness reduced from 70 mm to 25 mm) and more erosion resistant
- BHEL has indigenously developed a cost effective new product "Smart Wall Blowing System" (SWBS) for supercritical boiler

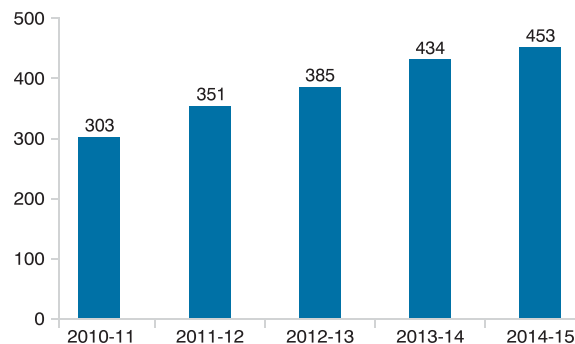
■ R&D expenditure (₹ Crore) — % of TO



■ TO from In-house Development (₹ Crore)



Filing of Patents & Copy Rights (Nos.)



application, replacing a hitherto imported system, thereby reducing dependence on foreign vendors

- BHEL has developed and successfully type tested (at KEMA, Netherland) 36 kV, 40 kA Gas Insulated Switchgear incorporating new vacuum interrupters to handle higher fault current from present level of 25 kA to 40 kA
- To address the business of Extra High Voltage transmission (EHV), BHEL has developed a 765 kV class, 80 MVAR shunt reactor using



state-of-the-art technologies having low levels of electrical losses and vibration. The developed shunt reactor has been supplied to PGCIL- Wardha substation for 2 years field trial

- To meet market requirement, BHEL has developed and tested successfully a new variant of Indoor Air Insulated Switchgear (AIS) suitable for Arc Fault Rating 12kV, 40 kA for 0.2 Sec
- BHEL has developed and tested a new product 765 kV Class, 275 MVA Rating Generator Transformer (GT) using state-of-the-art technologies resulting in lower electrical and core losses



3x275 MVA 765 kV Transformer Bank, developed by BHEL, commissioned at Lalitpur 2

- BHEL has added a new product variant in its existing product range by indigenously developing a new vertical multistage centrifugal pump for condensate drip pump applications in 800 MW supercritical sets which were outsourced earlier
- In line with its focus on energy efficiency, BHEL has developed, manufactured and successfully type tested an efficient and compact variant of 2 pole induction motor of 400 kW, 6.6 kV for centrifugal pump application
- To address the requirement of industrial application, BHEL has developed low cost, light weight compact modular design of 3 MW and 5 MW, 11 kV Alternators suitable for top as well as side mounted coolers and tested successfully as per IEC 60034-1
- BHEL has developed a new product variant of 4x500 kVAR STATCOM for DC oil rig application. The development has led to improvement in utilization of diesel generator

capacity by compensating reactive power and improving quality of voltage & current



4x500 kVAR STATCOM for DC oil rig application developed by BHEL

- BHEL has optimized “emitter diffusion process” employed in the solar PV panel manufacture to improve solar cell efficiency by optimizing various diffusion parameters such as diffusion temperature, gas flows and exhaust rate. This has led to improvement in average cell efficiency to 18.75% resulting in improvement in the wattage of modules

## 5.5 Future focus areas

It is imperative to focus on newer areas to meet the challenges of a changing business scenario while continuing development in traditional areas of business. To meet this objective, BHEL has taken several technology development initiatives covering various business verticals viz. Power, Transportation, Transmission, Solar, Water, Defence and other areas. 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 commercialization, Carbon capture, Solar PV & Thermal, 765/1200 kV Transmission System, GIS up to 765 kV,  $\pm 800$  kV HVDC system, IGBT based Propulsion Systems for higher rating Locos, EMUs, Metro coaches on mission mode. The company is also engaged in development of emerging technologies 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 Section 2(45) of the Companies Act, 2013 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.

The composition of the Board of Directors is as

# DIRECTORS' REPORT



follows:

Particulars	Board Structure	Actual Strength as on 31.3.2015
Chairman & Managing Director	1	1
Whole-time Executive (Functional) Directors	5	5
Part-time Official Directors (Government Nominees) representing the Ministry of Heavy Industries & Public Enterprises, Government of India	2	2
Part-time Non-official (Independent) Directors	8	2
<b>Total</b>	<b>16</b>	<b>10</b>

As on 31<sup>st</sup> March, 2015, there existed six 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.

## ii. Attendance of each Director at the Board Meetings held during 2014-15 and the last AGM

Director's Name S/Shri	No. of Board Meetings		Last AGM (held on 19.09.2014)
	Held	Attended	

### EXECUTIVE DIRECTORS

B. Prasada Rao, Chairman & Managing Director	9	9	Yes
P.K. Bajpai, Director (Finance)	9	9	Yes
R. Krishnan, Director (HR)	9	9	Yes
W.V.K. Krishna Shankar, Director (IS&P)	9	9	Yes
Atul Sobti #, Director (Power)	9	9	Yes
T.N. Veeraraghavan*, Director (E,R&D) (w.e.f. 07.01.2015 A.N.)	1	1	-

### PART-TIME OFFICIAL DIRECTORS – GOVT. NOMINEES

S.K. Bahri, Additional Secretary & Financial Adviser, Department of Industrial Policy and Promotion, Ministry of Commerce & Industry	9	7	Yes
Rajesh Kumar Singh*, Joint Secretary, Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises (w.e.f. 22.12.2014)	2	1	-
Ambuj Sharma, Additional Secretary, Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises (up to 21.12.2014)	7	7	Yes

### PART-TIME NON-OFFICIAL (INDEPENDENT) DIRECTORS

Ms. Harinder Hira (w.e.f. 08.05.2014)	8	8	Yes
--	---	---	-----

A.N. Roy (w.e.f. 27.08.2014)	4	3	Yes
---------------------------------	---	---	-----

# held additional charge of Director (E,R&D) w.e.f. 01.03.2014 up to 07.01.2015 F.N.

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

**iii. Details of Directorships, Committee Memberships and Committee Chairmanship in other companies as on 31<sup>st</sup> March, 2015**

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.	<b>Audit Committee:</b> Dada Dhuniwale Khandwa Power Ltd. (Chairman)
Atul Sobti Director (Power)	1. NTPC BHEL Power Projects Pvt. Ltd. 2. Raichur Power Corporation Ltd.	-NIL-
T.N. Veeraraghavan Director (E, R&D)	-NIL-	-NIL-
S.K. Bahri Part-time Official Director	1. Heavy Engineering Corporation Ltd. 2. H.M.T. Ltd.	<b>Audit Committee:</b> Heavy Engineering Corporation Ltd. (Member)
Rajesh Kumar Singh Part-time Official Director	1. Engineering Projects (India) Ltd. 2. Scooters India Ltd. 3. Andrew Yule & Co Ltd. 4. Tide Water Oil Co India Ltd.	<b>Audit Committee:</b> 1. Tide Water Oil Co India Ltd. (Member) 2. Engineering Projects (India) Ltd. (Member)
Ms. Harinder Hira Part -time Non-Official Director	-NIL-	-NIL-
A.N. Roy Part -time Non-Official Director	1. India Venture Advisors Pvt. Ltd. 2. HDFC Bank Ltd. 3. Vandana Foundation (Sec 8 Company) 4. GlaxoSmithKline Pharmaceuticals Ltd. 5. Mayar Infrastructure Development Pvt. Ltd. 6. Skills Academy Pvt. Ltd.	<b>Stakeholders' Relationship Committee:</b> HDFC Bank Ltd. (Chairman)

*\*Only Chairmanship/ Membership of the Audit Committee and Stakeholders' Relationship Committee has been considered.*



No Director of the Company holds office at the same time as Director in more than twenty (20) companies. No Director of the Company is a member in more than ten (10) Committees or is a Chairman of more than five (5) Committees across all companies in which he is a Director.

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

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 quarter 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 5, 2014         | (ii) May 12, 2014      |
| (iii) May 29, 2014        | (iv) July 14, 2014     |
| (v) August 12, 2014       | (vi) November 14, 2014 |
| (vii) December 11, 2014   | (viii) January 7, 2015 |
| (ix) February 12-14, 2015 |                        |

#### **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 Independent Directors are part of important

Committees constituted by the Board such as the Audit Committee, Nomination & Remuneration Committee and CSR Committee. In terms of Companies Act, 2013 & Clause 49 of the Listing Agreement, the Audit Committee and the Nomination & Remuneration Committee are chaired by an Independent Director and functions within their respective defined terms of references.

Further, in line with DPE OM dated 28<sup>th</sup> December, 2012 on Model Role & Responsibilities of Non-Official Directors for CPSEs, the Board had constituted a Committee of Independent Directors. The said Committee is in compliance with the requirements of Clause 49 of Listing Agreement and the Code of Independent Directors under Companies Act, 2013. The minutes of all the Board Level Committee Meetings are circulated and discussed in the Board Meetings. Details regarding familiarization programme of Independent Directors are available on the website of the Company 'www.bhel.com' at web link : [http://www.bhel.com/investor\\_relations/pdf/familiriazation\\_progrm\\_for\\_IDs.pdf](http://www.bhel.com/investor_relations/pdf/familiriazation_progrm_for_IDs.pdf)

#### **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 meetings:

- 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 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
- Quarterly details of foreign exchange exposures and the steps taken by management to limit the issues of adverse exchange rate movement, if material
- 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
- Significant Capital Investment proposals
- Changes in significant accounting policies & practices and reasons for the same
- 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 (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.

#### **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' was laid down for all Board Members and Senior Management personnel and the same was revised in line with changes in the regulatory framework & changing business dynamics and to incorporate other relevant provisions to strengthen the Code. Pursuant to revised Clause 49(II)(E) of the Listing Agreement with the Stock Exchanges, the Board of Directors of BHEL in its 465<sup>th</sup> meeting held on 14<sup>th</sup> November, 2014 revised and approved the "Code of Business Conduct & Ethics for Board Members and Senior Management Personnel" of the Company. The Code encompasses:

- General Moral Imperatives;
- Specific Professional Responsibilities; and
- Specific Additional Provisions 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](http://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 Board of Directors. The Charter also articulates our

corporate governance objectives and approach.

## xii. CEO/CFO certification

CEO / CFO certification pursuant to Clause 49(IX) of the Listing Agreement is enclosed at Annexure-II of the Directors Report.

## 6.3 Board Level Audit Committee

### i. Terms of reference

The terms of reference of the Board Level Audit Committee specified by the Board are in conformity with the requirements of Section 177 of the Companies Act, 2013 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. Recommendation for appointment, remuneration and terms of appointment of auditors of the company;
3. Approval of payment to statutory auditors for any other services rendered by the statutory auditors;
4. Reviewing, with the management, the annual financial statements and auditor's report thereon before submission to the board for approval, with particular reference to:
  - i. Matters required to be included in the Director's Responsibility Statement to be included in the Board's report in terms of clause (c) of sub-section 3 of section 134 of the Companies Act, 2013;
  - ii. Changes, if any, in accounting policies and practices and reasons for the same;
  - iii. Major accounting entries involving estimates based on the exercise of judgment by management;
  - iv. Significant adjustments made in the financial statements arising out of audit findings;
  - v. Compliance with listing and other legal requirements relating to financial statements;
  - vi. Disclosure of any related party transactions;
- vii. Qualifications in the draft audit report;
5. Reviewing, with the management, the quarterly financial statements and auditor's report thereon before submission to the board for approval;
6. Reviewing, with the management, the statement of uses/ application of funds raised through an issue (public issue, rights issue, preferential issue, etc.), the statement of funds utilized for purposes other than those stated in the offer document/ prospectus/ notice and the report submitted by the monitoring agency monitoring the utilization of proceeds of a public or rights issue, and making appropriate recommendations to the Board to take up steps in this matter;
7. Review and monitor the auditor's independence and performance, and effectiveness of audit process;
8. Approval or any subsequent modification of transactions of the company with related parties;
9. Scrutiny of inter-corporate loans and investments;
10. Valuation of undertakings or assets of the company, wherever it is necessary;
11. Evaluation of internal financial controls and risk management systems;
12. Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems;
13. 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;
14. Discussion with internal auditors of any significant findings and follow up there on;
15. 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;
16. 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;

17. 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;
18. To review the functioning of the Whistle Blower/ Vigil mechanism;
19. 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.
20. Discussion with Statutory Auditors/ Internal Auditors periodically about internal control systems.
21. To seek professional advice from external sources in appropriate cases, wherever required;
22. The Audit Committee shall also review the following information:
  - a. Management discussion and analysis of financial condition and results of operations;
  - b. Statement of significant related party transactions;
  - c. Management letters / letters of internal control weaknesses issued by the statutory auditors; and
  - d. Internal audit reports relating to internal control weaknesses;
23. Carrying out any other function as is mentioned in the terms of reference of the Audit Committee.

## ii. Composition of Committee, name of Members & Chairperson

The Audit Committee comprises of 2/3<sup>rd</sup> members as 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 w.e.f. 30<sup>th</sup> December, 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
A.N. Roy (Part-time Non-Official Director)	Chairperson (w.e.f. 30.12.2014)	1	1
	Member (w.e.f. 24.09.2014)	1	1
Rajesh Kumar Singh (Part-time Official Director)	Member (w.e.f. 30.12.2014)	1	1
S.K. Bahri (Part-time Official Director)	Member (up to 23.09.2014)	3	3
Ambuj Sharma (Part-time Official Director)	Member (up to 21.12.2014)	4	4
Ms. Harinder Hira (Part-time Non-Official Director)	Chairperson (w.e.f. 12.05.2014) (up to 29.12.2014)	4	4
	Member (w.e.f. 30.12.2014)	1	1

Director (Finance) will be permanent invitee in the meeting. Company Secretary shall act as Secretary to the Committee.

Head of Internal Audit and a representative of the Statutory Auditor may be present as invitees for the meetings of the Audit Committee. The Auditors of the Company and the Key Managerial Personnel shall have a right to be heard in the meetings of the Audit Committee when it considers the Auditor's Report but shall not have the right to vote.

## iii. Meetings and Attendance

The Audit Committee met five times on 29<sup>th</sup> May, 2014, 14<sup>th</sup> July, 2014, 12<sup>th</sup> August, 2014, 14<sup>th</sup> November, 2014, and 12<sup>th</sup> February, 2015 during the year 2014-15. The detail of 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 are paid to Independent Directors 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.

## ii. Terms of reference

The Board in its meeting held on 2<sup>nd</sup> January, 2014, decided to merge the erstwhile Remuneration Committee and Remuneration Committee on PRP and constituted a single "Remuneration Committee" with the following terms of reference.

- 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.
- 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.
- Finalization 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.
- Finalization of the criteria of making payments to Non-Executive Directors.
- 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.
- To decide the bonus/ variable pay pool and policy for its distribution across the executives and non-unionised supervisors.
- Carrying out any other function related to the terms of reference of the Remuneration Committee.

## iii. Composition of Committee, names of members & Chairperson

The Remuneration Committee was last reconstituted w.e.f. 30<sup>th</sup> December, 2014. Up to 29<sup>th</sup> March, 2015, the Remuneration Committee comprised of the following directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
Ms. Harinder Hira (Part-time Non-Official Director)	Chairperson (w.e.f. 05.08.2014)	1	1
S.K. Bahri (Part-time Official Director)	Member (w.e.f. 05.08.2014)	1	1
Rajesh Kumar Singh (Part-time Official Director)	Member (w.e.f. 30.12.2014)	-	-
Ambuj Sharma (Part-time Official Director)	Member (up to 21.12.2014)	1	1
Shri A.N. Roy (Part-time Non-Official Director)	Member (w.e.f. 24.09.2014)	1	1

Director (HR) will be permanent invitee to the meeting. Company Secretary shall act as Secretary to the Committee.

#### iv. Meetings and Attendance

The Committee met once on 13<sup>th</sup> November, 2014. The detail of attendance of each member is given in the above table.

In line with the requirements of Companies Act, 2013 and revised Clause 49 of the Listing Agreement, the Board of Directors w.e.f. 30<sup>th</sup> March, 2015, merged the Board Level Nomination Committee & the Remuneration Committee and renamed the merged committee as the Nomination & Remuneration Committee. The terms of reference and other details of the “Nomination & Remuneration Committee” are given at Point 6.5 of this Report.

### 6.5 Nomination and Remuneration Committee

#### i. Terms of Reference

In line with the requirements of Section 178 of the Companies Act, 2013 and revised Clause 49 of the Listing Agreement, the Board constituted the Nomination & Remuneration Committee (NRC) w.e.f. 30<sup>th</sup> March, 2015 having the following terms of reference:

- a) To identify persons who are qualified to become directors and who may be appointed in senior management in accordance with the criteria laid down and recommend to the Board for their appointment and removal and to carry out evaluation of every director's performance. Senior Management means personnel of the company who are members of its core management team excluding Board of Directors comprising all members of management one level below the executive directors, including the functional heads.
- b) To formulate the criteria for determining qualifications, positive attributes and independence of a director and recommend to the Board a policy, relating to the remuneration of the directors, key managerial personnel and other employees in compliance with the provisions of Act/ LA/ DPE guidelines.
- c) Formulation of criteria for evaluation of Independent Directors and the Board.
- d) Devising a policy on Board diversity.
- e) To recommend to the Board nomination of BHEL officials in the Boards of its subsidiaries and other government organizations which are required to be approved by the Board of BHEL before further submission to DHI.
- f) 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.
- g) 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.
- h) Finalization 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.
- i) Approval of fixed component and performance linked incentives based on the performance criteria.
- j) Finalization of the criteria of making payments to Non-Executive Directors.
- k) 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.
- l) To decide the bonus/ variable pay pool and policy for its distribution across the executives and non-unionised supervisors.
- m) Carrying out any other function related to the terms of reference of the NRC.

## ii. Composition of Committee, name of Members & Chairperson

The Committee comprises of the following directors:

Name of the Director S/Shri	Position
<b>Ms. Harinder Hira</b> (Part-time Non-Official Director)	Chairperson
<b>S.K. Bahri</b> (Part-time Official Director)	Member
<b>Rajesh Kumar Singh</b> (Part-time Official Director)	Member
<b>A.N. Roy</b> (Part-time Non-Official Director)	Member

Director (HR) will be permanent invitee to the meeting. Company Secretary shall act as Secretary to the Committee.

## iii. Meetings and Attendance

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

## iv. Details of remuneration of Functional Directors during the year 2014-15 are given below:-

(In ₹)

Sl. No.	Name of the Director S/ shri	Salary	Benefits	Performance Linked Incentives	Total	Service Contract/ Notice Period Severance Fee
1.	B. Prasada Rao	2703650	1083240	785506	4572397	--
2.	P.K. Bajpai	2425883	1047943	502206	3976032	Liable to retire by rotation
3.	R. Krishnan	2289061	1030884	479060	3799005	Liable to retire by rotation
4.	W.V.K. Krishna Shankar	2363516	1722741	346291	4432548	Liable to retire by rotation
5.	Atul Sobti	2616373	360558	163709	3140640	Liable to retire by rotation
6.	T.N. Veeraraghavan (w.e.f. 07.01.2015)	546627	121544	0	668171	Liable to retire by rotation

## v. Details of payments made to Independent Directors during the year 2014-15 are given below:-

(In ₹)

Name of the Independent Directors	Sitting Fees		Total
	Board Meeting	Committee Meeting	
Ms. Harinder Hira	1,60,000/-	1,95,000/-	3,55,000/-
Shri A.N. Roy	60,000/-	60,000/-	1,20,000/-

Independent Directors were entitled for sitting fee @ ₹ 20,000/- per Board Meeting and ₹ 15,000/- per Board Level Committee Meeting attended by them. They are not entitled to Stock Option.

## vi. Equity Shares held by Directors

Except as stated hereunder, none of the Directors, hold any Equity Shares in BHEL (as on 31<sup>st</sup> March, 2015):

Name of the Director S/Shri	No. of shares held
B. Prasada Rao	2000
W.V.K. Krishna Shankar	100
Atul Sobti	1500
T.N. Veeraraghavan	500

The Company has not issued any stock options during the year 2014-15.

## 6.6 Shareholders' Committees

### 6.6.1 Share Transfer Committee

The Board constituted a Share Transfer Committee on 25<sup>th</sup> March, 1992, which comprises Chairman & Managing Director, Director (Power) and Director (Finance) of the Company. The Board of Directors revised the terms of reference of the Committee w.e.f. 1<sup>st</sup> August, 2014. The Share Transfer Committee will consider and approve all share related issues, other than transfer of shares viz. transposition, sub-division, consolidation, issue of duplicate share certificate etc. in physical mode.

### Meetings during 2014-15

The Share Transfer Committee met 16 times during the year. The minutes of the Share Transfer Committee meetings are periodically placed before the Board of Directors.

### 6.6.2 Stakeholders Relationship Committee

#### i. Terms of Reference

The Board of Directors on 12<sup>th</sup> May, 2014 reconstituted the Shareholders'/Investors' Grievance Committee as the Stakeholders Relationship Committee in line with the requirements of Companies Act, 2013 and revised Clause 49 of the Listing Agreement. The Committee shall specifically look into the redressal of grievances of shareholders, debenture holders and other security holders including complaints related to transfer of shares, non-receipt of balance sheet, non-receipt of declared dividends etc.

## ii. Composition of Committee, name of Members & Chairperson

The Stakeholders Relationship Committee was last reconstituted w.e.f. 30<sup>th</sup> December, 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
Rajesh Kumar Singh (Part-time Official Director)	Chairperson (w.e.f. 30.12.2014)	1	1
Ambuj Sharma (Part-time Official Director)	Chairperson (up to 21.12.2014)	3	3
Director (Finance)	Member	4	4
Director (HR)	Member	4	4

Company Secretary shall act as Secretary to the Committee.

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 29<sup>th</sup> May, 2014, 15<sup>th</sup> July, 2014, 13<sup>th</sup> November, 2014 and 28<sup>th</sup> January, 2015 during the year under review. The detail of attendance of each member is given in the above table.

### Detail of shareholders' complaints

As reported by Karvy Computershare Private Limited (RTA) to SEBI, 759 complaints were received from the shareholders during the year under review and all complaints were redressed up to 31<sup>st</sup> March, 2015. No complaint was pending at the end of the period under report.

## 6.7 Board Level Committee for Corporate Social Responsibility

### i. Terms of Reference

Pursuant to the DPE Guidelines on Corporate Social Responsibility for CPSEs, the Board constituted the Board Level Apex Committee for CSR on 25<sup>th</sup> November, 2010 for proper & periodic monitoring of CSR activities. The



Committee is presently christened as the Board Level Committee for Corporate Social Responsibility. The Board of Directors in its meeting held on 12<sup>th</sup> May, 2014 reconstituted the Committee in line with requirements of Companies Act, 2013. The terms of reference of the Committee are as under:

1. Formulation and recommendation to the Board the Corporate Social Responsibility Policy which shall indicate the activities to be undertaken by the company as specified in Schedule VII to the Companies Act, 2013;
2. Recommendation of the Projects, Programs and amount of expenditure to be incurred on the activities referred to in clause (1); and
3. Monitoring the Corporate Social Responsibility activities of the company from time to time.
4. Ensuring compliance with guidelines on Corporate Social Responsibility and Sustainable Development issued by the Government of India from time to time.

## ii. Composition of Committee, name of Members & Chairperson

The Committee was last reconstituted w.e.f. 30<sup>th</sup> December, 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
Ms. Harinder Hira (Part-time Non-official Director)	Chairperson (w.e.f. 12.05.2014)	6	6
Rajesh Kumar Singh (Part-time Official Director)	Member (w.e.f. 30.12.2014)	1	1
Ambuj Sharma (Part-time Official Director)	Member (up to 21.12.2014)	5	5
Director (Finance)	Member	6	6
Director (HR)	Member	6	6

Head (CSR)-ED/GM In-charge, Corporate Office would be Permanent Invitee. Company Secretary

shall act as Secretary to the Committee.

## iii. Meetings and Attendance

The Committee met six times during the year on 15<sup>th</sup> July, 2014, 11<sup>th</sup> August, 2014, 18<sup>th</sup> September, 2014, 13<sup>th</sup> November, 2014, 11<sup>th</sup> December, 2014 and 28<sup>th</sup> January, 2015. The detail of attendance of each member is given in the above table.

## 6.8 HR Committee

### i. Terms of Reference

The Board constituted the HR Committee on 31<sup>st</sup> May, 2006 specifically to look into the following matters:

- a. Review of present policies with respect to promotion and reward/ incentive to the Executives.
- b. 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 & Chairperson

The HR Committee was last reconstituted on 16<sup>th</sup> July, 2012. The Committee comprises of the following directors:

Name of the Director S/ Shri	Position
Ambuj Sharma (Part-time Official Director)	Member (up to 21.12.2014)
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.

## 6.9 Committee of Independent Directors

### i. Terms of Reference

The Board, in line with DPE OM dated 28<sup>th</sup> December, 2012 on Model Role & Responsibilities of Non-Official Directors for CPSEs, constituted a Committee of Independent Directors, which is also in compliance with the requirements of Schedule

IV of the Companies Act, 2013 and Clause 49(II)(B)(6) of the Listing Agreement.

## ii. Composition of Committee, name of members & Chairperson

The Committee comprises of the following Independent Directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
Ms. Harinder Hira (Part-time Non-official Director)	Chairperson & Lead Independent Director	1	1
Shri A.N. Roy (Part-time Non-official Director)	Member	1	1

## iii. Meetings and Attendance

The Committee met once during the year on 25<sup>th</sup> March, 2015. The detail of attendance of each member is given in the above table.

## 6.10 Board Level Nomination Committee

### i. Terms of Reference

The Board constituted the Nomination Committee on 22<sup>nd</sup> March, 2013 to recommend to the Board nomination of BHEL officials in the Boards of its subsidiaries and other government organizations which are required to be approved by the Board of BHEL before further submission to DHI.

## ii. Composition of Committee, name of members & Chairperson

Up to 29<sup>th</sup> March, 2015, the Committee comprised of the following Directors:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
Director (E,R&D)	Chairperson (w.e.f. 12.02.2015)	1	1
Director (Finance)	Member	1	1
Director (HR)	Member	1	-

Head/ (HR) shall be a Permanent Invitee. Company

Secretary shall act as Secretary to the Committee.

## iii. Meetings and Attendance

The Committee met once during the year on 13<sup>th</sup> March, 2015. The detail of attendance of each member is given in the above table.

In line with the requirements of Section 178 of the Companies Act, 2013 and revised Clause 49 of the Listing Agreement, the Board of Directors w.e.f. 30<sup>th</sup> March, 2015, merged the Board Level Nomination Committee with the Remuneration Committee and renamed the merged committee as the Nomination & Remuneration Committee.

## 6.11 Board Level Risk Management Committee

### i. Terms of Reference

In line with revised Clause 49 of the Listing Agreement, the Board of Directors on 14<sup>th</sup> November, 2014 constituted the Board Level Risk Management Committee. The terms of reference of the Committee are as under:

- To review the Company's risk governance structure, risk assessment and risk management frame work, guidelines, policies and processes for risk assessment and risk management.
- To review Company's risk mitigation strategies relating to identified key risks as well as the processes for monitoring and mitigating such risks.
- Report to the Board on the Committee's activities for information and recommend proposed changes, if any, to the Board for approval.

## ii. Composition of Committee, name of Members & Chairperson

The Committee comprises of the following members:

Name of the Director S/ Shri	Position	No. of Meetings held during their tenure	No. of Meetings Attended
AS & FA, DIPPP (Part-time Official Director)	Chairperson	1	1
Director (Finance)	Member	1	1

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Director (IS&P)	Member	1	1
Director (Power)	Member	1	1
Chairman, Risk Management Steering Committee	Member	1	-
Chief Risk Officer	Member & Convener	1	1

## iii. Meetings and Attendance

The Committee met once during the year on 22<sup>nd</sup> January, 2015. The detail of attendance of each member is given in the above table.

## 6.12 General Meetings

### i. Location and time of last three AGMs:

Year	Location	Date	Time
FY 2011- 12 (48 <sup>th</sup> AGM)	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110001	19 <sup>th</sup> September, 2012	10.00 a.m.
FY 2012- 13 (EGM)	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110001	27 <sup>th</sup> June, 2013	11.00 a.m.
FY 2012- 13 (49 <sup>th</sup> AGM)	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110001	20 <sup>th</sup> September, 2013	10.00 a.m.
FY 2013- 14 (50 <sup>th</sup> AGM)	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110001	19 <sup>th</sup> September, 2014	10.00 a.m.

### ii. Details of Special resolutions passed in previous three AGMs and EGM

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 27<sup>th</sup> 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<sup>th</sup> August, 2013. BHPVL stands merged with BHEL from 30<sup>th</sup> August, 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.

## 6.13 Disclosures

### i. 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. 17 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

In pursuance of the DPE Guidelines on Corporate Governance for Central Public Sector Enterprises and clause 49 of the Listing Agreement between listed Companies & the Stock Exchanges and section 177 of the Companies Act, 2013, a Whistle Blower Policy for BHEL has been approved by the Board of Directors in its 464<sup>th</sup> meeting held on 12.8.2014.

Accordingly, the detailed Whistle Blower Policy of the Company was formulated and it was issued by Corporate HR and the Competent Authorities in this regard have been specified therein. A copy of the Whistle Blower Policy has also been placed on the website of the Company '[www.bhel.com](http://www.bhel.com)'.

The complaints received under the Policy are being processed as per the guidelines in this regard.

**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 & revised Clause 49 of the Listing Agreement have been duly complied with by the Company except those relating to required number of Independent Directors on the Board.

With regard to non-mandatory requirements under revised Clause 49, BHEL is already in the regime of unqualified financial statements. Other non-mandatory requirements will be gradually complied with on need basis by the company.

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.

No expenditure has been debited in 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. 2012-13, 2013-14 & 2014-15.

**vi. Risk Management**

In pursuance with 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) 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.

In line with revised Clause 49 of Listing Agreement, a Board Level Risk Management Committee (BLRMC) was constituted in Nov'14 with assigned responsibility of reviewing, monitoring, guiding & approving risk policy and Risk Management System/Plan. Besides this, Risk Management Steering Committee (RMSC), having Executive Directors/ Functional Heads from Corporate Functions and Business Sectors as members is responsible for adopting and getting implemented the RM framework across the organization. Chief Risk Officer (CRO) is the convener of RMSC and is responsible for reporting to BLRMC/Board based on deliberation in RMSC.

In addition, 35 Risk Management Committees (RMC) have been formed at the Business Sectors/ Regions/ Plants/ Corporate Functions level, in the RM Organization 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 2014-15, the Company level Top 10 risks were cascaded into further 24 nos. of measureable risk-parameters and their Likelihood & Impact scale identified. These measurable risks were pilot assessed based on past data so as to capture the organization risk level including prioritisation. The suitable Risk Responses are being taken to mitigate/ minimize these top risks.

**vii. Auditor's certificate on Corporate Governance**

Auditor's certificate on Corporate Governance is enclosed.

**6.14 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 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).

Other information pertaining to shareholders viz. details of unpaid dividend, Annual Reports etc., are also displayed on the Company's website. Official news releases including important events like receipt of major orders, major project commissioning are posted on the website of the Company and simultaneously sent to the Stock Exchanges. The transcripts of investors' conferences and presentations made to institutional investors/ analysts, if any, are also uploaded on the website of the Company.

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.

## 6.15 General Shareholder Information

### i. AGM

Date	Time	Venue
22 <sup>nd</sup> September, 2015	10.00 AM	FICCI AUDITORIUM, Barakhamba Road, (Tansen Marg), New Delhi-110 001

- ii. **Financial year** : 1<sup>st</sup> April, 2014 to 31<sup>st</sup> March, 2015
- iii. **Dates of Book Closure** : 16<sup>th</sup> September, 2015 to 22<sup>nd</sup> September, 2015 (Both days inclusive)
- iv. **Dividend payment date** : On or before 21<sup>st</sup> October, 2015

### v. Dividend History:

BHEL has been following “**Stability cum Growth**” policy with regard to dividend payment. The details of dividend paid by BHEL and the amount of unclaimed dividend as on 31.03.2015 are summarized as under:

Year	Rate of Dividend	Total Amount of Dividend Paid (₹ in Crore)	Date on which Dividend was Declared	Unclaimed Dividend as on 31.03.2015 (in ₹)
2007-2008 (Interim)	90%	440.57	25.01.2008*	Already transferred to Investor Education & Protection Fund
2007-2008 (Final)	62.50%	305.95	17.09.2008	1796284 <sup>#</sup>
2008-2009 (Interim)	90%	440.57	29.01.2009*	26342824 <sup>\$</sup>
2008-2009 (Final)	80%	391.62	17.09.2009	1723176
2009-2010 (Interim)	110%	538.47	21.01.2010*	2887125

<b>2009-2010 (Final)</b>	123%	602.11	17.09.2010	2678148
<b>2010-2011 (Interim)</b>	132.50%	648.62	15.03.2011*	2405487
<b>2010-2011 (Final)</b>	179%	876.24	20.09.2011	3207293
<b>2011-2012 (Interim)</b>	136%	665.75	02.03.2012*	2890275
<b>2011-2012 (Final)</b>	184%	900.72	19.09.2012	4824565
<b>2012-2013 (Interim)</b>	106%	518.89	01.02.2013*	3288300
<b>2012-2013 (Final)</b>	164.5%	805.26	20.09.2013	4281153
<b>2013-2014 (Interim)</b>	65.5%	320.64	05.02.2014*	1679431
<b>2013-2014 (Final)</b>	76%	372.04	19.09.2014	1784998
<b>2014-2015 (Interim)</b>	27%	132.17	12.02.2015*	1075575

\* 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 23.10.2015

\$ proposed to be transferred to Investor Education and Protection Fund (IEPF) on 06.03.2016

Number of shares of BHEL were 48.952 Crores of ₹ 10/- each, which became 244.76 Crore shares of ₹ 2/- each post-split w.e.f. 04.10.2011.

In case a shareholder has not been able to receive dividend for any of the last seven years and the same 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](http://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 2014-15 has been paid:

<b>Name of the Stock Exchange</b>	<b>Stock Code</b>
1. Bombay Stock Exchange Limited Phiroze Jeejeebhoy Towers, Dalal Street, Mumbai - 400 001	500103
2. National Stock Exchange of India Limited Exchange Plaza, Plot no. C/1, Block - G, Bandra Kurla Complex, Bandra (East), Mumbai - 400 051	BHEL

#### (b) Payment of Annual Custodian Fee to Depositories

The Annual Custodian fee has been paid to NSDL and CDSL for the financial year 2014-15.

#### 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" Scrips 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:-**

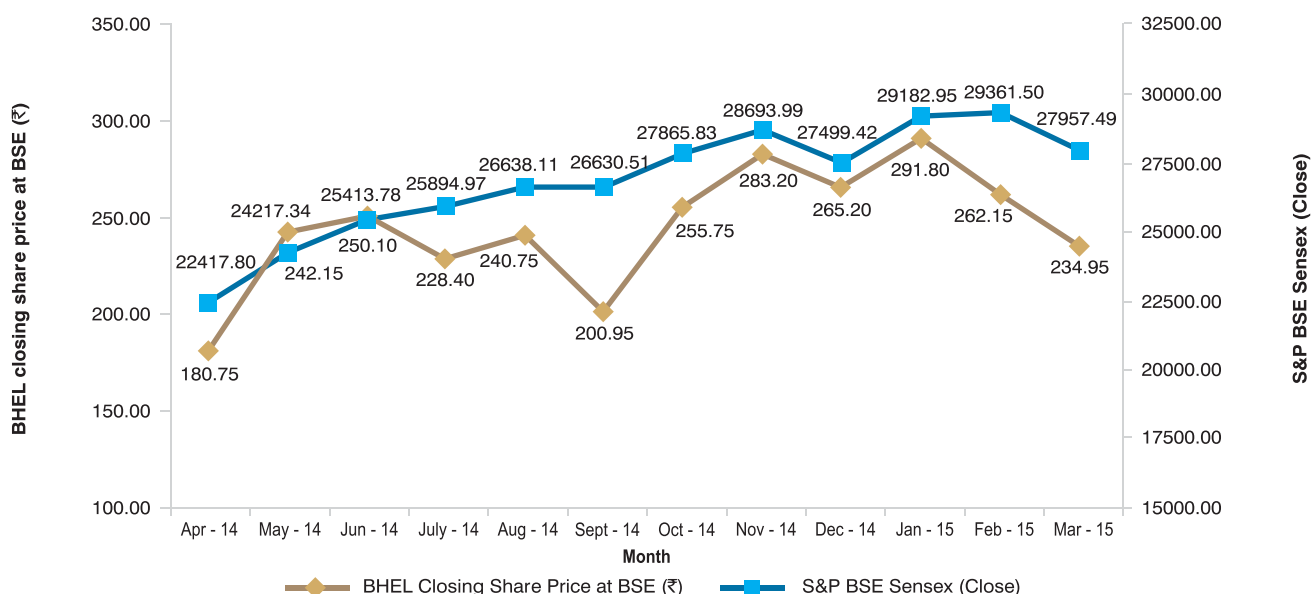
**BHEL Vs. S&P BSE Sensex**

High, Low and Closing market price of BHEL shares on the **Bombay Stock Exchange Ltd. (BSE)** vis-à-vis **S&P BSE Sensex**, No. of shares traded and Turnover during each month in last financial year ended March 31, 2015 are summarized as under:

Month	BHEL share price at BSE (₹)			S&P BSE Sensex			No. of shares traded	Turnover (₹ in Lakh)
	High	Low	Close	High	Low	Close		
Apr-14	198.15	173.00	180.75	22939.31	22197.51	22417.80	8660687	16026.59
May-14	291.50	176.90	242.15	25375.63	22277.04	24217.34	27676879	67157.96
Jun-14	266.55	232.35	250.10	25725.12	24270.20	25413.78	16857812	42201.68
Jul-14	266.40	220.10	228.40	26300.17	24892.00	25894.97	14006654	33842.05
Aug-14	243.80	205.00	240.75	26674.38	25232.82	26638.11	11420980	25671.02
Sep-14	243.45	199.00	200.95	27354.99	26220.49	26630.51	11468087	25357.45
Oct-14	258.40	195.10	255.75	27894.32	25910.77	27865.83	12658011	29035.21
Nov-14	287.00	236.25	283.20	28822.37	27739.56	28693.99	10735675	27699.96
Dec-14	282.95	240.55	265.20	28809.64	26469.42	27499.42	10537475	27385.69
Jan-15	297.35	250.25	291.80	29844.16	26776.12	29182.95	8322596	22785.73
Feb-15	299.50	251.00	262.15	29560.32	28044.49	29361.50	11117755	29820.37
Mar-15	278.20	227.95	234.95	30024.74	27868.21	27957.49	7960011	20235.71

Source: [www.bseindia.com](http://www.bseindia.com)

**Performance of BHEL Closing Share Price at BSE (₹) vs. S&P BSE Sensex (Close) during 2014-15**



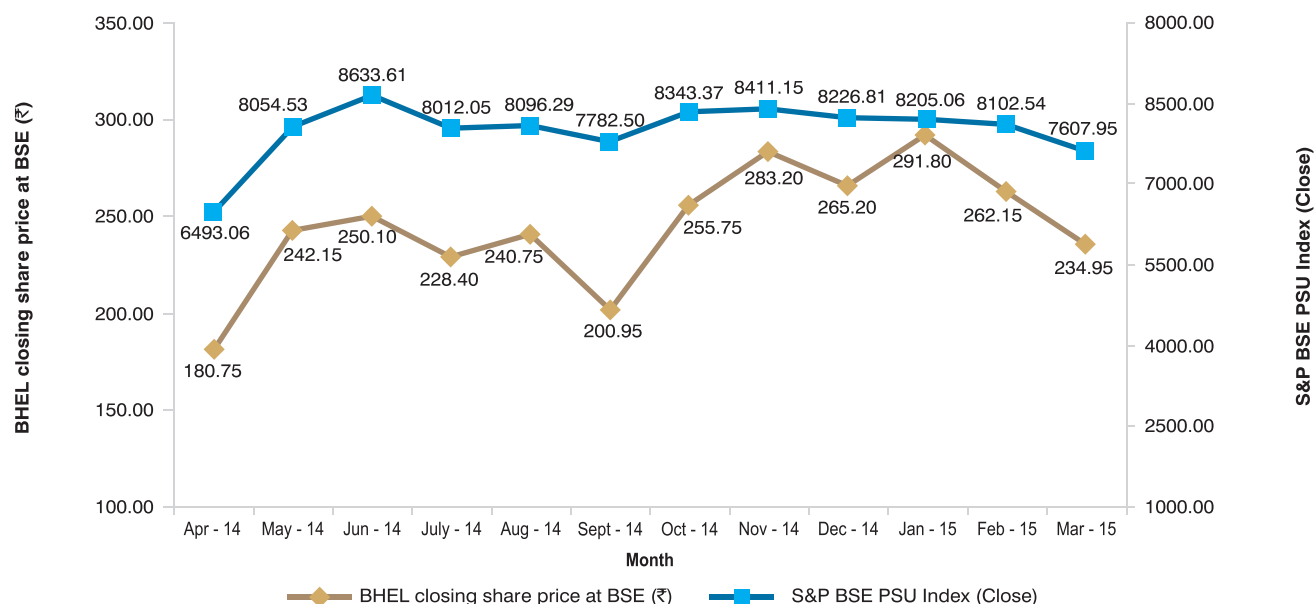
### BHEL Vs. S&P BSE PSU Index

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 last financial year ended March 31, 2015 are summarized as under:

Month	BHEL share price at BSE (₹)			S&P BSE PSU Index		
	High	Low	Close	High	Low	Close
Apr-14	198.15	173.00	180.75	6635.61	6275.68	6493.06
May-14	291.50	176.90	242.15	8919.18	6490.76	8054.53
Jun-14	266.55	232.35	250.10	9091.04	8079.08	8633.61
Jul-14	266.40	220.10	228.40	8791.48	7876.14	8012.05
Aug-14	243.80	205.00	240.75	8261.21	7765.96	8096.29
Sep-14	243.45	199.00	200.95	8442.63	7596.64	7782.50
Oct-14	258.40	195.10	255.75	8350.43	7642.51	8343.37
Nov-14	287.00	236.25	283.20	8440.62	8065.60	8411.15
Dec-14	282.95	240.55	265.20	8449.26	7650.53	8226.81
Jan-15	297.35	250.25	291.80	8440.43	7957.29	8205.06
Feb-15	299.50	251.00	262.15	8267.44	7770.28	8102.54
Mar-15	278.20	227.95	234.95	8263.33	7353.61	7607.95

Source: [www.bseindia.com](http://www.bseindia.com)

Performance of BHEL Closing Share Price  
at BSE (₹) vs. S&P BSE PSU Index (Close) during 2014-15





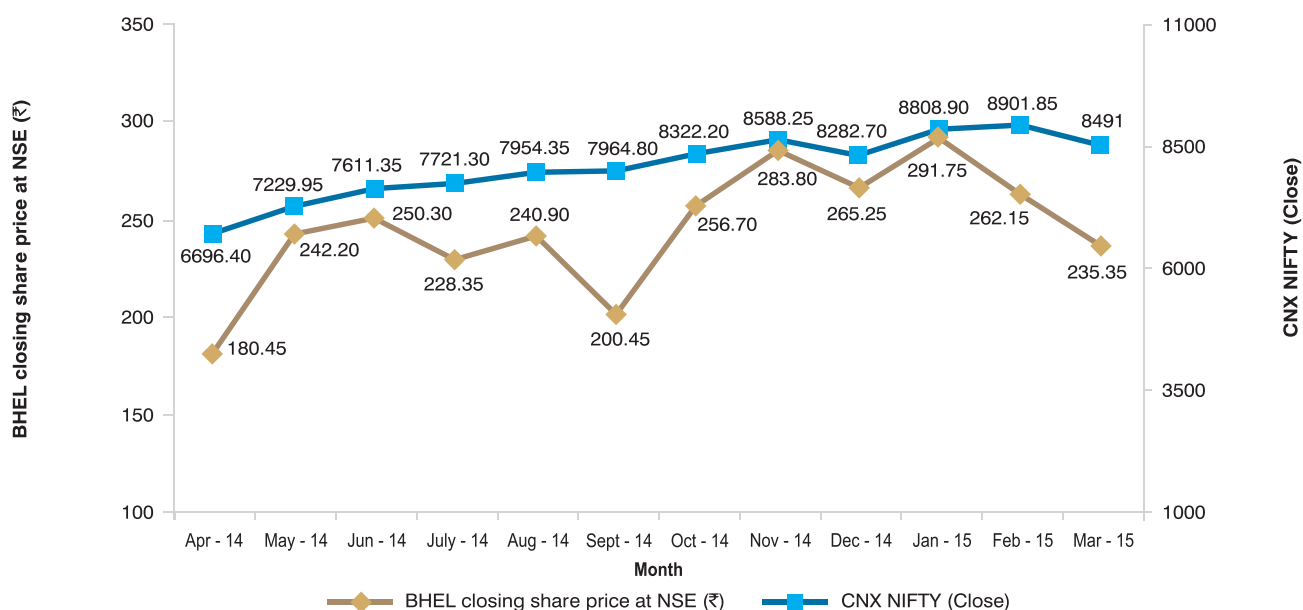
## BHEL Vs. CNX Nifty

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, 2015 are summarized as under:

Month	BHEL share price at NSE (₹)			CNX NIFTY			No. of shares traded	Turnover (₹ in Lakh)
	High	Low	Close	High	Low	Close		
Apr-14	198.25	172.70	180.45	6869.85	6650.40	6696.40	80687332	149687.54
May-14	291.50	176.65	242.20	7563.50	6638.55	7229.95	218731900	528862.75
Jun-14	266.25	232.10	250.30	7700.05	7239.50	7611.35	151277676	378998.23
Jul-14	266.60	219.10	228.35	7840.95	7422.15	7721.30	125110496	303558.09
Aug-14	243.95	204.50	240.90	7968.25	7540.10	7954.35	109700151	246652.61
Sep-14	243.50	198.70	200.45	8180.20	7841.80	7964.80	111164416	245879.82
Oct-14	258.65	194.20	256.70	8330.75	7723.85	8322.20	115184665	263571.03
Nov-14	287.75	236.15	283.80	8617.00	8290.25	8588.25	91829347	238198.68
Dec-14	283.45	240.50	265.25	8626.95	7961.35	8282.70	92621490	241529.23
Jan-15	297.80	250.00	291.75	8996.60	8065.45	8808.90	84160173	230526.94
Feb-15	300.00	250.75	262.15	8941.10	8470.50	8901.85	87257095	234957.79
Mar-15	278.70	228.00	235.35	9119.20	8269.15	8491.00	65080146	165124.71

Source: [www.nseindia.com](http://www.nseindia.com)

**Performance of BHEL Closing Share Price at NSE (₹) vs. CNX NIFTY (Close) during 2014-15**



#### 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 26<sup>th</sup> August, 2002. The Board has appointed Director (Finance) as the Compliance Officer under the Code. 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” w.e.f. 29<sup>th</sup> January, 2009.

SEBI vide notification dated 15.01.2015, introduced the SEBI (Prohibition of Insider Trading) Regulations, 2015, replacing the existing SEBI (Prohibition of Insider Trading) Regulations, 1992 to become effective on 120<sup>th</sup> day from the date of its publication in the Official Gazette i.e. w.e.f. 15<sup>th</sup> May, 2015. In line with SEBI (Prohibition of Insider Trading) Regulations, 2015, the Board, in its, 469<sup>th</sup> meeting held on 6<sup>th</sup> April, 2015, approved the ‘**Code of Conduct for Regulating & Reporting Trading by Insiders and for Fair Disclosure, 2015**’ to be effective from 15<sup>th</sup> May, 2015. The objective of the Code is to regulate, monitor and report trading by Designated Employees and other Connected Persons towards achieving compliance with SEBI (Prohibition of Insider Trading) Regulations, 2015. The Code also provides for practices and procedures for fair disclosure of unpublished price sensitive information.

#### x. Registrar & Share Transfer Agent (RTA)

M/s Karvy Computershare Private Ltd.

Delhi Address	Hyderabad Address
<b>UNIT: BHEL</b> 105-108, Arunachal Building, 19, Barakhamba Road, <u>New Delhi – 110 001</u>  Tel. : 011-23324401 43681700/01/02/21 Fax: 011-23730743 Email: ksblldelhi@karvy.com	<b>UNIT: BHEL</b> Karvy Selenium Tower B, Plot 31-32, Gachibowli, Financial District, <u>Nanakramguda, Hyderabad – 500 032</u>  Tel.: 040-67162222 Fax : 040-23001153 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, approval and dispatch of duly endorsed share certificates to the respective transferees within the prescribed time as per the Listing Agreement. In line with Listing Agreement, share certificates are being issued within 15 days of date of lodgment for transfer, sub-division and consolidation. All share transfer activities under physical segment like receipt/dispatch of documents and their verification are being carried out by M/s. Karvy Computershare Private Limited.

## xii. Distribution of Shareholding

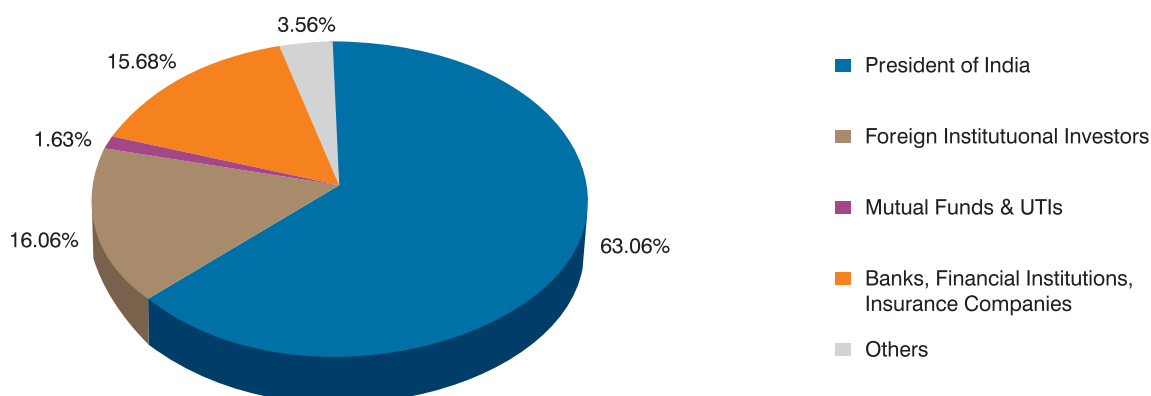
### (i) Distribution of shares according to size of holding as on 31<sup>st</sup> March 2015

No. of equity share(s) held	No. of Shareholders	% of Shareholders	No. of Shares	% of Shareholding
1-500	315460	93.64	28819076	1.18
501-1000	12448	3.69	9939492	0.41
1001-2000	5268	1.56	8069681	0.33
2001-3000	1374	0.41	3492392	0.14
3001-4000	508	0.15	1819524	0.07
4001-5000	403	0.12	1921224	0.08
5001-10000	586	0.17	4283976	0.17
10001 & Above	844	0.25	2389254635	97.62
<b>Total</b>	<b>336891</b>	<b>100%</b>	<b>2447600000</b>	<b>100%</b>

### (ii) Shareholding Pattern as on 31<sup>st</sup> March 2015

Category	2015		2014	
	Voting strength (%)	No. of shares held	Voting strength (%)	No. of shares held
<b>Promoters Holding</b>				
Indian Promoters-				
- President of India (POI)	63.06	1543452000	63.06	1543452000
<b>Total Promoter holding</b>	<b>63.06</b>	<b>1543452000</b>	<b>63.06</b>	<b>1543452000</b>
<b>Non-promoters Holding</b>				
Mutual Funds and UTI	1.63	39809147	0.30	7347397
Banks, Financial Institutions, Insurance Companies	15.68	383843326	16.17	395844109
Foreign Institutional Investors (including Foreign Portfolio Investors)	16.06	393190119	16.14	395053774
<b>Others</b>				
Directors & Relatives	0.00	4100	0.00	3600
Bodies Corporate	0.99	24218590	0.96	23591005
Individuals	2.26	55323057	2.89	70549138
Foreign Nationals	0.00	750	0.00	1090
NRIs	0.16	3937931	0.22	5338381
Trust	0.08	2017962	0.05	1199678
Clearing Members	0.07	1803018	0.21	5219828
<b>Total Non-promoter holding</b>	<b>36.94</b>	<b>904148000</b>	<b>36.94</b>	<b>904148000</b>
<b>Grand Total</b>	<b>100.00</b>	<b>2447600000</b>	<b>100.00</b>	<b>2447600000</b>

### Shareholding Patterns as on 31<sup>st</sup> March, 2015



#### (iii) List of shareholders who are holding more than 1% of the shares of the Company as on 31<sup>st</sup> March 2015

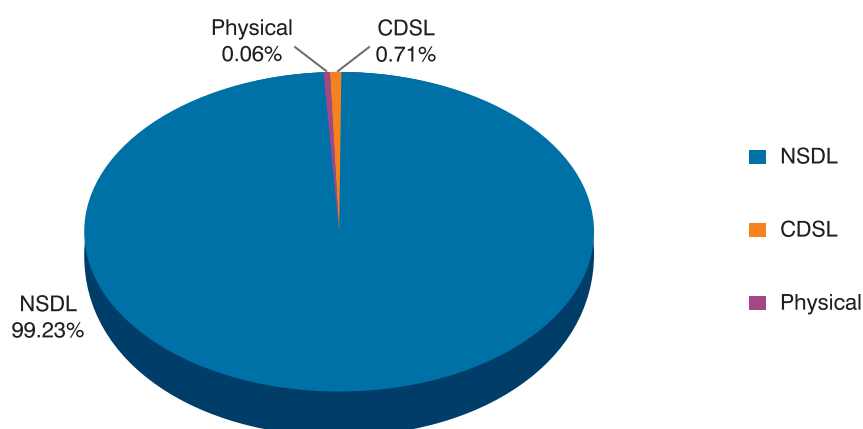
Category & Shareholder's Name	2015	
	Voting strength (%)	No. of shares held
<b>Promoters</b>		
1. President of India (POI)	63.06	1543452000
<b>Non-promoters</b>		
1. Life Insurance Corporation of India	9.42	230516784
2. Comgest Growth PLC A/C Comgest Growth Emerging Markets	1.18	28801590
3. Lazard Asset Management LLC A/c Lazard Emerging Markets Portfolio	1.16	28408477
4. Magellan	1.10	26802105
5. LIC of India Market Plus 1 Growth Fund	1.02	24939880

#### 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. 5<sup>th</sup> 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 31<sup>st</sup> March, 2015, 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 Company is INE257A01026.



## Shares held by depositories as on 31<sup>st</sup> March, 2015



### xiv. Outstanding GDRs / ADRs / Warrants or any convertible instruments, conversion date and likely impact on equity:

Nil

### xv. Plant locations

<b>BHEL Manufacturing Units</b>	Bengaluru	1. Electronics Division 2. Electronics Systems Division 3. Electro Porcelain 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 Plant 15. Seamless Steel Tube Plant
	Thirumayam	16. Power Plant Piping Unit
	Visakhapatnam	17. Heavy Plates & Vessels Plant
<b>BHEL Repair Units</b>	Mumbai	1. Electrical Machine Repair Plant
	Varanasi	2. Heavy Equipment Repair Plant
<b>BHEL Subsidiary</b>	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  
19, Barakhamba Road  
New Delhi – 110 001

Phone: 011-23324401  
43681700/01/02/21  
Fax: 011-23730743  
Email: ksbl Delhi@karvy.com

**Hyderabad:** Karvy Selenium Tower B,  
Plot 31-32, Gachibowli, Financial  
District, Nanakramguda,  
Hyderabad – 500 032

Phone: 040-67162222  
Fax: 040-23001153  
Email: madhusudhan.ms@karvy.com  
einward.ris@karvy.com

OR

**Shri I.P. Singh**

Company Secretary

BHEL

Regd. Office: BHEL House, Siri Fort,  
New Delhi – 110 049

Phone: 011-26001046  
Fax: 011-66337533  
Email: shareholderquery@bhel.in

**Note:** Shareholders holding shares in electronic mode should address all correspondence to their respective depository participants.

**Declaration:** Pursuant to Clause 49(IIE) 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 2014-15.

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 24, 2015

## 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 31.03.2015 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 31.03.2015, 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(II)(A)(1) & 49(II)(A)(2) of Listing Agreement (Clause 3.1.2 & 3.1.4 of the DPE Guidelines) relating to conditions of not less than fifty percent of board of directors to comprise of non-executive directors and at least half of the Board to comprise of independent directors, respectively.

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  
M/s Wahi & Gupta  
Chartered Accountants  
FRN 002263N



**(Anuj Gupta)**  
Partner  
M. No. 076560

Place : New Delhi  
Dated : July 24, 2015

## Secretarial Audit Report

**For the Financial Year ended 31<sup>st</sup> March, 2015**

{Pursuant to Section 204(1) of the Companies Act, 2013 and rule 9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014}

To,

The Members,

**Bharat Heavy Electricals Limited**

I have conducted the Secretarial Audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **Bharat Heavy Electricals Limited** (hereinafter called BHEL/the Company). Secretarial Audit was conducted in a manner that provided me a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing my opinion thereon.

Based on my verification of the BHEL's books, papers, Minute books, forms and returns filed and other records maintained by the Company and also the informations provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, I hereby report that in my opinion, the Company has, during the audit period covering the financial period ended on 31<sup>st</sup> March, 2015 complied with the statutory provisions listed hereunder and also that the Company has proper Board-processes and Compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

I have examined the books, papers, minute books, forms and returns filed and other records maintained by BHEL ("the Company") for the financial year ended on 31<sup>st</sup> March, 2015 according to the provisions of:

- (i) The Companies Act, 2013 (the Act) and the rules made thereunder;
- (ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the rules made thereunder;
- (iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;
- (iv) Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Foreign Direct Investment, Overseas Direct Investment and External Commercial Borrowings;

(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ('SEBI Act'):-

- (a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulation, 2011;
- (b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 1992;
- (c) The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2009;
- (d) The Securities and Exchange Board of India (Employee Stock Option Scheme and Employee Stock Purchase Scheme) Guidelines, 1999;
- (e) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008;
- (f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;
- (g) The Securities and Exchange Board of India (Delisting of Equity Shares) Regulations, 2009; and
- (h) The Securities and Exchange Board of India (Buyback of Securities) Regulations, 1998;

(vi) Compliances/ processes/ systems under following specifically applicable Laws to the Company are being verified on the basis of periodic certificate submitted to the Board of Directors of the Company:-

- (a) Atomic Energy (Radiation Protection) Rules, 2004.
- (b) Batteries (Management and Handling) Rules, 2001.
- (c) Factories Act, 1948.
- (d) The Indian Boilers Act, 1923.

I have also examined compliance with the applicable



clauses of the following:

- (i) Secretarial Standards issued by the Institute of Company Secretaries of India. (Not applicable for the Audit period).
- (ii) The Listing Agreements entered into by the Company with National Stock Exchange of India Limited and BSE Limited.

During the period under review the Company has complied with the provisions of the Acts, Rules, Regulations, Guidelines, Standards, etc. mentioned above subject to the following observation:

**Observation:** *In terms of Clause 49 (II) (A) of the Listing Agreement and para 3.1.2 & 3.1.4 of the Guidelines on Corporate Governance for Central Public Sector Enterprises, BHEL, having an Executive Chairman, is required to have at least fifty percent Independent directors.*

*At Present, the number of Independent Directors is less than 50% of the composition of the Board. Clarifications in this regard has also been sought by the Stock Exchanges from the Company. Since BHEL is a Government Company and appointment on the Board of the Company are done by the Department of Heavy Industry, Ministry of Heavy Industries & Public Enterprises, Government of India, the Company is in constant communication with the Department for the appointment of more Independent Directors on their Board in order to comply with the provisions of the Companies Act, 2013, Clause 49 of the listing agreement & DPE Guidelines.*

**I further report that** in view of the above, the Board of Directors of the Company is not duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. The changes in the composition of the Board of Directors that took place during the period under review were carried out in compliance with the provisions of the Act.

Generally, adequate notice is given to all directors to schedule the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and a system exists for seeking and obtaining further information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

Majority decision is carried through while the dissenting members' views are captured and recorded as part of the minutes, wherever required.

**I further report that** as per Section 178(2) of the Companies Act, 2013, the Nomination and Remuneration Committee of the Board was required to carry out evaluation of every director's performance. Further, Clause 49 of the Listing Agreement and the Code for Independent Directors pursuant to Section 149 (8) of the Companies Act, 2013 requires the performance evaluation of Independent Directors to decide their continuance or otherwise. However, MCA has vide its notification dated 5<sup>th</sup> June, 2015 notified the Exemptions to Government Companies from the provisions of the Companies Act, 2013 which inter-alia provides that Sub-Sections (2), (3) & (4) of Sec. 178 regarding appointment, performance evaluation and remuneration shall not apply to Directors of Government Companies. The Company has explained that the appointment of Functional Directors, Part Time Official Directors as well as Part Time Non-Official Directors (Independent Directors) on the Board of BHEL is made by Government of India (GOI). Further, terms & conditions of appointment as well as tenure of all directors are also decided by GOI and there is a well laid down procedure for evaluation of Functional Directors & CMD by Administrative Ministry.

**I further report that** there are adequate systems and processes in the company commensurate with the size and operations of the company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

**I further report that** during the audit period, the company has duly complied with the clauses/provisions of various Foreign Technical Collaboration Agreements as entered by the Company.

For Agarwal S. & Associates  
Company Secretaries



**Sachin Agarwal**  
FCS No.: 5774  
C.P. No.: 5910

Place: New Delhi  
Date: 15<sup>th</sup> June, 2015

*This report is to be read with our letter of even date which is annexed as "Annexure A" and forms an integral part of this report.*

"Annexure A"

To,  
The Members,

**Bharat Heavy Electricals Limited**

Our report of even date is to be read along with this letter.

1. Maintenance of secretarial record is the responsibility of the management of the Company. Our Responsibility is to express an opinion on these secretarial records based on our audit.
2. We have followed the audit practices and processes as were appropriate to obtain reasonable assurance about the correctness of the contents of the secretarial records. The verification was done on test basis to ensure that correct facts are reflected in secretarial records. We believe that the processes and practices, we followed provide a reasonable basis for our opinion.
3. We have not verified the correctness and appropriateness of financial records and Books of Accounts of the Company.
4. Where ever required, we have obtained the Management representation about the compliance of laws, rules and regulation and happening of events etc.
5. The Compliance of the provisions of corporate and other applicable laws, rules, regulations, standards are the responsibility of management. Our examination was limited to the verification of procedures on test basis.
6. The Secretarial Audit Report is neither an assurance as to future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

For Agarwal S. & Associates  
Company Secretaries



**Sachin Agarwal**  
FCS No.: 5774  
C.P. No.: 5910

Place: New Delhi  
Date: 15<sup>th</sup> June, 2015

## Secretarial Audit Report for the FY 2014-15

Observation	Reply
<p>In terms of Clause 49 (II) (A) of the Listing Agreement and para 3.1.2 &amp; 3.1.4 of the Guidelines on Corporate Governance for Central Public Sector Enterprises, BHEL, having an Executive Chairman, is required to have at least fifty percent Independent Directors.</p> <p>At Present, the number of Independent Directors is less than 50% of the composition of the Board. Clarifications in this regard has also been sought by the Stock Exchanges from the Company. Since BHEL is a Government Company and appointment on the Board of the Company are done by the Department of Heavy Industry, Ministry of Heavy Industries &amp; Public Enterprises, Government of India, the Company is in constant communication with the Department for the appointment of more Independent Directors on their Board in order to comply with the provisions of the Companies Act, 2013, Clause 49 of the listing agreement &amp; DPE Guidelines.</p>	<p>BHEL, being Government Company, the Independent Directors are selected by the Administrative Ministry viz., Department of Heavy Industry in consultation with the Search Committee of the Department of Public Enterprises. The Company is in constant communication with the Department of Heavy Industry for the appointment of requisite number of Independent Directors on their Board in order to comply with the provisions of the Companies Act, 2013, Clause 49 of the listing agreement &amp; DPE Guidelines.</p>

*N.B. The other paras of the report are self-explanatory.*

## Extracts of Annual Return

**Form No. MGT-9**  
**EXTRACT OF ANNUAL RETURN**  
as on the financial year ended on 31.03.2015  
[Pursuant to section 92(3) of the Companies Act, 2013 and rule 12(1) of the Companies  
(Management and Administration) Rules, 2014]

### I. REGISTRATION AND OTHER DETAILS:

i) CIN	:	L74899DL1964GOI004281
ii) Registration Date	:	13 <sup>th</sup> November, 1964
iii) Name of the Company	:	Bharat Heavy Electricals Limited
iv) Category/ Sub-Category of the Company	:	Public Company/ Government Company/ Limited by shares
v) Address of the Registered office and contact details	:	BHEL House, Siri Fort, New Delhi- 110049 Tel: 011-66337000 Fax: 011-26493021 Email: shareholderquery@bhel.in
vi) Whether listed company (Yes / No)	:	YES
vii) Name, Address and Contact details of Registrar and Transfer Agent, if any	:	<b>Karvy Computershare Private Limited</b> Karvy Selenium Tower B, Plot 31-32, Gachibowli, Financial District, Nanakramguda, Hyderabad-500032 Tel.: 040-67162222 Fax : 040-23001153 Email: madhusudhan.ms@karvy.com; einward.ris@karvy.com

### II. PRINCIPAL BUSINESS ACTIVITIES OF THE COMPANY

All the business activities contributing 10 % or more of the total turnover of the company shall be stated:-

Sl. No.	Name and Description of main products / services	NIC Code of the Product/ service	% to total turnover of the company
1.	Boiler	2513	28.66
2.	Turbine & Generator	2811	16.42
3	Construction & Service	42201	20.77

### III. PARTICULARS OF HOLDING, SUBSIDIARY AND ASSOCIATE COMPANIES -

Sl. No.	Name and address of the company	CIN/ GLN	Holding/ Subsidiary/ Associate	% of shares held	Applicable Section
1.	<b>BHEL Electrical Machines Ltd.</b> 283/1&2, Village Puttur, Post Bedradka, Kasargod, Kerala- 671124	U31909KL2011GOI027440	Subsidiary	51%	Sec 2(87) of Companies Act, 2013



# DIRECTORS' REPORT



2.	<b>Raichur Power Corporation Ltd.</b> # 22/23, Sudarshan Complex, Sheshadari Road, Bengaluru- 560009	U40101KA2009PLC049582	Associate	23.54 %	2(6) of Companies Act, 2013
3.	<b>Dada Dhuniwale Khandwa Power Ltd.</b> Shed No. 7, MPSEB Complex, Rampur, Jabalpur- 482008	U40100MP2010PLC023131	Associate	50%	2(6) of Companies Act, 2013
4.	<b>BHEL-GE Gas Turbine Services Pvt. Ltd.</b> Gumidelli Towers, 6 <sup>th</sup> Floor, 1-10-39 to 44, Begumpet Airport Road, Begumpet, Hyderabad- 500016	U51505TG1997PTC040657	Associate	50% less one share	2(6) of Companies Act, 2013
5.	<b>NTPC BHEL Power Projects Pvt. Ltd.</b> NTPC Bhawan, SCOPE Complex, 7 Institutional Area, Lodhi Road, New Delhi- 110003	U40102DL2008PTC177307	Associate	50%	2(6) of Companies Act, 2013
6.	<b>Powerplant Performance Improvement Ltd.</b> 54/ D-9, Kishangarh Village, Vasant Kunj, New Delhi- 110070	U28991DL2003PLC120915	Associate	50% less one share	2(6) of Companies Act, 2013
7.	<b>Latur Power Company Ltd.</b> Prakashgad, 2 <sup>nd</sup> Floor, Plot No. G-9, Anant Kanekar Marg, Bandra (E), Mumbai- 400051	U40102MH2011PLC215884	Associate	50% (JV under liquidation)	2(6) of Companies Act, 2013

## IV. SHAREHOLDING PATTERN (Equity Share Capital Breakup as percentage of Total Equity)

### i) Category-wise Share Holding

Category of Shareholders	No. of Shares held at the beginning of the year (As on 01.04.2014)				No. of Shares held at the end of the year (As on 31.03.2015)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	

#### A. Promoters

(1) Indian									
a) Individual/ HUF	0	0	0	0.00	0	0	0	0.00	0.00
b) Central Govt.	1543452000	0	1543452000	63.06	1543452000	0	1543452000	63.06	0.00
c) State Govt. (s)	0	0	0	0.00	0	0	0	0.00	0.00
d) Bodies Corp.	0	0	0	0.00	0	0	0	0.00	0.00
e) Banks / FI	0	0	0	0.00	0	0	0	0.00	0.00
f) Any Other...	0	0	0	0.00	0	0	0	0.00	0.00
<b>Sub-total (A) (1):-</b>	<b>1543452000</b>	<b>0</b>	<b>1543452000</b>	<b>63.06</b>	<b>1543452000</b>	<b>0</b>	<b>1543452000</b>	<b>63.06</b>	<b>0.00</b>

Category of Shareholders	No. of Shares held at the beginning of the year (As on 01.04.2014)				No. of Shares held at the end of the year (As on 31.03.2015)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
<b>(2) Foreign</b>									
a) NRIs - Individuals	0	0	0	0.00	0	0	0	0.00	0.00
b) Other – Individuals	0	0	0	0.00	0	0	0	0.00	0.00
c) Bodies Corp.	0	0	0	0.00	0	0	0	0.00	0.00
d) Banks / FI	0	0	0	0.00	0	0	0	0.00	0.00
e) Any Other....	0	0	0	0.00	0	0	0	0.00	0.00
<b>Sub-total (A) (2):-</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.00</b>	<b>0.00</b>
<b>Total shareholding of Promoter (A) = (A)(1)+(A)(2)</b>	<b>1543452000</b>	<b>0</b>	<b>1543452000</b>	<b>63.06</b>	<b>1543452000</b>	<b>0</b>	<b>1543452000</b>	<b>63.06</b>	<b>0.00</b>
<b>B. Public Shareholding</b>									
<b>(1) Institutions</b>									
a) Mutual Funds	7331397	16000	7347397	0.30	39793147	16000	39809147	1.63	1.33
b) Banks / FI	126384705	4000	126388705	5.16	126603246	4000	126607246	5.17	0.01
c) Central Govt.	0	0	0	0.00	0	0	0	0.00	0.00
d) State Govt(s)	0	0	0	0.00	0	0	0	0.00	0.00
e) Venture Capital Funds	0	0	0	0.00	0	0	0	0.00	0.00
f) Insurance Companies	269453404	2000	269455404	11.01	257234080	2000	257236080	10.51	-0.50
g) FIIs	395044574	9000	395053574	16.14	393181119	9000	393190119	16.06	-0.08
h) Foreign Venture Capital Funds	0	0	0	0.00	0	0	0	0.00	0.00
i) Others (specify)									
Qualified Foreign Investor	200	0	200	0.00	0	0	0	0.00	0.00
<b>Sub-total (B)(1):-</b>	<b>798214280</b>	<b>31000</b>	<b>798245280</b>	<b>32.61</b>	<b>816811592</b>	<b>31000</b>	<b>816842592</b>	<b>33.37</b>	<b>0.76</b>
<b>(2) Non-Institutions</b>									
a) Bodies Corp.									
i) Indian	23585005	6000	23591005	0.96	24212590	6000	24218590	0.99	0.03
ii) Overseas	0	0	0	0.00	0	0	0	0.00	0.00
b) Individuals									
i) Individual shareholders holding nominal share capital up to ₹ 1 lakh	67963634	1430529	69394163	2.84	53528596	1356741	54885337	2.24	-0.59

# DIRECTORS' REPORT



Category of Shareholders	No. of Shares held at the beginning of the year (As on 01.04.2014)				No. of Shares held at the end of the year (As on 31.03.2015)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
ii) Individual shareholders holding nominal share capital in excess of ₹ 1 lakh	1154975	0	1154975	0.05	437720	0	437720	0.02	-0.03
c) Others (specify)									
Clearing Members	5219828	0	5219828	0.21	1803018	0	1803018	0.07	-0.14
Directors	1600	2000	3600	0.00	4100	0	4100	0.00	0.00
Foreign Nationals	1090	0	1090	0.00	750	0	750	0.00	0.00
Non Resident Indians	5325881	12500	5338381	0.22	3925431	12500	3937931	0.16	-0.06
Trusts	1199678	0	1199678	0.05	2017962	0	2017962	0.08	0.03
<b>Sub-total (B)(2):-</b>	<b>104451691</b>	<b>1451029</b>	<b>105902720</b>	<b>4.33</b>	<b>85930167</b>	<b>1375241</b>	<b>87305408</b>	<b>3.57</b>	<b>-0.76</b>
<b>Total Public Shareholding (B)=(B)(1)+(B)(2)</b>	<b>902665971</b>	<b>1482029</b>	<b>904148000</b>	<b>36.94</b>	<b>902741759</b>	<b>1406241</b>	<b>904148000</b>	<b>36.94</b>	<b>0.00</b>
C. Shares held by Custodian for GDRs & ADRs	0	0	0	0.00	0	0	0	0.00	0.00
<b>Grand Total (A+B+C)</b>	<b>2446117971</b>	<b>1482029</b>	<b>2447600000</b>	<b>100.00</b>	<b>2446193759</b>	<b>1406241</b>	<b>2447600000</b>	<b>100.00</b>	<b>0.00</b>

## (ii) Shareholding of Promoters

Sl. No.	Shareholder's Name	Shareholding at the beginning of the year (As on 01.04.2014)			Shareholding at the end of the Year (As on 31.03.2015)			% change in share holding during the year
		No. of Shares	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	No. of Shares	% of total Shares of the company	% of Shares Pledged / encumbered to total shares	
1	President of India	1543452000	63.06	0.00	1543452000	63.06	0.00	0.00
	<b>TOTAL</b>	<b>1543452000</b>	<b>63.06</b>	<b>0.00</b>	<b>1543452000</b>	<b>63.06</b>	<b>0.00</b>	<b>0.00</b>

**(iii) Change in Promoters' Shareholding (No Change)**

Sl. No.	Name	Shareholding at the beginning of the year (01.04.2014)/ end of the year (31.03.2015)		Date wise Increase/ Decrease in Promoters Shareholding during the year specifying the reasons for Increase/ Decrease			Cumulative Shareholding during the year (01.04.2014 to 31.03.2015)	
		No. of shares	% of total shares of the company	Date	Increase/ Decrease in Share holding	Reason	No. of shares	% of total shares of the company
1.	President of India	1543452000	63.06	NO CHANGE			1543452000	63.06

**(iv) Shareholding Pattern of top ten Shareholders (other than Directors, Promoters and Holders of GDRs and ADRs):**

Sl. No.	Name	Shareholding at the beginning of the year (01.04.2014)/ end of the year (31.03.2015)		Date wise Increase/ Decrease in Shareholding during the year specifying the reasons for Increase/ Decrease			Cumulative Shareholding during the year (01.04.2014 to 31.03.2015)	
		No. of shares	% of total shares of the Company	Date	Increase/ Decrease in Share holding	Reason	No. of shares	% of total shares of the Company
1.	Life Insurance Corporation of India	242890195	9.92					
				05.12.2014	-2485968	Transfer	240404227	9.82
				12.12.2014	-4078755	Transfer	236325472	9.66
				19.12.2014	-1918505	Transfer	234406967	9.58
				31.12.2014	-3890183	Transfer	230516784	9.42
		230516784	9.42	31.03.2015			230516784	9.42
2	Lazard Asset Management LLC A/c Lazard Emerging Markets Portfolio	38942264	1.59					
				04.04.2014	14655	Transfer	38956919	1.59
				11.04.2014	18329	Transfer	38975248	1.59
				25.04.2014	24646	Transfer	38999894	1.59
				09.05.2014	16746	Transfer	39016640	1.59
				16.05.2014	24646	Transfer	39041286	1.60
				06.06.2014	-3827530	Transfer	35213756	1.44
				13.06.2014	-1929104	Transfer	33284652	1.36
				20.06.2014	-459078	Transfer	32825574	1.34
				30.06.2014	-2305882	Transfer	30519692	1.25
				04.07.2014	-1654693	Transfer	28864999	1.18
				11.07.2014	-1000907	Transfer	27864092	1.14
				01.08.2014	383511	Transfer	28247603	1.15
				08.08.2014	160874	Transfer	28408477	1.16
		28408477	1.16	31.03.2015			28408477	1.16



# DIRECTORS' REPORT



Sl. No.	Name	Shareholding at the beginning of the year (01.04.2014)/ end of the year (31.03.2015)		Date wise Increase/ Decrease in Shareholding during the year specifying the reasons for Increase/ Decrease			Cumulative Shareholding during the year (01.04.2014 to 31.03.2015)	
		No. of shares	% of total shares of the Company	Date	Increase/ Decrease in Share holding	Reason	No. of shares	% of total shares of the Company
3	Comgest SA A/c Magellan	30000000	1.23					
				04.04.2014	-1000000	Transfer	29000000	1.18
				11.04.2014	-3000000	Transfer	26000000	1.06
				30.05.2014	-2000000	Transfer	24000000	0.98
				10.10.2014	198396	Transfer	24198396	0.99
				17.10.2014	1610855	Transfer	25809251	1.05
				24.10.2014	666714	Transfer	26475965	1.08
				31.10.2014	326140	Transfer	26802105	1.10
		26802105	1.10	31.03.2015			26802105	1.10
4	LIC of India Market Plus 1 Growth Fund	24939880	1.02		No Change			
		24939880	1.02	31.03.2015			24939880	1.02
5	Comgest Growth PLC A/c Comgest Growth Emerging Markets	24307000	0.99					
				03.10.2014	675800	Transfer	24982800	1.02
				10.10.2014	213318	Transfer	25196118	1.03
				17.10.2014	1655505	Transfer	26851623	1.10
				24.10.2014	886111	Transfer	27737734	1.13
				31.10.2014	241428	Transfer	27979162	1.14
				21.11.2014	822428	Transfer	28801590	1.18
		28801590	1.18	31.03.2015			28801590	1.18
6	LIC of India Money Plus Growth Fund	22406815	0.92		No Change			
		22406815	0.92	31.03.2015			22406815	0.92
7	Fidelity Puritan Trust-Fidelity Low-Priced Stock Fund	19250000	0.79					
				11.04.2014	250000	Transfer	19500000	0.80
				18.04.2014	1500000	Transfer	21000000	0.86
				02.05.2014	1000000	Transfer	22000000	0.90
		22000000	0.90	31.03.2015			22000000	0.90
8	Life Insurance Corporation of India P& GS Fund	18902990	0.77		No Change			
		18902990	0.77	31.03.2015			18902990	0.77
9	LIC of India Market Plus Growth Fund	18387175	0.75		No Change			
		18387175	0.75	31.03.2015			18387175	0.75
10	LIC of India Profit Plus Growth Fund	17381255	0.71		No Change			
		17381255	0.71	31.03.2015			17381255	0.71

**(v) Shareholding of Directors and Key Managerial Personnel:**

Sl. No.	Name (S/ shri)	Shareholding at the beginning of the year (01.04.2014)/ end of the year (31.03.2015)		Date wise Increase/ Decrease in Shareholding during the year specifying the reasons for Increase/ Decrease			Cumulative Shareholding during the year (01.04.2014 to 31.03.2015)	
		No. of shares	% of total shares of the Company	Date	Increase/ Decrease in Share holding	Reason	No. of shares	% of total shares of the Company
1	B. Prasada Rao Chairman & Managing Director	2000	0.00		No Change			
		2000	0.00	31.03.2015			2000	0.00
2	S.K. Bahri Part-time Official Director	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00
3	Ambuj Sharma Part-time Official Director (up to 21.12.2014)	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00
4	Rajesh Kumar Singh Part-time Official Director (w.e.f. 22.12.2014)	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00
5	Ms. Harinder Hira Part-time Non-Official Director (w.e.f. 08.05.2014)	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00
6	A.N. Roy Part -time Non-Official Director (w.e.f. 27.08.2014)	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00
7	P.K. Bajpai Director (Finance)	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00
8	R. Krishnan Director (HR)	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00
9	W.V.K. Krishna Shankar Director (IS&P)	100	0.00		No Change			
		100	0.00	31.03.2015			100	0.00
10	Atul Sobti Director (Power)	1500	0.00		No Change			
		1500	0.00				1500	0.00
11	T.N. Veeraraghavan Director (E,R&D) (w.e.f. 07.01.2015)	500	0.00		No Change			
		500	0.00	31.03.2015			500	0.00
12	I.P. Singh Company Secretary	0	0.00		No Change			
		0	0.00	31.03.2015			0	0.00

## V. INDEBTEDNESS

Indebtedness of the Company including interest outstanding/accrued but not due for payment

(₹ in Crore)

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year				
i) Principal Amount	2550.00			2550.00
ii) Interest due but not paid	2.89			2.89
iii) Interest accrued but not due	-			-
<b>Total (i+ii+iii)</b>	2552.89			2552.89
Change in Indebtedness during the financial year				
• Addition	-			-
• Reduction	2552.89			2552.89
Net Change	-2552.89			-2552.89
Indebtedness at the end of the financial year				
i) Principal Amount	-			-
ii) Interest due but not paid	-			-
iii) Interest accrued but not due	-			-
<b>Total (i+ii+iii)</b>	-			-

## VI. REMUNERATION OF DIRECTORS AND KEY MANAGERIAL PERSONNEL

A. Remuneration to Managing Director, Whole-time Directors and/ or Manager:

(In ₹)

Sl. no.	Particulars of Remuneration	Name of MD/ WTD/ Manager (S/ shri)						Total Amount
		B. Prasada Rao CMD	P.K. Bajpai Director (Fin.)	R. Krishnan Director (HR)	WVK Krishna Shankar Director (IS&P)	Atul Sobti Director (Power)	T.N. Veeraraghavan Director (E, R&D) wef 07.01.15	
1.	Gross salary							
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961	40,35,939	35,03,211	35,47,719	38,94,047	31,01,040	6,19,976	1,87,01,932
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961	5,36,458	4,72,821	2,51,286	5,38,501	39,600	48,195	18,86,860

Sl. no.	Particulars of Remuneration	Name of MD/ WTD/ Manager (S/ shri)						Total Amount
		B. Prasada Rao CMD	P.K. Bajpai Director (Fin.)	R. Krishnan Director (HR)	WVK Krishna Shankar Director (IS&P)	Atul Sobti Director (Power)	T.N. Veeraraghavan Director (E, R&D) wef 07.01.15	
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961							
2.	Stock Option							
3.	Sweat Equity							
4.	Commission - as % of profit - others, specify...							
5.	Others, please specify							
	<b>Total (A)</b>	<b>45,72,397</b>	<b>39,76,032</b>	<b>37,99,005</b>	<b>44,32,548</b>	<b>31,40,640</b>	<b>6,68,171</b>	<b>2,05,88,792</b>
	Ceiling as per the Act	NA						

B. Remuneration to other directors:

(In ₹)

Sl. no.	Particulars of Remuneration	Name of Directors (S/ shri)			Total Amount
1.	Independent Directors	Ms. Harinder Hira (wef 08.05.14)	A.N. Roy (wef 27.08.14)	-	
	• Fee for attending board / committee meetings	3,55,000	1,20,000	-	4,75,000
	• Commission	-	-	-	-
	• Others, please specify	-	-	-	-
	<b>Total (1)</b>	<b>3,55,000</b>	<b>1,20,000</b>	<b>-</b>	<b>4,75,000</b>
2.	Other Non-Executive Directors	S.K. Bahri	Ambuj Sharma (up to 21.12.14)	Rajesh Kumar Singh (wef 22.12.14)	
	• Fee for attending board/ committee meetings	-	-	-	-
	• Commission	-	-	-	-
	• Others, please specify	-	-	-	-
	<b>Total (2)</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>	<b>NIL</b>
	<b>Total (B)=(1+2)</b>	<b>3,55,000</b>	<b>1,20,000</b>	<b>NIL</b>	<b>4,75,000</b>
	Total Managerial Remuneration				-
	Overall Ceiling as per the Act	Sitting fee paid to Independent Director is within the overall Ceiling as per the Companies Act, 2013 (which is ₹ 1,00,000 per Board/ Committee Meeting)			



# DIRECTORS' REPORT



## C. Remuneration to Key Managerial Personnel other than MD/ Manager/ WTD:

(In ₹)

Sl. No.	Particulars of Remuneration	Key Managerial Personnel			Total
		CEO	I.P. Singh Company Secretary	CFO	
1.	Gross salary	As per table VI(A)	2483337	As per table VI(A)	
	(a) Salary as per provisions contained in section 17(1) of the Income-tax Act, 1961				
	(b) Value of perquisites u/s 17(2) Income-tax Act, 1961				
	(c) Profits in lieu of salary under section 17(3) Income-tax Act, 1961				
2	Stock Option				
3	Sweat Equity				
4	Commission - as % of profit - others, specify...				
5	Others, please specify				
	<b>Total</b>		2483337		

## VII. PENALTIES/ PUNISHMENT/ COMPOUNDING OF OFFENCES:

Type	Section of the Companies Act	Brief Description	Details of Penalty/ Punishment/ Compounding fees imposed	Authority [RD/ NCLT/ COURT]	Appeal made, if any (give Details)
Penalty					
Punishment					
Compounding					
<b>Other Officers in Default</b>					
			NIL		
Penalty					
Punishment					
Compounding					

## Annexure-VII

### 7.1 Conservation of Energy

Energy Conservation (ENCON) is an important thrust area in BHEL. Following main activities were performed during the financial year:

1. Energy Conservation projects (34 Nos.) were implemented across the company, as suggested by the specialised agencies in the Energy Audit reports. The projects included installation of 5 Star Rated Air-Conditioners/ Fans; Energy Efficient Compressors; Energy Efficiency Lighting (LED/ CFL); SWHS (Solar Water Heating System); VFD (Variable Frequency Drives; APFC (Automatic Power Factor Control); Turbo Ventilators; Arresting Leakages; Occupancy & Photo Sensors (to turn ON/OFF lights/ AC); Replacement of conventional (old resistive type) regulators with Electronic Regulators for fans; etc.
2. Specific Energy Consumption (Energy/ Fuel units in kcal/ Gross Turnover – ED) has improved by 7.7% over the base level: 132 kcal/₹ Lacs in 12-13.
3. Energy Audit was conducted by specialized agencies at Trichy, Varanasi, Ranipet, Goindwal, Jhansi and EDN-Bengaluru units.
4. National Energy Conservation Day was celebrated across the company on 14<sup>th</sup> December. Various activities related to ENCON were organized for awareness generation of employees. All the employees working at CFFP-Haridwar were imparted awareness training on Energy Conservation as a part of preparedness for ISO 50001 (Energy Management System).

### 7.2 Technology Absorption and Research & Development

Research & Development

- |   |   |
|---|---|
| 1. Specific areas in which R&D carried out by the Company | } Given in the Directors' Report under R&D and Technological achievement (Annexure V) |
| 2. Benefits derived as a result of the above R&D          |   |
| 3. Future plan of action:                                 |   |

The following are the major thrust areas for R&D and technology:

- Conventional thermal power plants with higher efficiencies using supercritical parameters
- Conventional thermal power plants with higher efficiencies 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  $\pm 800$  kV HVDC, 765 kV, 1200 kV Transmission systems/ products
- Flexible AC Transmission systems, including devices such as Thyristor Controlled Series Compensation, Phase Shifting Transformer, Static Synchronized Compensator (STATCOM), Controlled Shunt Reactor, etc.
- Gas Insulated Switchgear up to 765 kV rating
- 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
- Specialized 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.
- Desalination and Water Treatment Plants
- Flue Gas Desulphurization (FGD) systems
- Nano-technology applications
- Hydrogen energy and fuel cells
- Defence products

#### 4. Expenditure on R&D

1. Total	....	₹ 1018.59 Crore
a) Recurring	....	₹ 995.15 Crore
b) Capital		₹ 23.44 Crore
Expenditure as a percentage of total turnover	....	3.29 %

### 7.3 Technology Absorption and Adoption

Details of technology imported during the last 5 years:

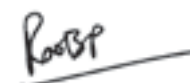
Technology	Year of import	Absorption status
Large size forgings	2010	Technology absorption in progress.
Centrifugal Compressors	2010	Technology absorption in progress.
Flue Gas Desulphurization (FGD) systems	2013	Technology absorption in progress.

### 7.4 Foreign Exchange Earnings and Outgoings

(₹ in Crore)

	2014-15	2013-14
(i) Foreign Exchange Used	4540	6758
(ii) Foreign Exchange Earned	5434	8778

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



**(B. Prasada Rao)**

Chairman & Managing Director

Place : New Delhi  
Dated : 24.07.2015

# Annexure-VIII

## Form AOC - I

(Pursuant to first proviso to sub-section (3) of section 129 read with rule 5 of Companies (Accounts) Rules, 2014)

### Statement containing salient features of the financial statement of subsidiaries/associate Companies/joint ventures

#### Part "A": Subsidiaries

(Information in respect of each subsidiary to be presented with amounts in ₹ Crore )

1. Sl. No.	01
2. Name of the subsidiary	BHEL ELECTRICALS MACHINES LIMITED
3. Reporting period for the subsidiary concerned, if different from the holding company's reporting period	N.A.
4. Reporting currency and Exchange rate as on the last date of the relevant Financial year in the case of foreign subsidiaries.	N.A.
5. Share capital	10.50
6. Reserves & surplus	-5.95
7. Total assets	21.63
8. Total Liabilities	17.08
9. Investments	NIL
10. Turnover (Gross)	21.88
11. Profit before taxation	-5.44
12. Provision for taxation	-1.48
13. Profit after taxation	-3.96
14. Proposed Dividend	NIL
15. % of shareholding	51%

#### Notes:

The following information shall be furnished at the end of the statement:

1. Names of subsidiaries which are yet to commence operations	NIL
2. Names of subsidiaries which have been liquidated or sold during the year.	NIL



## Part “B”: Associates and Joint Ventures

Statement pursuant to Section 129 (3) of the Companies Act, 2013 related to Associate Companies and Joint Ventures

(₹ in Crore)


Name of Joint Ventures	BHEL-GE Gas Turbine Services P. Ltd.	NTPC BHEL Power Projects Pvt Ltd.	Dada Dhuniwale Khandwa Power Ltd.	Raichur Power Corporation Ltd.
1. Latest Audited Balance Sheet Date	31.03.15	31.03.15 <sup>#</sup>	31.03.15	31.03.15 <sup>#</sup>
2. Shares of JVs held by BHEL on the year end				
No.	2379999	50000000	22500000	331523312
Amount of investment	2.38	50	22.5	331.52
Extent of Holding %	50% minus one share	50%	50%	23.54%
3. Description of how there is significant influence	-	-	-	-
4. Reason why the associate/ JV is not consolidated	N.A.	N.A.	N.A.	N.A.
5. Networth attributable to Shareholding as per latest audited Balance Sheet	110.96	66.32	22.88	331.52
6. Profit/ Loss for the year	As per Proportionate Consolidation Method			
i. Considered in consolidation	34.35	0.83	*	NIL**
ii. Not considered in Consolidation	-	-	-	-

#Unaudited \*Less than ₹ One lakh \*\* Pre- operative expenses considered in Capital WIP

M/s Latur Power Company Ltd. is under liquidation. The investment made with M/s Latur Power Company Ltd has been received back. M/s Power Plant Performance Improvement Ltd. is also under liquidation. Hence, both these JVs were not considered in consolidation

For and on behalf of Board of Directors

  
(I. P. Singh)  
Company Secretary

  
(Atul Sobti)  
Director (Finance)

  
(B. Prasada Rao)  
Chairman & Managing Director

For Wahi & Gupta.  
Chartered Accountants  
FRN 002263N

For DSP & Associates  
Chartered Accountants  
FRN-006791N

  
(CA Anuj Gupta)  
Partner  
M. No. 076560

  
(CA Sanjay Jain)  
Partner  
M.No. 084906

## Form AOC - 2

(Pursuant to clause (h) of sub-section (3) of section 134 of the Act and Rule 8(2) of the Companies (Accounts) Rules, 2014)

**Form for disclosure of particulars of contracts/arrangements entered into by the company with related parties referred to in sub-section (1) of section 188 of the Companies Act, 2013 including certain arm's length transactions under third proviso there to**

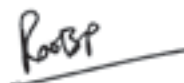
**1. Details of contracts or arrangements or transactions not at arm's length basis:**

- |   |       |
|---|-------|
| (a) Name(s) of the related party and nature of relationship   | : NIL |
| (b) Nature of contracts/arrangements/transactions   | : NIL |
| (c) Duration of the contracts/arrangements/transactions   | : NIL |
| (d) Salient terms of the contracts or arrangements or transactions including the value, if any                        | : NIL |
| (e) Justification for entering into such contracts or arrangements or transactions                                    | : NA  |
| (f) Date(s) of approval by the Board  | : NIL |
| (g) Amount paid as advances, if any   | : NIL |
| (h) Date on which the special resolution was passed in general meeting as required under first proviso to section 188 | : NIL |

**2. Details of material contracts or arrangement or transactions at arm's length basis:**

- |   |       |
|---|-------|
| (a) Name(s) of the related party and nature of relationship                                     | : NIL |
| (b) Nature of contracts/arrangements/transactions   | : NIL |
| (c) Duration of the contracts/arrangements/transactions   | : NIL |
| (d) Salient terms of the contracts or arrangements or transactions including the value, if any: | : NA  |
| (e) Date(s) of approval by the Board, if any  | : NIL |
| (f) Amount paid as advances, if any   | : NIL |

For and on behalf of the Board of Directors of  
BHARAT HEAVY ELECTRICALS LIMITED



**(B. Prasada Rao)**  
Chairman & Managing Director

Place: New Delhi  
Date: 24.07.2015

# 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, 2015, 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 in which are incorporated the returns for the year ended on that date audited by us for 11 branches and 24 branches audited by the branch auditors of the company.

### Management's Responsibility for the Standalone Financial Statements

The Company's Board of Directors is responsible for the matters stated in Section 134(5) of the Companies Act, 2013 ("the Act") with respect to the preparation of these standalone 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 principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, 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 standalone financial statements based on our audit.

We have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made thereunder.

We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. 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 the 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 financial control relevant to the Company's preparation of the 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 whether the Company has in place an adequate internal financial controls system over financial reporting and the operating effectiveness of such controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Company's Directors, 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 on the standalone financial statements.

## Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone 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, 2015;
- (b) 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.

## Emphasis of Matter

We draw attention to :

Amount outstanding in projects under hold for more than 3 years amounting to ₹ 1845 Crores (Refer note no. 31(26))

Our opinion is not qualified in respect of above matter.

## Other Matter

We did not audit the financial statements/information of 24 (Twenty Four ) branches included in the standalone financial statements of the Company whose financial statements / financial information reflect total assets of ₹ 46378.71 Crores as at 31<sup>st</sup> March, 2015 and total revenue of ₹ 24922.28 Crores for the year ended on that date, as considered in the standalone financial statements. The financial statements / information of these branches have been audited by the branch auditors whose reports have been furnished to us, and our opinion in so far as it relates to the amounts and disclosures included in respect of these branches, is based solely on the report of such branch auditors.

Our opinion is not modified in respect of this matter.

## Report on Other Legal and Regulatory Requirements

- (1) As required by the Companies (Auditor's Report) Order, 2015 ("the Order") issued by the Central Government of India in terms of

sub-section (11) of section 143 of the Act, we give in the Annexure (A) a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.

- (2) As required by Section 143 (3) of the Act, we report that:

- (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit.
- (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books and proper returns adequate for the purposes of our audit have been received from the branches not visited by us;
- (c) The reports on the accounts of the branch offices of the Company audited under Section 143 (8) of the Act by branch auditors have been sent to us and have been properly dealt with by us in preparing this report.
- (d) The Balance Sheet, the Statement of Profit and Loss, and the Cash Flow Statement dealt with by this Report are in agreement with the books of account and with the returns received from the branches not visited by us.
- (e) In our opinion, the aforesaid standalone financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014.
- (f) On the basis of the written representations received from the directors as on 31<sup>st</sup> March, 2015 taken on record by the Board of Directors, none of the directors appointed during 2014-15 is disqualified as on 31<sup>st</sup> March, 2015 from being appointed as a director in terms of Section 164(2) of the Act. Prior to 01-04-2014, in terms of notification no. GSR 829(E) dated 21.10.2013 issued by the Department of Company Affairs, Govt. of India, the provisions of section 274(1) (g) of the Companies Act, 1956 were not applicable to the company.
- (g) With respect to the other matters to



be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:

- i. The Company has disclosed the impact of pending litigations on its financial position in its financial statements – Refer Note 31(5) to the financial statements.
- ii. The Company has made provision, as required under the applicable law and accounting standards, for

material foreseeable losses, if any, on long-term contracts – Refer Note 31(11) to the financial statements.

- iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company.
- (3) As required by section 143(5) of the Act, we have considered the directions issued by the Comptroller and Auditor General of India, the action taken thereon and its impact on the accounts and financial statements of the company (Annexure B)

For Wahi & Gupta  
Chartered Accountants  
**FRN 002263N**



**(CA Anuj Gupta)**  
M.No.076560

For DSP & Associates  
Chartered Accountants  
**FRN 006791N**



**(CA Sanjay Jain)**  
M.No.084906

Date : May 26, 2015  
Place : New Delhi

## Annexure (A) 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 (“the Company”), for the year ended March 31, 2015)**

- 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.
- 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 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.
- iii) 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 189 of the Companies Act, 2013. Therefore clauses (iii) (a) and (iii)(b) of Paragraph 3 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, for the 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, the Company has not accepted any deposits from public during the year within the meaning of sections 73 to 76 or any other relevant provisions of the Companies Act, 2013 and the Companies (Acceptance of Deposits) Rules 2014.
- vi) We have broadly reviewed the books of account and records maintained by the Company pursuant to the Companies (Cost Records and Audit) Rules 2014 prescribed by the Central Government under section 148(1) of the Companies Act, 2013 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 and complete.

- vii) (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, Employees' State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, duty of Customs, duty of Excise, Value Added Tax, Cess and any other statutory dues as applicable to it.
- (b) According to the information and explanations given to us, no undisputed amounts payable in respect of Provident Fund, Employees State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, duty of Customs, duty of Excise, Cess and any other statutory dues were outstanding as at March 31, 2015 for a period of more than six months from the date they became payable.
- (c) According to the information and explanations given to us, the particulars of Income Tax, Sales Tax, Wealth Tax, Service Tax, duty of Customs, duty of Excise, Value Added Tax and Cess which have not been deposited on account of dispute are as under:

(₹ in Crore)

Sl. 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, Entry Tax Act and Sales Tax Act of various States	Sales Tax, Entry Tax & Work Contract Tax	89.55	25.15	Assessing Officer
			302.03	35.96	Dy. Commissioner / Jt. Commissioner/ Commissioner (Appeals)
			378.77	80.28	Appellate Tribunal
			409.35	107.49	High Court
			3.43	3.38	Supreme Court
			360.81	20.25	Various Appellate Authorities
2	Income Tax Act, 1961	Income Tax	1.17	-	Assessing Officer
			15.01	0.70	Commissioner (Appeals)
			0.32		High Court
3	Central Excise Act, 1944	Excise Duty	54.12	9.47	Commissioner (Appeals)
			359.63	8.44	Appellate Tribunal
			45.89	5.50	High Court
4	Service Tax under the Finance Act, 1994	Service Tax	77.96	2.13	Commissioner (Appeals)
			366.51	2.23	Appellate Tribunal
			14.47	-	High Court
5	Customs Act, 1962	Custom duty	2.93	2.83	Assessing Officer
6	The Building and Other Construction Workers Welfare Cess Act, 1996	Cess	11.78	2.50	High Court

- (d) The company has transferred the amount required to be transferred to Investor Education and Protection Fund within time in accordance with the relevant provisions of the Companies Act, 1956 (1 of 1956) and rules made thereunder.
- viii) The Company has no accumulated losses as at March 31, 2015 and has not incurred any cash losses during the financial year covered by our audit and the immediately preceding financial year.
- ix) 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.
- x) 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.
- xi) As per information and explanations given to us, the Company has not obtained any term loan during the year.
- xii) 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 fraud on or by the Company has been noticed or reported during the year.

For Wahi & Gupta  
Chartered Accountants  
**FRN 002263N**



**(CA Anuj Gupta)**  
M.No.076560

For DSP & Associates  
Chartered Accountants  
**FRN 006791N**



**(CA Sanjay Jain)**  
M.No.084906

Date : May 26, 2015  
Place : New Delhi



## Annexure-B

**Directions indicating the areas to be examined by the Statutory Auditors during the course of audit of annual accounts of Bharat Heavy Electricals Limited (Standalone) for the year 2014-15 issued by the Comptroller & Auditor General of India under Section 143(5) of the Companies Act, 2013**

Sl. No.	Areas Examined	Observation/Finding												
1	If the company has been selected for disinvestment, a complete status report in terms of valuation of Assets (including intangible assets and land) and Liabilities (including Committed & General Reserves) may be examined including the mode and present stage of disinvestment process.	Department of Disinvestment (DoD) under Ministry of Finance have informed BHEL that a disinvestment of 5% paid up equity capital thro' Offer for Sale of Shares by promoters (GOI) thro' stock exchange mechanism as SEBI Rules & Regulations has been considered. Towards this Merchant Bankers/Selling Brokers have been appointed by DoD. BHEL participation towards this have been (a) Preparation of a presentation material about company & hosting on BHEL's web site (b) Participation in Road Shows planned by DoD along with Merchant Bankers/Selling Brokers. DoD is the agency for this disinvestment and the procedures & time lines are in their purview.												
2	Please report whether there are any cases of waiver/write off of debts/loans/interest etc., if yes, the reasons there for and the amount involved	Debtors amounting to ₹ 31.24 Crore have been written-off during the FY 2014-15 on account of LD levied & recovered by the customers. ₹ 31.43 Crore written off during the FY 2014-15 due to various disallowance/ recoveries made by customer on account of rejections/defects, shortages, transport charges, difference in Taxes, counter claims etc. These are old cases and necessary approval for write off have been taken from competent authorities.												
3	Whether proper records are maintained for inventories lying with third parties & assets received as gift from Govt. or other authorities	Proper records are being maintained for the inventories lying with third parties & assets received as gift from Govt. or other authorities. However, during the year there is no case of assets received as gift from Govt. or other authorities.												
4	A report on age-wise analysis of pending legal/arbitration cases including the reasons of pendency and existence/ effectiveness of a monitoring mechanism for expenditure on all legal cases (foreign and local) may be given.	<div>Age-wise analysis of pending legal &amp; arbitration cases and pending industrial dispute cases are as under :</div> <table><tr><th>Particulars</th><th>No. of Cases</th></tr><tr><td>Less than 1 year</td><td>184</td></tr><tr><td>More than 1 year and less than 2 years</td><td>167</td></tr><tr><td>More than 2 years and less than 3 years</td><td>154</td></tr><tr><td>More than 3 years</td><td>664</td></tr><tr><td>Total</td><td>1169</td></tr></table> <div>Reasons for their pendency is that the legal cases entail procedural rules being adhered to and are finally heard/disposed of by the Court at their own turn. There exists an effective monitoring mechanism for expenditure on all legal cases (foreign and local). A sum of ₹ 19.44 Crore has been incurred as legal fees and expenses which is only 0.06 % of turnover.</div>	Particulars	No. of Cases	Less than 1 year	184	More than 1 year and less than 2 years	167	More than 2 years and less than 3 years	154	More than 3 years	664	Total	1169
Particulars	No. of Cases													
Less than 1 year	184													
More than 1 year and less than 2 years	167													
More than 2 years and less than 3 years	154													
More than 3 years	664													
Total	1169													



No-MAB-III/Rep/01-05/A/cs-BHEL/2015-16/Phase-I

भारतीय लेखा परीक्षा तथा लेखा विभाग 58।

कार्यालय प्रधान निदेशक, वाणिज्यिक लेखा परीक्षा

एवं पदेन सदस्य, लेखा परीक्षा बोर्ड-III

नई दिल्ली

INDIAN AUDIT & ACCOUNTS DEPARTMENT

Office of the Principal Director of Commercial Audit

& Ex-Officio Member, Audit Board-III

New Delhi

सेवा में,

अध्यक्ष एवं प्रबंध निदेशक,  
भारत हेवी इलेक्ट्रिकल्स लिमिटेड,  
नई दिल्ली

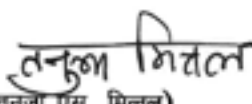
विषय: 31 मार्च 2015 को समाप्त वर्ष के लिये भारत हेवी इलेक्ट्रिकल्स लिमिटेड, नई दिल्ली के वार्षिक लेखाओं पर  
कम्पनी अधिनियम 2013 की धारा 143(6)(b) के अन्तर्गत भारत के नियंत्रक-महालेखा परीक्षक की टिप्पणियाँ।

महोदय,

मैं भारत हेवी इलेक्ट्रिकल्स लिमिटेड, नई दिल्ली के 31 मार्च 2015 को समाप्त वर्ष के लेखाओं पर कंपनी  
अधिनियम 2013 की धारा 143(6)(b) के अंतर्गत भारत के नियंत्रक-महालेखापरीक्षक की टिप्पणियाँ अंग्रेजित कर रही हूँ।  
कृपया इस पत्र की संलग्नकों सहित प्राप्ति की पावती भेजी जाए।

संलग्न: यथोपरि।

भवदीया

  
(तनुजा एस. मित्तल)  
प्रधान निदेशक

**COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA  
UNDER SECTION 143(6)(b) OF THE COMPANIES ACT, 2013 ON THE FINANCIAL  
STATEMENTS OF BHARAT HEAVY ELECTRICALS LIMITED FOR THE YEAR  
ENDED 31 MARCH 2015**

The preparation of financial statements of Bharat Heavy Electricals Limited for the year ended 31 March 2015 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 is the responsibility of the Management of the Company. The Statutory Auditors appointed by the Comptroller and Auditor General of India under Section 139(5) of the Act are responsible for expressing opinion on the financial statements under Section 143 of the Act based on independent audit in accordance with Standards on Auditing prescribed under Section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 26 May 2015.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 143(6)(a) of the Act of the financial statements of Bharat Heavy Electricals Limited for the year ended 31 March 2015. 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.

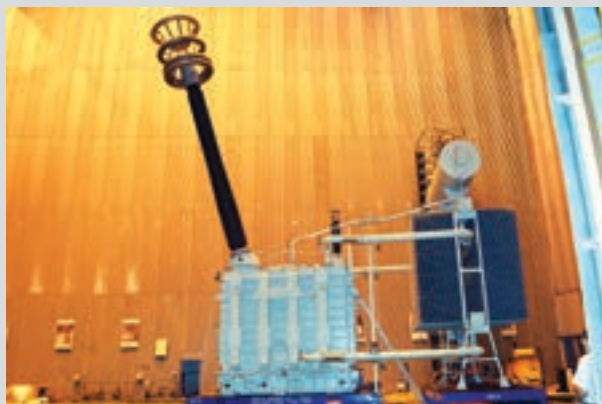
**For and on the behalf of the  
Comptroller & Auditor General of India**

  
(Tanuja S. Mittal)

**Principal Director of Commercial Audit &  
Ex-officio Member, Audit Board – III,  
New Delhi**

Place: New Delhi  
Dated: 24 July 2015

## Another leap in efficient Transmission



*765 kV Shunt Reactor designed, manufactured, tested and commissioned by BHEL*

BHEL has successfully designed, manufactured, tested and commissioned 765 kV, 825 MVA 3-phase bank of Generator Transformer (comprising of 3 nos. 275 MVA 1-phase Transformers) and 765 kV 315 MVA 3-phase bank of Inter Connecting Transformer (comprising of 3 nos. 105 MVA Single Phase Transformers) for first unit of 660 MW Lalitpur Supercritical Thermal Power Project in Uttar Pradesh. Earlier, 765 kV 80 MVA, Single Phase Shunt Reactor has also been successfully designed, manufactured, and supplied by BHEL to PGCIL. Transmission of bulk power at 765 kV voltage has grown rapidly in the country during the recent years. With this, BHEL has established itself to address all kind of requirements of power generating and transmission utilities at 765 kV voltage class. In the year 2012, BHEL became the first indigenous Transformer manufacturer to design, manufacture and commission India's first 1200 kV Transformer.

So far, BHEL has supplied more than 500,000 MVAs of Transformers and Reactors to various utilities in India and abroad.

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# Annual Accounts





## Balance Sheet

As at 31<sup>st</sup> March, 2015

(₹ in Crore)

Particulars	Note No.	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>I. EQUITY AND LIABILITIES</b>					
<b>(1) Shareholders' Funds</b>					
(a) Share capital	1	489.52		489.52	
(b) Reserves & surplus	2	33595.08	34084.60	32557.53	33047.05
<b>(2) Non-current liabilities</b>					
(a) Long-term borrowings	3	61.00		104.77	
(b) Other Long-term liabilities	4	5358.84		6600.17	
(c) Long-term provisions	5	6755.21	12175.05	7496.43	14201.37
<b>(3) Current liabilities</b>					
(a) Short-term borrowings	6	-		2550.00	
(b) Trade payables	7	8798.94		8717.84	
(c) Other current liabilities	8	9123.31		11445.32	
(d) Short-term provisions	9	4285.23	22207.48	2829.59	25542.75
<b>TOTAL</b>			<b>68467.13</b>		<b>72791.17</b>
<b>II. ASSETS</b>					
<b>(1) Non current assets</b>					
(a) Fixed assets	10				
(i) Tangible assets		3982.20		4525.13	
(ii) Intangible assets		158.32		167.81	
(iii) Capital work-in-progress		500.50		622.01	
(iv) Intangible assets under development		17.30	4658.32	20.11	5335.06
(b) Non-current investments	11	417.67		420.17	
(c) Deferred tax assets (net)	12	2220.73		1968.95	
(d) Long-term loans and advances	13	1219.05		1167.08	
(e) Other non-current assets	14	11413.82	15271.27	11881.07	15437.27
<b>(2) Current assets</b>					
(a) Inventories	15	10101.66		9797.55	
(b) Trade receivables	16	26223.50		28071.92	
(c) Cash and Bank Balances	17	9812.70		11872.93	
(d) Short term loans and advances	18	2224.65		2023.92	
(e) Other current assets	19	175.03	48537.54	252.52	52018.84
<b>TOTAL</b>			<b>68467.13</b>		<b>72791.17</b>

### Significant Accounting Policies

### Other notes to financial statements

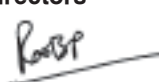
31

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 Wahi & Gupta  
Chartered Accountants  
FRN-002263N

For DSP & Associates  
Chartered Accountants  
FRN-006791N

  
(CA Anuj Gupta)  
Partner  
M.No. 076560

  
(CA Sanjay Jain)  
Partner  
M.No. 084906

Place : New Delhi  
Date : May 26, 2015

## Statement of Profit & Loss

For the year ended 31<sup>st</sup> March, 2015

(₹ in Crore)

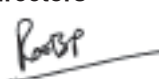
Particulars	Note No.	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
<b>I. Revenue from operations (Gross)</b>	<b>20</b>	<b>30947.04</b>	40337.92
Less : Excise duty		920.42	1342.26
Less : Service tax		484.65	606.84
<b>Revenue from operations (Net)</b>		<b>29541.97</b>	38388.82
<b>II. Other operational income</b>	<b>21</b>	<b>641.01</b>	720.01
<b>III. Other income</b>	<b>22</b>	<b>1220.45</b>	1616.03
<b>Total revenue (I to III)</b>		<b>31403.43</b>	40724.86
<b>IV. Expenses</b>			
Cost of material consumption, erection and engineering expenses	<b>23</b>	<b>17758.32</b>	22102.83
(Increase)/Decrease in work in progress & finished goods	<b>24</b>	<b>-338.04</b>	1053.65
Employees benefits expense	<b>25</b>	<b>5450.00</b>	5933.78
Finance costs	<b>26</b>	<b>91.65</b>	132.63
Depreciation & amortisation expense	<b>10.1</b>	<b>1077.32</b>	982.92
Other expenses of manufacture, administration, selling and distribution	<b>27</b>	<b>3637.33</b>	3308.50
Provisions (net)	<b>28</b>	<b>1604.23</b>	2258.70
Less: Cost of jobs done for internal use		27.50	68.46
<b>Total expenses</b>		<b>29253.31</b>	35704.55
<b>V. Profit before prior period adjustments and tax</b>		<b>2150.12</b>	5020.31
<b>VI. Add/less: Prior period adjustments (net)</b>	<b>29</b>	<b>-10.11</b>	-6.01
<b>VII. Profit before tax for the year</b>		<b>2140.01</b>	5014.30
<b>VIII. Less: Tax expense</b>	<b>30</b>		
a) Current tax		951.07	1911.00
b) Deferred tax		-230.35	-357.48
<b>IX. Profit for the year</b>		<b>1419.29</b>	3460.78
Earnings per share (Basic & Diluted)			
(Refer para no. 19 of Note no. 31) in ₹		5.80	14.14
Face Value per share (in ₹)		2.00	2.00
<b>Significant Accounting Policies</b>			
<b>Other notes to financial statements</b>	<b>31</b>		

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 Wahi & Gupta  
Chartered Accountants  
FRN-002263N

For DSP & Associates  
Chartered Accountants  
FRN-006791N

  
(CA Anuj Gupta)  
Partner  
M.No. 076560

  
(CA Sanjay Jain)  
Partner  
M.No. 084906

Place : New Delhi  
Date : May 26, 2015

## Cash Flow Statement

for the year ended 31.03.2015

(₹ in Crore)

	2014-15	2013-14
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>		
Net Profit Before Tax as per Statement of Profit and Loss	<b>2140.01</b>	<b>5014.30</b>
Adjustment for		
Depreciation/Amortisation	1077.65	988.95
Lease Equalisation	0.60	0.51
Provisions (Net)	1125.16	1629.24
Bad Debts & LD & investment written off	62.69	70.30
Profit on sale of Fixed assets	-5.74	-0.05
Profit on sale of Short Term Investments	0.00	-0.02
Finance cost	91.65	132.66
Interest/Dividend Income	-840.92	-652.42
Operating Profit before Working Capital changes	<b>3651.10</b>	<b>7183.47</b>
Adjustment for		
Trade & Other Receivables	1115.59	-952.82
Inventories	-354.43	1945.06
Trade Payable & Advances	-2606.88	-1526.27
Cash generated from operations	<b>1805.38</b>	<b>6649.44</b>
Direct Taxes Paid (Net of refund)	-1029.90	-2131.30
<b>NET CASH INFLOW / (OUTFLOW) FROM OPERATING ACTIVITIES</b>	<b>775.48</b>	<b>4518.14</b>
<b>B. CASH FLOW FROM INVESTING ACTIVITIES</b>		
Purchase of Fixed Assets	-500.43	-791.42
Sale and Disposal of Fixed Assets	43.66	121.72
Sale and Disposal of short term Investments	0.00	0.02
Investment in Subsidiary & Joint Ventures (net)	2.50	9.00
Adjustment pursuant to amalgamation		-108.20
Interest & Dividend income	918.58	600.81
<b>Net Cash used in Investing Activities</b>	<b>-464.31</b>	<b>168.07</b>
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>		
Short term & Long term Borrowing (Net)	-2604.62	1233.01
Dividend Paid (including tax on dividend)	-594.02	-1315.55
Finance cost	-101.38	-126.65
<b>Net Cash used in Financing Activities</b>	<b>3300.02</b>	<b>209.19</b>
<b>D. NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>-2060.23</b>	<b>4140.88</b>
Opening Balance of Cash and Cash Equivalents	11872.93	7732.05
Closing Balance of Cash and Cash Equivalents (Refer Note no.17)	9812.70	11872.93

Note 1 : Cash & Cash Equivalents consists of cash and bank balance & deposits with banks.

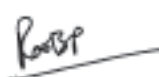
2 : Previous year's figures have been regrouped/rearranged wherever necessary.

3 : Cash & Cash Equivalents includes ₹ 3.72 Crore (Previous year ₹ 3.87 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 Wahi & Gupta  
Chartered Accountants  
FRN-002263N

For DSP & Associates  
Chartered Accountants  
FRN-006791N

  
(CA Anuj Gupta)  
Partner  
M.No. 076560

  
(CA Sanjay Jain)  
Partner  
M.No. 084906

Place : New Delhi  
Date : May 26, 2015

## 1 - Share Capital

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>Authorised</b>				
1000,00,00,000 equity shares of ₹ 2 each (previous year 1000,00,00,000 equity shares of ₹ 2 each)		<b>2000.00</b>		2000.00
<b>Issued, Subscribed &amp; Paid up Capital</b>		<b>489.52</b>		489.52
244,76,00,000 fully paid equity Shares of ₹ 2 each (previous year 244,76,00,000 equity shares of ₹ 2 each)				
a) The reconciliation of the number of equity shares outstanding is set out below :				
	<b>Number</b>	<b>Amount</b>	<b>Number</b>	<b>Amount</b>
Shares outstanding at the beginning of the year	<b>2447600000</b>	<b>489.52</b>	2447600000	489.52
Shares bought back during the year	-	-	-	-
Shares outstanding at the end of the year	<b>2447600000</b>	<b>489.52</b>	2447600000	489.52
b) Details of shares held by shareholders holding more than 5% shares at the year end	<b>No. of shares</b>	<b>% age of holding</b>	<b>No. of shares</b>	<b>% age of holding</b>
President of India (POI) alongwith nominees	<b>1543452000</b>	<b>63.06%</b>	1543452000	63.06%
Life Insurance Corporation of India	<b>230516784</b>	<b>9.42%</b>	242890195	9.92%
Face Value per share (₹)		<b>2.00</b>		2.00
c) Terms / rights attached to the equity shares:				
The company has only one class of equity shares having par value of ₹ <b>2 per share</b> (previous year ₹ 2 per share). Each holder of the equity shares is entitled to one vote per share.				



## 2 - Reserves & surplus

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>Capital reserve</b>				
Opening Balance	36.56		2.74	
Add: Addition pursuant to amalgamation	-		0.02	
Add: Adjustment on amalgamation	-	36.56	33.80	36.56
<b>General reserve</b>				
Opening balance	31349.72		28849.72	
Add: transfer from surplus i.e. balance in statement of profit and loss	1000.00		2500.00	
Less: Deductions	-	32349.72	-	31349.72
<b>Surplus i.e. balance in statement of profit and loss</b>				
Opening Balance	1171.25		1102.12	
Add: Adjustment pursuant to Amalgamation	-		-81.25	
Less: Depreciation Adjustment (Refer to Para 25 of Note 31)	40.50		-	
Add: profit for the year	1419.29		3460.78	
Profit available for appropriation	2550.04		4481.65	
Less: Appropriation-				
- General reserve	1000.00		2500.00	
- Dividend (including interim dividend of ₹ 132.17 Crore previous year ₹ 320.64 Crore)	283.92		692.68	
- Corporate dividend tax (including tax on interim dividend ₹ 26.43 Crore previous year ₹ 54.49 Crore)	57.32	1208.80	117.72	1171.25
		<b>33595.08</b>		<b>32557.53</b>
<b>Proposed dividend on equity per share (₹)</b>		<b>0.62</b>		<b>1.52</b>

### 3 - Long-term borrowings

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>Unsecured</b>		
Long term maturities of finance lease obligations	61.00	104.77
	<u>61.00</u>	<u>104.77</u>

### 4 - Other long-term liabilities

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Trade payables	701.66	764.91
Advances received from customers & others	4563.02	5759.88
Deposits from contractors & others	94.16	75.38
	<u>5358.84</u>	<u>6600.17</u>

### 5 - Long-term provisions

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Provision for employees benefits	2706.52	2437.96
Contractual Obligation	3597.96	4692.95
Other long-term provisions	450.73	365.52
	<u>6755.21</u>	<u>7496.43</u>

### 6 - Short-term borrowings

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>Secured</b>		
<b>From banks</b>		
<b>Rupee export packing credit</b>	-	2,550.00
(secured by first charge by way of hypothecation of raw materials, components, work-in-progress, finished goods, stores, trade receivables both present and future)		
	<u>-</u>	<u>2,550.00</u>

### 7 - Trade Payables

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Trade Payables	8754.83	8643.51
Acceptances	44.11	74.33
	<u>8798.94</u>	<u>8717.84</u>

(Refer to Para no. 10 of Note no. 31 for micro and small enterprises disclosure)

## 8 - Other current liabilities

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Current maturities of finance lease obligation	56.83	67.68
Advances received from customers & others	6969.36	8902.48
Deposits from contractors & others	517.16	538.14
Bonds pursuant to amalgamation	0.00	1.00
Unclaimed dividend*	3.72	3.87
Other payables/ liabilities		
- Capex	193.49	268.11
- Statutory dues	454.62	506.76
- Employees dues	322.08	657.99
- Other dues	599.16	482.67
Interest accrued but not due	0.40	0.39
Interest accrued and due on:		
Bonds pursuant to Amalgamation	-	5.52
Rupee export packing credit	-	2.89
State Government Loans	2.33	2.33
Finance lease	4.16	5.49
	<b>9123.31</b>	<b>11445.32</b>

Advances received from customers & others include valuation adjustment-

-(₹ 2637.89 Crore (previous year ₹ 4025.65 Crore))

\* There is no amount due & outstanding as at balance sheet date to be transferred to Investor Education & Protection Fund.

## 9 - Short-term provisions

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Provision for employees benefits	574.45	570.10
Proposed Dividend	151.75	372.04
Corporate dividend tax	30.89	63.23
Contractual obligation	2511.19	943.86
Other short-term provisions	954.01	880.36
Corporate Social Responsibility	62.94	0.00
	<b>4285.23</b>	<b>2829.59</b>

## 10 - Fixed assets

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>(i) Tangible assets</b>		
Gross block	12146.48	11644.66
Less: Accumulated depreciation	8166.53	7122.37
Less: Lease adjustment account	-2.25	-2.84
Net Block	<u>3982.20</u>	<u>4525.13</u>
<b>(ii) Intangible assets</b>		
Gross block	442.29	405.83
Less: Accumulated depreciation/amortisation	283.97	238.02
Net block	<u>158.32</u>	<u>167.81</u>
<b>(iii) Capital work in progress</b>		
Construction work-in-progress -Civil	72.38	121.23
Construction stores (including in transit)	2.88	8.95
Plant & machinery and other equipments		
- Under Erection/ Fabrication/awaiting erection	352.32	345.80
- In transit	72.92	146.03
	<u>500.50</u>	<u>622.01</u>
<b>(iv) Intangible assets under development</b>	<u>17.30</u>	<u>20.11</u>
	17.30	20.11
<b>Total</b>	<u>4658.32</u>	<u>5335.06</u>
Refer to details in Note no. 10.1		



## Note 10.1

### Fixed Assets

(₹ in Crore)

	Gross Block			Depreciation						Net Block	
	Cost As at 01.04.2014	Additions/ adjustments during the year	Deductions/ adjustments during the year	Cost As at 31.03.2015	Accumulated Depreciation/ Amortisation As at 01.04.2014	Depreciation for the year	Depreciation adjustments	Lease Adjustment Account as at 31.03.2015	Accumulated Depreciation/ Amortisation as at 31.03.2015	As at 31.03.2015	As at 31.03.2014
<b>Factory/ Office Complex</b>											
<b>(i) Tangible assets</b>											
Freehold land (incl. development exp.)	25.29		0.15	25.14						25.14	25.29
Leasehold land (incl. development exp.)	60.16	0.11		60.27	1.04	0.64			1.68	58.60	59.12
Roads, bridges and culverts	28.24	0.41		28.65	5.73	8.13	4.16		18.02	10.63	22.51
Buildings	1795.11	115.91	27.47	1883.56	699.25	96.97	-10.89		785.33	1098.24	1095.86
Leasehold buildings	3.12			3.12	1.44	0.05			1.49	1.63	1.68
Drainage, sewerage and water supply	29.45	0.20		29.65	12.68	0.84	0.38		13.90	15.75	16.77
Railway siding	16.70	2.81		19.51	9.98	0.80			10.78	8.73	6.72
Locomotives and wagons	52.59	2.65		55.24	23.73	3.13	0.30		27.16	28.09	28.86
Plant & Machinery	7294.68	320.79	13.15	7602.32	4725.12	715.91	-14.93		5426.10	2176.22	2569.56
Electronic data processing equipments	175.59	28.86		204.45	170.00	2.51	27.65		200.16	4.29	5.59
Electrical installations	336.62	8.85	0.59	344.88	140.73	29.26	-0.05		169.94	174.94	195.89
Construction Equipment	265.33	6.49	2.17	269.65	193.24	28.77	-0.81		221.20	48.45	72.09
Vehicles	20.12	5.15	0.46	24.82	16.64	1.28	0.69		18.61	6.21	3.48
Furniture & fixtures	55.74	5.17	0.43	60.47	19.01	7.28	0.64		26.93	33.54	36.73
Office & other equipments	182.76	22.34	1.11	203.99	92.83	38.25	12.67		143.75	60.25	89.93
Fixed assets costing up to ₹10,000/-	110.96	6.53	1.36	116.14	110.96	6.55	-1.37		116.13		
Capital expenditure	0.44		0.44		0.44		-0.44				
Assets Given on Lease	497.15			497.15	493.79		3.36	2.25	497.15	2.25	6.20
EDP Equipment taken on lease	396.57	5.87	33.83	368.61	261.03	70.50	-13.58		317.95	50.66	135.54
Office & other equipment taken on lease	4.17	0.45	0.45	4.17	1.04	1.31	0.20		2.55	1.61	3.13
Other assets taken on lease	2.00		0.05	1.95	2.11	0.18	-0.48		1.81	0.14	-0.11
<b>Total Tangible Assets-Factory</b>	<b>11352.81</b>	<b>532.61</b>	<b>81.66</b>	<b>11803.73</b>	<b>6980.79</b>	<b>1012.35</b>	<b>7.49</b>	<b>2.25</b>	<b>8000.63</b>	<b>3805.36</b>	<b>4374.86</b>
<b>(ii) Intangible Assets</b>											
-Internally developed											
Software											
Others	59.88	8.55		68.43	34.70	13.69	0.08		48.46	19.97	25.18
-Others											
Software	150.42	16.03	5.30	161.16	132.57	14.51	-4.87		142.22	18.94	17.85
Technical Know-how	171.28	17.22		188.50	60.67	19.65	-0.96		79.36	109.15	110.61
Others	24.25		0.05	24.20	10.08	3.85			13.93	10.27	14.17
<b>Total intangible Assets-Factory</b>	<b>405.83</b>	<b>41.81</b>	<b>5.35</b>	<b>442.29</b>	<b>238.02</b>	<b>51.70</b>	<b>-5.75</b>		<b>283.97</b>	<b>158.32</b>	<b>167.81</b>
<b>Total of Factory Assets</b>	<b>11758.64</b>	<b>574.41</b>	<b>87.01</b>	<b>12246.02</b>	<b>7218.81</b>	<b>1064.05</b>	<b>1.74</b>	<b>2.25</b>	<b>8284.60</b>	<b>3963.68</b>	<b>4542.67</b>

	Gross Block			Depreciation						Net Block	
	Cost As at 01.04.2014	Additions/ adjustments during the year	Deductions/ adjustments during the year	Cost As at 31.03.2015	Accumulated Depreciation/ Amortisation As at 01.04.2014	Depreciation for the year	Depreciation adjustments	Lease Adjustment Account as at 31.03.2015	Accumulated Depreciation/ Amortisation as at 31.03.2015	As at 31.03.2015	As at 31.03.2014
<b>Township/ Residential</b>											
<b>Tangible assets</b>											
Freehold land (incl. development exp.)	2.39	0.15		2.54						2.54	2.39
Leasehold land (incl. development exp.)	11.43	0.25		11.68	0.66	0.12			0.78	10.89	10.77
Roads, bridges and culverts	7.22	0.59		7.81	3.21	0.61	2.13		5.95	1.86	4.01
Buildings	177.69	39.66		217.35	72.40	5.76	6.55		84.71	132.64	105.29
Leasehold buildings	0.27			0.27	0.27				0.27		
Drainage, sewerage and water supply	19.94	2.81	0.02	22.73	15.10	0.53	0.24		15.87	6.86	4.84
Plant and Machinery	23.76	2.55	0.04	26.27	14.10	2.12	-0.04		16.18	10.09	9.66
Electronic Data Processing Equipment	0.03	0.02		0.05		0.02			0.02	0.03	0.03
Electrical installations	19.54	2.13		21.67	15.88	1.04	0.05		16.97	4.70	3.66
Vehicles	1.00		0.08	0.92	0.96	0.03	-0.08		0.90	0.01	0.04
Furniture & fixtures	1.30	0.29	0.04	1.55	0.58	0.31	-0.03		0.87	0.68	0.72
Office & other equipments	24.25	2.74	0.18	26.81	15.40	2.64	2.24		20.28	6.53	8.85
Fixed assets costing up to ₹ 10000/-	3.02	0.10		3.12	3.02	0.10			3.12		
<b>Total Tangible Assets-Township</b>	<b>291.85</b>	<b>51.27</b>	<b>0.36</b>	<b>342.75</b>	<b>141.58</b>	<b>13.27</b>	<b>11.05</b>		<b>165.90</b>	<b>176.84</b>	<b>150.27</b>
<b>Total of Township Assets</b>	<b>291.85</b>	<b>51.27</b>	<b>0.36</b>	<b>342.75</b>	<b>141.58</b>	<b>13.27</b>	<b>11.05</b>		<b>165.90</b>	<b>176.84</b>	<b>150.27</b>
<b>Total of Tangible Assets</b>	<b>11644.66</b>	<b>583.88</b>	<b>82.03</b>	<b>12146.48</b>	<b>7122.37</b>	<b>1025.62</b>	<b>18.54</b>	<b>2.25</b>	<b>8166.53</b>	<b>3982.20</b>	<b>4525.13</b>
<b>Total of Intangible Assets</b>	<b>405.83</b>	<b>41.81</b>	<b>5.35</b>	<b>442.29</b>	<b>238.02</b>	<b>51.70</b>	<b>-5.75</b>		<b>283.97</b>	<b>158.32</b>	<b>167.81</b>
<b>Total of Factory &amp; Township</b>	<b>12050.49</b>	<b>625.69</b>	<b>87.38</b>	<b>12588.77</b>	<b>7360.39</b>	<b>1077.32</b>	<b>12.80</b>	<b>2.25</b>	<b>8450.50</b>	<b>4140.52</b>	<b>4692.94</b>
<b>Previous year</b>	<b>10783.26</b>	<b>1345.59</b>	<b>78.36</b>	<b>12050.49</b>	<b>6406.47</b>	<b>982.92</b>	<b>-29.01</b>	<b>2.84</b>	<b>7360.39</b>	<b>4692.94</b>	<b>4458.49</b>
<b>The details of R&amp;D capital items included in above</b>											
<b>Plant &amp; Machinery &amp; other Equipments</b>	<b>482.95</b>	<b>48.76</b>	<b>0.67</b>	<b>531.04</b>	<b>302.40</b>	<b>48.06</b>	<b>0.62</b>		<b>351.08</b>	<b>179.96</b>	<b>180.55</b>
<b>Building</b>	<b>41.45</b>	<b>0.02</b>		<b>41.47</b>	<b>18.76</b>		<b>0.02</b>		<b>18.78</b>	<b>22.68</b>	<b>22.69</b>

Gross Block as at 31.03.2015 includes assets condemned and retired from active use ₹ 122.03 Crore (Previous year ₹ 85.29 Crore)

Net Block as at 31.03.2015 includes assets condemned and retired from active use ₹ 1.29 Crore (Previous year ₹ 0.02 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	<b>2014-15</b>	<b>2013-14</b>
	<b>49.16</b>	<b>42.04</b>

There is no impairment loss in fixed assets during the year.

Depreciation adjustment includes adjustment to retained earning ₹ 61.94 Crore (refer para 25 of note 31)

## 11 - Non-current investments

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>Long Term Investments (at cost)</b>				
<b>Unquoted Shares (Fully paid up):</b>				
<b>TRADE:</b>				
1892 (previous year 1892) 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
<b>Subsidiary Company</b>				
5355000 (previous year 5355000) Equity Shares of ₹ 10/- each of BHEL Electrical Machines Ltd.	5.36	5.36	5.36	5.36
<b>Joint Venture Companies</b>				
1999999 (previous year 1999999) Equity Shares of ₹ 10/- each of Powerplant Performance Improvement Ltd.	2.00		2.00	
Less: Provision for diminution in value	2.00		2.00	
- 50000000 (previous year 50000000) Equity Shares of ₹ 10/- each of NTPC-BHEL Power Projects Pvt. Ltd.	50.00		50.00	
- 331523312 (previous year 331523312) Equity Shares of ₹ 10/- each of Raichur Power Corporation Ltd.	331.52		331.52	
- 22500000 (previous year 22500000) Equity Shares of ₹ 10/- each of Dada Dhuniwale Khandwa Power Ltd.	22.50		22.50	
- NIL (previous year 2500000) Equity Shares of ₹ 10/- each of Latur Power Company Ltd.	0.00		2.50	
- 2379999 (previous year 2379999) Equity Shares of ₹ 10/- each of BHEL-GE Gas Turbine Services Pvt. Ltd.	2.38	406.40	2.38	408.90
<b>OTHER THAN TRADE:</b>				
250 shares (Previous year 250) of ₹ 10/- each of BHPV Employees Consumers Cooperative Stores Ltd.		*		*
10 shares (Previous year 10) of ₹ 50/- each of Cuffe Parade Persopolis Premises Cooperative Society Ltd., Mumbai		*		*
20 shares of ₹ 50/- each (Previous year 20) 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 ₹ 10 each		*		*
Share Money paid in advance to M/s. Asish Enterprises, Mumbai for allotment of 50 shares of ₹ 10 each		*		*
* Value of less than ₹ 1 lakh/-				
	417.67		420.17	
<b>Aggregate value of unquoted investments</b>	417.67		420.17	
<b>Aggregate provision in diminution in value of investments</b>	2.00		2.00	
Latur Power Company Ltd. is under liquidation. The amount of investment made (₹ 2.50 Crore) has been received back.				

## 12 - Deferred tax assets (Net)

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Provisions	1512.23	1317.02
Statutory dues	639.32	609.47
Modvat Adjustment	2.88	50.05
Others	8.82	40.66
	<u>2163.25</u>	<u>2017.20</u>
Deferred tax liabilities		
Depreciation	-57.48	48.25
<b>Deferred tax assets (net)</b>	<u><b>2220.73</b></u>	<u><b>1968.95</b></u>

## 13 - Long-term loans and advances

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>Loans</b>		
Loans to employees	0.01	0.01
Loans to public sector undertakings (Bharat Pumps and Compressor Ltd. for capital investment)	4.00	8.00
Interest accrued and or due on loans	<u>0.17</u>	<u>0.32</u>
	<b>4.18</b>	<b>8.33</b>
<b>Sub classification:-</b>		
Secured, considered good ₹ <b>4.02 Crore</b> (previous year ₹ 8.09 Crore)		
Unsecured, considered good ₹ <b>0.16 Crore</b> (previous year ₹ 0.24 Crore)		
<b>Advances (recoverable in cash or in kind or for value to be received)</b>		
For purchases	336.12	413.29
Capital advance	35.12	36.06
To Others	<u>57.95</u>	<u>58.85</u>
	<b>429.19</b>	<b>508.20</b>
<b>Sub classification:-</b>		
Unsecured, considered good ₹ <b>429.19 Crore</b> (previous year ₹ 508.20 Crore)		
<b>Deposits</b>		
Balance with Customs, Port Trust and other Govt. Authorities	78.32	55.49
Other deposits	108.01	65.05
Advance tax/TDS (Net of provision for taxation ₹ <b>5909.46 Crore</b> (Previous year ₹ 8007.45 Crore))	642.19	563.36
Less: Provisions	<u>42.84</u>	<u>33.35</u>
	<b>785.68</b>	<b>650.55</b>
<b>Sub classification:-</b>		
Unsecured, considered good ₹ <b>785.68 Crore</b> (previous year ₹ 650.55 Crore)		
Doubtful ₹ <b>42.84 Crore</b> (previous year ₹ 33.35 Crore)		
	<u><b>1219.05</b></u>	<u><b>1167.08</b></u>
<b>Includes:</b>		
Due from Officers	0.01	0.01



## 14 - Other non-current assets

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
Long term trade receivables	14731.78		14858.76	
Less: Provision for bad & doubtful debts	2956.71		2403.35	
Less: Automatic price reduction adjustment	361.25	11413.82	574.34	11881.07
		<u>11413.82</u>		<u>11881.07</u>
<b>Sub classification: Long term trade receivables</b>				
Secured, considered good		-		-
Unsecured, considered good		11413.82		11881.07
Doubtful		3317.96		2977.69
		<u>14731.78</u>		<u>14858.76</u>
Long term trade receivables include deferred debts- - ₹ 10219.60 Crore (previous year ₹ 11619.96 Crore)				

## 15 - Inventories

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
Raw material & components	4090.04		3877.83	
Material-in-transit	467.45	4557.49	593.50	4471.33
Work-in-progress (including items with sub-contractors)		3210.72		3013.69
Finished goods	1743.74		1498.80	
Inter division transfers in transit	201.99	1945.73	307.07	1805.87
Stores & spare parts				
Production	224.08		227.15	
Fuel stores	5.50		17.06	
Miscellaneous	46.55	276.13	48.69	292.90
Materials with fabricators/contractors		141.73		197.39
Loose tools		35.29		37.55
Scrap (at estimated realisable value)		71.54		65.56
Less: Provision for non-moving inventory	136.97	-136.97	86.74	-86.74
		<u>10101.66</u>		<u>9797.55</u>
Refer to Significant accounting policy No. 9 regarding mode of valuation				

## 16 - Trade receivables

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Debts outstanding for a period exceeding six months	15418.12	15015.42
Other debts	12567.25	14248.31
	27985.37	29263.73
Less : Provision for bad & doubtful debts & automatic price reduction adjustment	1761.87	1191.81
	26223.50	28071.92
Trade receivables include deferred debts-		
– ₹ 7047.77 Crore (previous year ₹ 6327.62 Crore)		
Trade receivables include goods despatched pending billing		
– ₹ 1191.93 Crore (previous year ₹ 1328.75 Crore)		
Trade receivables include valuation adjustment-		
– ₹ 1708.44 Crore (previous year ₹ 1342.28 Crore)		
<b>Particulars of trade receivables :</b>		
Secured, considered good	-	-
Unsecured, considered good	26223.50	28071.92
Doubtful	1761.87	1191.81
	27985.37	29263.73

## 17 - Cash & Bank Balances

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b><u>Cash &amp; cash equivalents</u></b>		
Balances with Banks*	2510.46	2383.66
Cheques, Demand Drafts on hand	290.74	185.54
Cash & Stamps in on hand	0.58	0.94
Remittances in transit	-	0.06
<b><u>Other Bank Balances</u></b>		
Fixed deposit having maturity more than 3 months but not more than 12 months	7010.09	9302.73
Fixed deposit having maturity more than 12 months	0.83	
	9812.70	11872.93
<b>*Includes</b>		
Earmarked against unclaimed dividend	3.72	3.87
Non-repatriable account	4.11	5.87

## 18 - Short-term loans and advances

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>Loans</b>				
Loans to employees	0.01		0.02	
Loans to public sector undertakings (Bharat Pumps and Compressor Ltd. for capital investment)	8.00		8.00	
Interest accrued and or due on loans	1.93	9.94	1.95	9.97
<b>Sub classification:-</b>				
Secured, considered good ₹ 8.04 Crore (previous year ₹ 8.06 Crore)				
Unsecured, considered good ₹ 1.90 Crore (previous year ₹ 1.91 Crore)				
<b>Advances (recoverable in cash or in kind or for value to be received)</b>				
To subsidiaries	0.59		0.51	
To employees	39.08		39.68	
For purchases	463.74		505.78	
To others	1192.49	1695.90	1046.82	1592.79
<b>Sub classification:-</b>				
Secured, considered good ₹ 0.05 Crore (previous year ₹ 0.08 Crore)				
Unsecured, considered good ₹ 1695.85 Crore (previous year ₹ 1592.71 Crore)				
<b>Deposits</b>				
Balance with Customs, Port Trust and other Govt. Authorities	502.52		436.88	
Others	129.58		86.86	
Less: Provision	113.29	518.81	102.58	421.16
<b>Sub classification:-</b>				
Unsecured, considered good ₹ 518.81 Crore (previous year ₹ 421.16 Crore)				
Doubtful ₹ 113.29 Crore (previous year ₹ 102.58 Crore)				
		2224.65		2023.92
Includes:				
Due from officers		0.14		0.15

## 19 - Other current assets

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Interest Accrued on Banks Deposits	175.03	252.52
	175.03	252.52

## 20 - Revenue from operations

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Sales less returns (gross)	24463.73	33136.29
Income from external erection & other services & revenue from works contract	6483.31	7201.63
	<u>30947.04</u>	<u>40337.92</u>
Refer point no. 29a of Note no. 31		

## 21 - Other operational income

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Export Incentives	100.33	27.04
Rental income on leased assets	0.93	0.93
Lease equalisation account	-0.60	-0.51
Scrap sale	243.92	284.88
Receipt from sale/transfer of surplus stock	0.06	0.05
Others	296.37	407.62
	<u>641.01</u>	<u>720.01</u>

## 22 - Other income

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
<b>A. Other income</b>		
Profit on sale of short term investment	0.00	0.02
Profit from sale of fixed assets & capital stores (net)	5.74	0.05
Dividend	29.80	21.38
Exchange variation ( net)	0.00	658.78
Others (including grants of ₹ NIL (previous year ₹ NIL) from Govt. of India for R & D Projects)	373.79	304.76
<b>Total (A)</b>	<u>409.33</u>	<u>984.99</u>
<b>B. Interest Income*</b>		
From customers	0.07	0.09
From banks	798.27	613.85
Others	12.78	17.10
<b>Total (B)</b>	<u>811.12</u>	<u>631.04</u>
*TDS ₹ 81.05 Crore (previous year ₹ 60.36 Crore)		
<b>Total Other Income</b>	<u>1220.45</u>	<u>1616.03</u>



## 23 - Cost of material consumption, erection and engineering expenses

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Consumption of raw material & components	13703.99	17141.26
Consumption of stores & spares	472.54	569.19
Erection and engineering exp. - payment to subcontractors	3581.79	4392.38
	<u>17758.32</u>	<u>22102.83</u>

## 24 - Increase/(Decrease) in work in progress & finished goods

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
<b>Work-in-Progress</b>		
Closing Balance	3210.72	3013.69
Opening Balance	3013.69	4188.13
Less: Stock adjustment on amalgamation	<u>197.03</u>	<u>13.29</u>
		-1187.73
<b>Finished Goods</b>		
Closing Balance	1743.74	1498.80
Opening Balance	1498.80	1359.89
Less: Stock adjustment on amalgamation	<u>244.94</u>	<u>1.11</u>
		137.80
<b>Inter-division transfer in transit</b>	<u>-103.93</u>	<u>-3.72</u>
	<u>338.04</u>	<u>-1053.65</u>
<b>NOTE:</b>		
<b>Element of Excise duty in Finished Goods</b>		
Closing Balance	128.31	130.62
Opening Balance	130.62	126.49

## 25 - Employees benefits expense

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Salaries, wages, bonus, allowances & other benefits	4503.07	5019.40
Contribution to gratuity fund	89.44	107.13
Contribution to provident and other funds	334.67	328.32
Group insurance	11.89	10.56
Staff welfare expenses	510.93	468.37
	<u>5450.00</u>	<u>5933.78</u>

## 26 - Finance cost

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Interest expense	91.65	103.90
Interest on income tax	0.00	4.47
Other Borrowing Costs	0.00	24.26
	91.65	132.63
Less: Borrowing Cost capitalised	-	-
	91.65	132.63

## 27 - Other expenses of manufacture, administration, selling & distribution

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Royalty, technical, Resident consultant's charges & other consultancy charges	118.58	134.03
Rent	82.04	81.95
Excise duty	225.16	285.61
Power & Fuel	554.57	603.52
Rates & taxes	74.30	74.75
Service tax	9.94	8.25
Exchange variation (Net)	386.42	
Insurance	123.02	119.34
Repairs:		
Buildings	88.29	84.04
Plant & machinery	43.64	44.56
Others	133.09	135.40
Other expenses in connection with exports	23.79	23.30
Losses written off	0.02	0.05
Bad debts written off	31.43	8.58
Carriage outward	321.35	382.40
Travelling & conveyance	164.53	186.78
Miscellaneous expenses	1060.91	1027.67
Liquidated damages charged off	31.24	61.67
Donations	0.01	0.06
Corporate social responsibility & sustainability development expenses (Includes ₹ 62.94 Crore for amount yet to be spent on committed projects)	165.00	46.54
	3637.33	3308.50

## 28 - Provisions (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2015		Figures for the previous year ended 31.03.2014	
<b>Doubtful debts, Liquidated damages and loans &amp; advances</b>				
Created during the year	1765.23		1469.92	
Less: written back during the year	<u>802.82</u>	<u>962.41</u>	<u>713.85</u>	<u>756.07</u>
<b>Contracutal Obligations</b>				
Created during the year	1047.26		1116.95	
Less: written back during the year	<u>568.19</u>	<u>479.07</u>	<u>487.49</u>	<u>629.46</u>
<b>Others</b>				
Created during the year	494.14		947.14	
Less: written back during the year	<u>331.39</u>	<u>162.75</u>	<u>73.97</u>	<u>873.17</u>
		<u>1604.23</u>		<u>2258.70</u>

## 29 - Prior period adjustment (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2015		Figures for the previous year ended 31.03.2014	
<b>Income</b>				
Sales less returns	-10.36		0.00	
Other income	<u>0.66</u>	<u>-9.70</u>	<u>0.03</u>	<u>0.03</u>
<b>Expenditure</b>				
Payment to Subcontractor	0.66		0.14	
Consumption of Raw material & components	0.00		0.40	
Depreciation	0.33		6.03	
Interest Cost	0.00		0.03	
Misc. Expenses	<u>-0.58</u>	<u>0.41</u>	<u>-0.56</u>	<u>6.04</u>
		<u>-10.11</u>		<u>-6.01</u>

## 30 - Tax expense

(₹ in Crore)

	Figures for the current year ended 31.03.2015		Figures for the previous year ended 31.03.2014	
<b>a) Current tax</b>				
For current year	1005.33		1899.95	
For earlier years	<u>-54.26</u>	<u>951.07</u>	<u>11.05</u>	<u>1911.00</u>
<b>b) Deferred tax charge / (credit)</b>				
For current year	-340.38		-315.10	
For earlier years	<u>110.03</u>	<u>-230.35</u>	<u>-42.38</u>	<u>-357.48</u>
		<u>720.72</u>		<u>1553.52</u>

## 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, 2013 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 recognized 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 utilized 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 16<sup>th</sup> 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 1<sup>st</sup> 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 recognized over the lease period.

#### (ii) Assets Given on Lease on or after 1<sup>st</sup> April, 2001

Assets manufactured and given on finance lease are recognized as sales at normal sale price / fair value/ NPV.

Finance income is recognized over the lease period.

Initial direct costs are expensed at the commencement of lease.

#### B) Assets Taken on Lease on or after 1<sup>st</sup> 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 recognized as income over the lease period.

##### B) Assets Taken on Lease:

Lease payments made for assets taken



on operating lease are recognized 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
  - The company will have control over the assets, and
  - 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.
  - 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 recognized 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 useful life prescribed in Schedule II of the Companies Act, 2013, except where estimated useful life is shorter as shown hereunder:-

	(Years)
General plant & machinery	12.5
Automatic/semi- automatic machines	10
Erection equipment, Capital tools & tackles	5
Railway sidings, Locomotives & wagons	12.5
Drainage, sewerage & water supply	30
Servers and networks	5

In respect of additions to/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

- Where useful life of a part of the asset (costing at least ₹ 1 Crore or 10% of the cost of the asset, whichever is higher) is different from the useful life of the remaining asset, useful life of that part is determined separately and depreciation charged accordingly.
- Fixed assets used outside India pursuant to long term contracts are depreciated over the duration of the initial contract.
- 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/-.
- 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 temporary structures) are so depreciated after retaining 5% as residual value.

- (vi) Temporary structures are fully depreciated in the year of construction.
- (vii) 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

- (i) Long-term investments are carried at cost. Decline, other than temporary, in the value of such investments, is recognized 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

- (i) 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 recognized 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 recognized.

### **c) 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 recognized 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 realizable value, they are considered at 97.5% of the realizable 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 recognized as revenue on completion of supplies under the contract.

- (ii) Income from erection and project management services is recognized on work done based on:

Percentage of completion; or

The intrinsic value, reckoned at 97.5% of contract value, the balance 2.5% is recognized as income when the contract is completed.

- (iii) Income from engineering services rendered is recognized at realizable value based on percentage of work completed.
- (iv) Income from supply/erection of non-BHEL equipment/systems and civil works is recognized 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 recognized 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 recognized 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 recognized 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 recognized 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 recognized 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 recognized 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 recognized 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.	Description		2014-2015	2013-2014
<b>1</b>	<b>Capital &amp; other commitments</b>			
a)	Estimated amount of contracts, net of advances, remaining to be executed on capital account and not provided for	₹ in Crore	<b>294.25</b>	327.92
	The above includes for acquisition of intangible assets	₹ in Crore	<b>8.00</b>	9.80
b)	Investment in the Joint Venture entities for which the company has restrictions for their disposal for five years from the date of incorporation /commercial operation of the project/first unit of the project/completion of first EPC contract, as the case may be.	₹ in Crore	<b>381.52</b>	406.50
c)	Investment in the Subsidiary for which the company has restrictions for their disposal for first four years after the registration of contract (19.01.2011)	₹ in Crore	-	5.36
d)	Commitments towards future investment in the joint venture entities.	₹ in Crore	<b>292.50</b>	137.50
e)	In view of the nature of business, being long term construction contracts, there may be other commitments for purchase of material etc., which has been considered as normal business process, hence not been disclosed.			
<b>2</b>	<b>Land and buildings includes</b>			
a)	(i) Acres of land for which formal transfer/ lease deed have not been executed	Acres	<b>8939.61</b>	8939.61
	Net Block of above	₹ in Crore	<b>74.20</b>	74.68
	(ii) Number of flats for which formal transfer/ lease deed have not been executed	Nos.	<b>12</b>	12
	Net Block of above	₹ in Crore	<b>1.37</b>	1.51
	(iii) Number of buildings for which formal transfer/ lease deed have not been executed	Nos.	<b>0</b>	1
	Net Block of above	₹ in Crore	<b>0.00</b>	5.07
	(iv) including for 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	<b>528.18</b>	528.18
	Net Block of above	₹ in Crore	<b>67.81</b>	68.28
b)	Acres of land leased to Ministry of Defence, Govt. of India Departments & others	Acres	<b>30.60</b>	30.60
c)	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	<b>180.00</b>	180.00
d)	Acres of land under adverse possession/encroachment.	Acres	<b>586.05</b>	598.78
e)	610.06 acres of land pending mutation at Haridwar (Cost of land of 2(b), (c), (d) & (e) above mentioned is not material)			

3	The impact on the profit of providing 100 percent depreciation on fixed assets up to ₹ 10,000/- each, without considering such impact of earlier years, is as under :			
	100% depreciation on assets up to ₹ 10,000/- charged off in the accounting year.	₹ in Crore	<b>8.26</b>	10.59
	Normal depreciation on above.	₹ in Crore	<b>1.42</b>	3.21
	Excess amount charged.	₹ in Crore	<b>6.84</b>	7.38
4	Revenue from Operations			
	i) a) Includes based on provisional prices	₹ in Crore	<b>56.23</b>	154.02
	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	<b>1232.54</b>	1673.94
	c) includes despatches of equipment held on behalf of customers at their request for which payment has been received by Company ; and	₹ in Crore	<b>17.10</b>	36.22
	d) excludes for price reduction (net of refund) due to delay in delivery as per the terms of the contract .	₹ in Crore	<b>45.43</b>	57.66
	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.			
5	Contingent liabilities:			
	Claims against the company not acknowledged as debt :			
	i) a) Income Tax Pending Appeals	₹ in Crore	<b>16.50</b>	0.90
	b) Against which paid under protest included under the head "Deposits "	₹ in Crore	<b>0.70</b>	0.00
	ii) a) Sales Tax Demand	₹ in Crore	<b>1519.28</b>	1343.70
	b) Against which paid under protest included under the head "Deposits"	₹ in Crore	<b>267.66</b>	190.51
	iii) a) Excise Duty demands	₹ in Crore	<b>530.85</b>	489.55
	b) Against which paid under protest included under the head "Deposits"	₹ in Crore	<b>23.40</b>	17.75
	iv) a) Custom Duty demands	₹ in Crore	<b>2.93</b>	3.14
	b) Against which paid under protest included under the head "Deposits"	₹ in Crore	<b>2.83</b>	2.89
	v) Court & Arbitration cases	₹ in Crore	<b>862.72</b>	1033.93
	vi) a) Liquidated Damages	₹ in Crore	<b>4107.19</b>	4347.41
	b) Amount deducted by customers towards LD included in vi)a	₹ in Crore	<b>2405.13</b>	2672.49
	vii) Counter Claim by contractors	₹ in Crore	<b>0.61</b>	0.77
	viii) a) Service Tax Demand	₹ in Crore	<b>458.95</b>	291.71
	b) Against which paid under protest	₹ in Crore	<b>4.36</b>	0.61
	ix) Others	₹ in Crore	<b>102.23</b>	65.26

(In view of the various court cases, litigations and claims disputed by the company, the 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 ₹ 55000 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 31.03.2015 is ₹ 44915 Crore (previous year ₹ 45007 Crore).
- b) Corporate Guarantees outstanding as on 31.03.2015 is ₹ 2752.27 Crore (Previous year ₹ 3312.07 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 up to 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 by the company. The Company vide letter dated 09.02.15 has again requested Department of Heavy Industries (DHI) for waiver of the guarantee fee.
- 8 Amorphous Silicon Solar Cell Plant (ASSCP), Gurgaon was taken on April 1, 1999 from Ministry of New and Renewable Energy (MNRE) on lease for a period of 30 years. The formal lease agreement with the Ministry of New and Renewable Energy (MNRE) is yet to be finalised.
- 9 Balances shown under Trade Receivables, Long term Trade receivable, Trade payables, contractors' advances, deposits and stock/ materials lying with sub-contractors/ fabricators are subject to confirmation, reconciliation & consequential adjustment, if any. As the Company is in the business of long term construction contracts, bills are raised on the customers as per contract by the units located at various places as per the approved billing schedule by the customer and the reconciliation is carried out on ongoing basis & provisions made, wherever considered necessary. Final reconciliation with customer is done on completion of project (Trial Operation and PG Test completed). The total receivables (including long term) are ₹ 42717 Crore, (including deferred debts ₹ 17267 Crore not due for payment). The amount reconciled with customer is around ₹ 1900 Crore against the outstanding amount of ₹ 5412 Crore in completed projects.

10 The disclosure relating to Micro and Small Enterprises		2014-15	2013-14
i)	The principal amount remaining unpaid to supplier as at the end of the accounting year	₹ in Crore	
		<b>201.86</b>	173.85
ii)	The interest due thereon remaining unpaid, to supplier as at the end of accounting year.	₹ in Crore	
		<b>0.07</b>	0.07
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	
		<b>0.00</b>	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	
		<b>0.09</b>	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	
		<b>0.15</b>	0.38
vi)	The amount of interest accrued during the year and remaining unpaid at the end of year.	₹ in Crore	
		<b>0.16</b>	0.45
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	
		<b>0.15</b>	0.45

- 11 a) The disclosures relating to Construction Contracts entered on or after 01.04.2003 as per the requirement of Accounting Standard -7 (Revised) (AS-7R) Construction Contracts are as follows:  
(₹ in Crore)

	2014-15	2013-14
Contract revenue recognised for the year	24136.35	33109.49
In respect of Contract in progress at the end of year :		
The aggregate amount of Cost incurred and recognised profits (less recognised losses)	259994.13	240459.04
Amount of advance received	6779.67	7949.11
Amount of retentions (deferred debts)	18137.26	19009.06
In respect of dues from customers after appropriate netting off		
Gross amount due from customer for the contract work as an asset	4419.12	2903.39
Gross amount due to customer for the contract work as a liability	1590.01	2161.35
Contingencies	-	-

- b) The estimates of total costs and total revenue in respect of construction contracts entered on or after 1<sup>st</sup> April, 2003 in accordance with AS-7R 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 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.

		2014-15	2013-14
<b>A. Capital Expenditure on R&amp;D</b>			
Land	₹ in Crore	0.00	0.00
Building	₹ in Crore	0.02	4.43
Plant & Machinery & Other Equipments	₹ in Crore	41.41	49.05
Total Capital Expenditure	₹ in Crore	41.43	53.48
<b>B. Revenue Expenditure on R &amp; D</b>			
Salaries & Wages	₹ in Crore	141.93	198.56
Material Consumables/spares	₹ in Crore	30.85	24.83
Manufacturing & Other Expenses (Net of Income)	₹ in Crore	37.51	79.01
Total Revenue Expenditure (Net of Income)	₹ in Crore	210.29	302.40

- 13 The disclosure relating to derivative instruments:

- a) The derivative instruments that are hedged and outstanding as on 31.03.2015 is Nil (previous year Nil).  
b) The foreign currency exposures that are not hedged by a derivative instrument or otherwise are as under:

a) Assets / Receivables		2014-15	2013-14
<b>In foreign currency</b>			
in US \$	in Crore	58.48	69.75
in EURO	in Crore	56.24	57.05
in Libya Dinar (LYD)	in Crore	0.81	0.83



in Riyal Oman ( RO)	in Crore	<b>0.03</b>	0.03
<b>In Indian currency</b>			
in US \$	₹ in Crore	<b>3409.21</b>	4136.82
in EURO	₹ in Crore	<b>3794.70</b>	4635.44
in LYD	₹ in Crore	<b>36.72</b>	39.75
in RO	₹ in Crore	<b>4.96</b>	5.24
in Others	₹ in Crore	<b>49.93</b>	32.20

## b) Liabilities

### In foreign currency

in US \$	in Crore	<b>30.79</b>	26.53
in EURO	in Crore	<b>20.28</b>	18.84
in LYD	in Crore	<b>1.38</b>	1.42

### In Indian currency

in US \$	₹ in Crore	<b>1940.23</b>	1607.18
in EURO	₹ in Crore	<b>1381.30</b>	1575.57
in LYD	₹ in Crore	<b>69.92</b>	69.36
in Others	₹ in Crore	<b>72.17</b>	210.24

(₹ in Crore)

14	Remuneration paid/payable to Directors (including Chairman & Managing Director)*	2014-15	2013-14
	Salaries & Allowances	<b>1.70</b>	2.39
	Contribution to PF	<b>0.12</b>	0.11
	Contribution to Gratuity Fund	<b>0.05</b>	0.33
	Others	<b>0.17</b>	0.19

\*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)

15	a) Expenditure on departmental repair & maintenance which are as under:	2014-15	2013-14
	Plant & Machinery	<b>234.01</b>	186.64
	Buildings	<b>55.29</b>	56.41
	Others	<b>43.39</b>	51.13
	b) Agency Commission on exports included in expenses in connection with exports	<b>18.53</b>	11.15
	c) Expenditure on research & development	<b>300.76</b>	311.38
	d) Rent Residential	<b>53.10</b>	50.96

e)	Payment to Auditors (Net of service tax)		
	As Auditors	0.63	0.52
	includes paid abroad	0.07	0.02
	Reimbursement of expenses	0.14	0.15
	Taxation matters (including certification)	0.26	0.14
	includes paid abroad	0.11	0.02
	Other services	0.42	0.35
f)	Payment to Cost Auditors	0.05	0.12
g)	Expenditure on entertainment	6.07	7.41
h)	Expenditure on foreign travel		
	No. of tours	513	734
	Expenditure in Rupees	11.79	15.82
i)	Expenditure on Publicity and Public Relations		
	Salaries allowances & other benefits	10.76	11.96
	Other expenses	10.11	17.52
j)	Director's Fees	0.05	0.08

**16** 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:

	(₹ in Crore)	
	2014-15	2013-14
1 Change in present value of obligation		
a) Present value of obligation as at the beginning	1904.28	1872.92
b) Acquisition adjustment	-	-
c) Interest Cost	161.86	149.83
d) Past service cost	-	-
e) Current service cost	97.18	92.28
f) Curtailment cost / (Credit)	-	-
g) Settlement cost / (Credit)	-	-
h) Benefits paid	-246.42	-241.55
i) Actuarial (gain) / loss	(7.87)	30.79
j) Present value of obligation at the end of the period	1909.03	1904.28
2 Change in the fair value of plan assets		
a) Fair value of plan assets at the beginning	1904.28	1872.92
b) Acquisition Adjustments	-	-
c) Expected return on plan assets	161.86	159.20

d)	Contributions		-
e)	Benefits paid	<b>-246.42</b>	-241.55
f)	Actuarial gain / (loss) on plan assets	<b>-2.57</b>	-6.15
g)	Fair value of plan assets as at the end of the year	<b>1817.15</b>	1784.42
3	Fair value of plan assets		
a)	Fair value of plan assets at the beginning	<b>1904.28</b>	1872.92
b)	Acquisition Adjustments		-
c)	Actual return on plan assets	<b>159.30</b>	153.05
d)	Contributions		-
e)	Benefits paid	<b>-246.42</b>	-241.55
f)	Fair value of plan assets at the year end	<b>1817.15</b>	1784.42
g)	Funded status	<b>-91.88</b>	-119.86
h)	Excess of actual over estimated return of plan assets	<b>-2.57</b>	-6.15
4	Actuarial gain / loss recognised		
a)	Actuarial gain / (loss) for the period – obligation	<b>7.87</b>	-30.79
b)	Actuarial (gain) / loss for the period – plan assets	<b>2.57</b>	6.15
c)	Total (gain) / loss for the period	<b>-5.30</b>	36.94
d)	Actuarial (gain)/ loss recognised in the period	<b>-5.30</b>	36.94
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	<b>1909.03</b>	1904.28
b)	Fair value of plan assets as at the end of period	<b>1817.15</b>	1784.42
c)	Funded status	<b>-91.88</b>	-119.86
d)	Excess of actual over estimated	<b>-2.57</b>	-6.15
e)	Unrecognised actuarial (gains)/ losses	-	-
	Less: Pursuant to Amalgamation		-12.60
f)	Net asset/ (liability) recognised in balance sheet	<b>-91.88</b>	-107.26
6	Expense recognised in the statement of profit and loss		
a)	Current service cost	<b>97.18</b>	92.28
b)	Past service cost	-	-
c)	Interest cost	<b>161.86</b>	149.83
d)	Expected return on plan assets	<b>-161.86</b>	-159.20
e)	Curtailment cost / (credit)	-	-
f)	Settlement cost / (credit)	-	-
g)	Net actuarial (gain) / loss recognised in the period	<b>-5.30</b>	36.94
h)	Adjustment for reversal of liability	<b>2.44</b>	12.72
i)	Expenses recognized in the statement of profit & loss	<b>89.44</b>	107.13

Assumptions- Discounting rate 8.00% (prev. year 8.50%), Future salary increase 6.00% (prev. year 6.50%), Expected rate of return on plan assets 8.50% (prev. year 8.50%).

**b) Post Retirement Medical Benefits Plan**

₹ in Crore

	2014-15	2013-14
1 Change in present value of obligation		
a) Present value of obligation as at the beginning	1360.44	1222.20
b) Acquisition adjustment	-	0.00
c) Interest cost	115.64	97.78
d) Past service cost	-	0.00
e) Current service cost	26.37	23.40
f) Curtailment cost / (Credit)	-	0.00
g) Settlement cost / (Credit)	-	0.00
h) Benefits paid	-78.35	-68.80
i) Actuarial (gain) / loss	106.34	85.87
j) Present value of obligation as at the end of year	1530.44	1360.44
2 Change in the fair value of plan assets	-	-
3 Fair value of plan assets	-	-
Funded Status	-1530.44	-1360.44
4 Actuarial gain / loss recognised		
a) Actuarial gain / (loss) for the period - obligation	-106.34	-85.87
b) Actuarial (gain) / loss for the period – plan assets	-	-
c) Total (gain) / loss for the year	106.34	85.87
d) Actuarial (gain)/ loss recognised in the period	106.34	85.87
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	1530.44	1360.44
b) Fair value of plan assets as at the end of the year	-	-
c) Funded status	-1530.44	-1360.44
d) Net assets / (liability) recognised in balance sheet	-1530.44	-1360.44
6 Expenses recognised in the statement of profit and loss		
a) Current service cost	26.37	23.40
b) Interest cost	115.64	97.78
c) Net actuarial (gain) / loss recognised in the year	106.34	85.87
d) Expenses recognised in the statement of profit & loss	248.35	207.04

**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 up to 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.



(₹ in Crore)

<b>1</b>	<b>Change in present value of obligation</b>	<b>2014-15</b>	<b>2013-14</b>
a)	Present value of obligation as at the beginning	1328.62	1174.31
b)	Acquisition adjustment	-	-
c)	Interest Cost	112.93	93.95
d)	Past service cost	-	-
e)	Current service cost	51.74	48.75
f)	Curtailment cost / (Credit)	-	-
g)	Settlement cost / (Credit)	-	-
h)	Benefits paid	-242.00	-256.00
i)	Actuarial (gain) / Loss	228.58	267.61
j)	Present value of obligation at the end of the period	1479.87	1328.62
<b>2</b>	<b>Change in the fair value of plan assets</b>	<b>-</b>	<b>-</b>
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	-	-
<b>3</b>	<b>Fair value of plan assets</b>	<b>-</b>	<b>-</b>
a)	Fair value of plan assets at the beginning	-	-
b)	Acquisition Adjustments	-	-
c)	Actual return on plan assets	-	-
d)	Contributions	-	-
e)	Benefits paid	-	-
f)	Fair value of plan assets at the year end	-	-
g)	Funded status	-1479.87	-1328.62
h)	Excess of actual over estimated return of plan assets	-	-
<b>4</b>	<b>Actuarial gain / loss recognised</b>	<b>-</b>	<b>-</b>
a)	Actuarial gain / (loss) for the period - obligation	-228.57	-267.61
b)	Actuarial (gain) / loss for the period – plan assets	-	-
c)	Total (gain) / loss for the period	228.57	267.61
d)	Actuarial (gain)/ loss recognised in the period	228.57	267.61
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	1479.87	1328.62
b)	Fair value of plan assets as at the end of period	-	-
c)	Funded status	-1479.87	-1328.62
d)	Excess of actual over estimated	-	-
e)	Unrecognised actuarial (gains)/ losses	-	-
	Less: Pursuant to Amalgamation		
f)	Net asset/ (liability) recognised in balance sheet	-1479.87	-1328.62
6	Expense recognised in the statement of profit and loss		
a)	Current service cost	51.74	48.75
b)	Past service cost	-	-
c)	Interest cost	112.93	93.95
d)	Expected return on plan assets	-	-
e)	Curtailment cost / (Credit)	-	-
f)	Settlement cost / (credit)	-	-
g)	Net actuarial (gain) / loss recognised in the period	228.57	267.61
	Less: Pursuant to Amalgamation		
h)	Expenses recognised in the statement of profit & loss	393.24	410.31
d)	The company has got the actuarial valuation of provident fund done in respect of PF trusts of the units/regions. As per the actuarial valuation certificate liability for likely interest shortfall, to be compensated by the company to the PF trust, has been provided in the accounts.		
	Provision made (withdrawal) for shortfall in PF interest liability based on actuarial valuation for the year	₹ in Crore	
		-3.54	-10.39
	Accumulated provision for shortfall in PF interest liability based on actuarial valuation	₹ in Crore	
		14.95	18.49

## 17 Related Party Transactions:

- i) Related Parties where control exists (Joint Ventures):

Powerplant Performance Improvement Ltd.

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 & Company Secretary):

CMD : Shri B. Prasada Rao,

Functional Directors : S/Shri P. K. Bajpai, R. Krishnan, W.V.K. Krishna Shankar, Atul Sobti,

T.N. Veeraraghavan (from 07.01.2015) & Company Secretary : Shri I.P. Singh

### iii) Details of Transactions

Joint Ventures		2014-15	2013-14
Purchase of Goods and Services	₹ in Crore	8.95	39.96
Sales of Goods and services	₹ in Crore	1592.70	1982.39
Receiving of Services	₹ in Crore	27.11	40.60
Rendering of Services	₹ in Crore	430.53	289.86
Dividend income	₹ in Crore	17.08	16.90
Royalty income	₹ in Crore	1.02	1.29
Purchase of shares	₹ in Crore	-	25.00
Sale of Shares	₹ in Crore	2.50	0.00
Amounts due to BHEL at the end of the year	₹ in Crore	1082.68	1034.17
Amounts due from BHEL (incl. advances) at the end of the year	₹ in Crore	277.12	466.79
Provision for Doubtful debts	₹ in Crore	0.74	10.81
Advances given	₹ in Crore	0.75	0.81
Note : Majority of transactions are with BGGTS, NBPPL and Raichur Power Corporation Ltd.			
Key Management Personnel (KMP)			
Payment of Salaries	₹ in Crore	2.31	3.02
Relatives of KMP			
Amounts due to BHEL at the end of the year	₹ in Crore	0.01	0.01
Payment of Salaries	₹ in Crore	0.26	0.24

## 18 Lease

Details of assets taken on lease on or after 1<sup>st</sup> April 2001 are as under:

### i) Finance Lease

a.	Outstanding balance of Minimum Lease payments		2014-15	2013-14
	not later than one year	₹ in Crore	68.70	83.67
	later than one year and not later than five years	₹ in Crore	69.21	121.43
	later than five years	₹ in Crore	0.12	0.23
	Total minimum lease payments at the balance sheet date	₹ in Crore	138.03	205.34
b.	Present Value of (a) above			
	not later than one year	₹ in Crore	56.82	67.68
	later than one year and not later than five years	₹ in Crore	60.89	104.56
	later than five years	₹ in Crore	0.11	0.20
	Total of Present Value at the balance sheet date	₹ in Crore	117.82	172.45
c.1	Finance charges	₹ in Crore	20.21	32.89
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		2014-15	2013-14
The future minimum lease payments under non-cancellable operating lease are as under			
not later than one year	₹ in Crore	1.28	1.47
later than one year and not later than five years	₹ in Crore	2.02	1.95
later than five years	₹ in Crore	2.18	4.15
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

## 19 Earnings per Share:

		2014-15	2013-14
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	1419.29	3460.78
Basic and Diluted Earnings Per Share (B)/(A)	(₹)	5.80	14.14

## 20 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:

		2014-15	2013-14
a) Names of Joint Ventures	Country of Incorporation	Proportion of Ownership	
Power Plant Performance Improvement Ltd.	India	One share less than 50%	One share less than 50%
BHEL-GE Gas Turbine Services Pvt. Ltd.	India		
NTPC-BHEL Power Projects Pvt. Ltd.	India	50%	50%
Latur Power Company Ltd. (Under liquidation)	India	NIL	50%
Raichur Power Corporation Ltd.	India	23.54%	36.49%
Dada Dhuniwale Khandwa Power Ltd.	India	50%	50%



- b) The provision for diminution in value of investment in Power plant 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)

	2014-15	2013-14
Non current asset	10.89	10.86
Net Current Assets	99.24	86.17
Non current liabilities	2.66	4.11
Deferred Tax Assets (net)	3.50	2.82
Shareholders Funds	110.96	96.80
Income	303.64	399.05
Expenses	251.43	341.92
Contingent Liabilities	2.53	2.66
Capital Commitments	0.22	0.41

**NTPC-BHEL Power Projects Pvt. Ltd.** (₹ in Crore)

	2014-15	2013-14
Non current asset	92.73	57.22
Net Current Assets	-21.19	12.38
Non current liabilities	7.91	6.18
Deferred Tax Assets (net)	2.71	2.14
Shareholders Funds	66.32	65.56
Income	296.26	43.03
Expenses	295.68	36.03
Contingent Liabilities	34.29	37.75
Capital Commitments	4.82	17.13

*Figures of 2014-15 are based on provisional unaudited financial results*

**Raichur Power Corporation Ltd.** (₹ in Crore)

	2014-15	2013-14
Non current asset	2201.52	2398.97
Net Current Assets	-203.59	-197.71
Non current liabilities	1666.41	1856.80
Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	331.52	331.52
Income	0.17	0.50

Expenses	169.52	163.37
Contingent Liabilities	104.17	161.50

*Figures of 2014-15 are based on provisional unaudited financial results*

	(₹ in Crore)	
<b>Dada Dhuniwale Khandwa Power Ltd.</b>	<b>2014-15</b>	<b>2013-14</b>
Non current asset	8.14	8.20
Net Current Assets	14.86	14.79
Non current liabilities	0.12	0.12
Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	22.88	22.87
Income	0.01	0.00
Expenses	0.00	0.02
Contingent Liabilities	0.00	0.00

- 21 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.   | 2014-15 | 2013-14 |
| 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    | 0.00    |
- 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.

- 22 The disclosure relating to Accounting Standard -29 (₹ in Crore)

	2014-15	2013-14
<b>a) Liquidated Damages</b>		
Opening Balance	1728.77	1320.46
Add: Adjustment pursuant to amalgamation	0.00	39.61
Additions	734.68	697.84
Usage/ Write off/payment	-31.24	-61.67
Withdrawal/adjustments	-207.18	-267.47
Closing Balance	2225.03	1728.77
<b>Contractual Obligation</b>		
Opening Balance	5636.81	4989.97

Add: Adjustment pursuant to amalgamation	<b>0.00</b>	6.87
Additions	<b>1041.63</b>	1116.95
Usage/ Write off/payment	<b>-239.28</b>	-133.39
Withdrawal/adjustments	<b>-330.01</b>	-343.59
Closing Balance	<b>6109.15</b>	5636.81

- 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.
- 23 Assets and Liabilities are classified between Current and Non-current considering 12 months period as operating Cycle.
- 24 Item of expense and income less than ₹ one Lakh are not considered for booking under Prior Period Items.
- 25 a) The Company has revised the accounting policy for depreciation in line with Schedule II of the Companies Act, 2013. Assets, for which the estimated useful life based on the technical evaluation is different from the life given in the Schedule II, have been disclosed in significant accounting policy no. 7. Wherever applicable, depreciation is charged at the increased rate for double and triple shift as prescribed in Note no. 6 of Schedule II of the Companies Act 2013.
- b) Due to the revision in depreciation policy, the depreciation for the year is higher by ₹ 77.58 Crore and profit before tax for the year is lower to this extent. Further, an amount of ₹ 40.50 Crore (net of deferred tax ₹ 21.44 Crore) for assets, whose remaining useful life is NIL as at 1<sup>st</sup> April 2014, has been adjusted with the opening balance of retained earnings.
- 26 There is an outstanding of ₹ 3376 Crore pertaining to 20 projects on hold due to various reasons like environment clearance, fuel linkage, land acquisition, fund constraints, force majeure etc. mainly hold imposed by BHEL due to strategic reasons. This includes ₹ 1845 Crore outstanding for more than 3 years in respect of 11 projects. Total advance available against these 20 hold projects is ₹ 1109 Crore.
- 27 Previous year's figures have been regrouped/ rearranged wherever considered necessary.

## 28. Segment Information

(₹ in Crore)

	For the year ended 31.3.2015			For the year ended 31.3.2014		
A. PRIMARY SEGMENT - BUSINESS SEGMENTS						
	Power	Industry	Total	Power	Industry	Total
I. SEGMENT REVENUE						
a. Segment Revenue	23983.54	6963.50	30947.04	32485.38	7852.54	40337.92
b. Operating Revenue-External	23983.54	6963.50	30947.04	32485.38	7852.54	40337.92
II. SEGMENT RESULTS						
a. Segment Results	2961.65	341.72	3303.37	5385.00	974.57	6359.57
b. Unallocated expenses (Net of income)			1071.71			1212.64
c. Profit before finance cost & Income Tax (a) - (b)			2231.66			5146.93
d. Finance cost			91.65			132.63
e. Net Profit before Income Tax (c) - (d)			2140.01			5014.30
f. Income Tax			720.72			1553.52
g. Net Profit after Income Tax			1419.29			3460.78
III ASSETS & LIABILITIES						
a. Segment Assets	43714.91	10995.76	54710.67	45525.08	11919.56	57444.64
b. Unallocated Assets			13756.46			15346.53
c. Total Assets			68467.13			72791.17
d. Segment Liabilities	27139.91	6148.28	33288.19	29311.07	6662.02	35973.09
e. Unallocated Liabilities			1094.34			3771.03
f. Total Liabilities			34382.53			39744.12
IV OTHER INFORMATION						
a. Cost incurred during the period to acquire fixed assets (Incl. CWIP)	293.85	124.19		339.42	271.51	
b. Depreciation	796.99	212.18		758.83	182.65	
c. Non Cash Expenses (other than depreciation)	1262.80	397.35		2092.03	235.39	
B. SECONDARY SEGMENT - GEOGRAPHICAL SEGMENTS						
	Within India	Outside India	Total	Within India	Outside India	Total
1 Net Sales / Income from Operations	29701.31	1245.73	30947.04	38354.35	1983.57	40337.92
2 Total Assets	67705.43	761.70	68467.13	72164.17	627.00	72791.17
3 Cost incurred during the period to acquire Fixed Assets	500.08	0.35	500.43	713.85	-0.79	713.06

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.

## 29. Other Information

### a. Sales, Opening Stocks & Closing Stocks

(₹ in Crore)

Product	Unit	Sales during the year 2014-2015		Op. Stock of Fin. Goods as on 01.04.2014		Cl. Stock of Fin. Goods as on 31.3.2015	
		Qty.	Value	Qty.	Value	Qty.	Value
<b>HEP, Bhopal</b>							
<b>SWITCHGEAR, CONTROLGEAR, RECTIFIER, CAPACITORS</b>							
Switchgear-11 kv to 220 kv high speed air blast circuit breakers	Nos.	5157	95.30	101	11.42	0	1.98
Control Panels	Nos.	(5492)	(231.29)	0	(11.44)	(101)	(11.42)
Industrial controlgear	Nos.	244	90.54	12	2.42	0	0.28
	Nos.	(970)	(35.73)	0	(2.41)	(12)	(2.42)
Traction controlgear for AC, DC & diesel system	Nos.	0	2.28	0	0.00	0	0.01
	Nos.	0	(6.80)	0	0.00	0	0.00
Rectifiers with Electronics	Set	112	75.59	7	1.42	5	2.43
	Set	(166)	(105.31)	0	(0.11)	(7)	(1.42)
Capacitors	Nos.	556	64.89	3	0.27	2	0.31
	Nos.	(529)	(76.82)	0	(0.28)	(3)	(0.27)
Bushings	MVAR	3374	25.91	382	2.43	278	1.76
	MVAR	(2172)	(17.77)	0	0.00	(382)	(2.43)
		0	15.25	0	0.70	0	0.93
		0	(22.63)	0	(0.41)	0	(0.70)
<b>TRANSFORMERS</b>							
Power transformers up to 400 kv	MVA	11603	606.35	1398	68.93	3	21.82
	MVA	(21568)	(978.18)	(683)	(26.25)	(1398)	(68.93)
Instrument, welding, transformers and reactors	MVA	384	8.79	36	1.31	163	1.68
	Nos.			0			
	MVA	(552)	(15.33)	(0)	(0.06)	(36)	(1.31)
	Nos.	(468)		(1)		0	
<b>INDUSTRIAL AND TRACTION MACHINES</b>							
Traction Motors for AC,DC & diesel system, main/auxiliary generators	Nos.	1978	431.84	135	9.89	35	4.02
Industrial machines, AC motors up to 1000 HP, DC motors & generators of all types	Nos.	(3444)	(466.94)	(17)	(2.42)	(135)	(9.89)
	Nos.	686	127.66	63	11.88	105	21.65
	Nos.	(819)	(193.48)	(131)	(14.46)	(63)	(11.88)
<b>HEAVY ROTATING PLANT &amp; TURBINES</b>							
Large electrical machines above 1000 HP	Nos.	187	275.99	16	12.82	16	11.25
Water wheel alternators & water turbines & Mini micro turbines & generators	Nos.	(217)	(337.30)	(17)	(14.17)	(16)	(12.82)
	Nos.	2	549.26	0	33.03	4	64.74
	MW	32	0.00			680	
	Nos.	6	197.80	0	14.88	3	71.17
	MW	82				510	
	Nos.	(6)	(611.33)	0	(14.47)	0	(33.03)
	MW	(742)					
	Nos.	(2)	(183.10)	0	(10.68)	0	(14.88)
	MW	(220)					
Turbo Alternators & Steam turbines	Set	5	517.11	0	15.32	0	12.55
Heat Exchangers	Set	(5)	(605.53)	0	(44.04)	0	(15.32)
	Nos.	32	392.48	7	3.66	0	8.11
	Nos.	(27)	(407.98)	(5)	(5.93)	(7)	(3.66)
Others		2018	61.88		0.00		4.96
			(6.70)		(0.39)		0.00
<b>TOTAL</b>			<b>3538.92</b>		<b>190.38</b>		<b>229.65</b>



(₹ in Crore)

Product	Unit	Sales during the year 2014-2015		Op. Stock of Fin. Goods as on 01.04.2014		Cl. Stock of Fin. Goods as on 31.3.2015	
		Qty.	Value	Qty.	Value	Qty.	Value
TP, Jhansi							
Power transformers and	Nos.	119	367.17	0	0	3	13.32
special transformers	Nos.	(147)	(451.44)	0	0.00	0	0
ESP Transformer	Nos.	955	100.01	0	0.00	0	0
	Nos.	(1179)	(125.00)	0	0.00	0	0.00
AC EMU Transformer	Nos.	6	2.18	0	0.00	0	0.00
	Nos.	(10)	(1.95)	0	0.00	0	0.00
Freight Loco transformers	Nos.	132	79.20	10	4.85	1	0.30
	Nos.	(94)	(85.17)	(3)	(1.60)	(10)	(4.85)
Instrument transformers	Nos.	432	14.77	0	0.00	0	0.00
	Nos.	(491)	(16.85)	0	0.00	0	0.00
Bus Duct	Nos./Set	0	0.14	0	0.00	0	0.00
	Nos./Set	0	(0.23)	0	0.00	0	0.00
Dry Type Transformer	Nos.	110	39.64	0	0	0	0
	Nos.	(61)	(28.38)	0	0.00	0	0.00
Diesel Shunters	Nos.	12	49.74	0	0.00	2	12.03
	Nos.	(11)	(39.39)	0	0.00	0	0.00
AC LOCO	Nos.	0	0.00	0	0.00	0	0.00
	Nos.	(32)	(286.53)	0	0.00	0	0.00
New Product Loco	Nos.	0	0.00	0	0.00	0	0.00
	Nos.	(1)	(7.94)				
Others/Misc.	Nos.	0	40.02	0	0.00	0	0.00
	Nos.	0	(18.08)	0	(0.02)	0	0.00
		TOTAL	692.87	4.85		25.65	
HEEP, Haridwar							
Electrical Machines	MW/ Nos.	0	0	1/2	0.11	1/2	0.12
	MW/ Nos.	0	0	(1/2)	(0.22)	(1/2)	(0.11)
Industrial controls panels	Nos.	0	0	3	0.00	3	0.00
	Nos.	0	0	(3.00)	(0.19)	(3.00)	0.00
Turbo Sets							
Turbine Modules	MW/ Nos.	5520/42		1357/19	313.05	908/17	285.16
	MW/ Nos.	(8991/79)		(1131/19)	(365.05)	(1357/19)	(313.05)
Turbogenerator modules	MW/ Nos.	6161/10.5	2587.17	1711/5.5			
	MW/ Nos.	(13740/28.5)	(5364.74)	(1350/4)		(1711/5.5)	
Hydro sets	MW/ Nos.		0.17	0	0		
	MW/ Nos.	0	(1.47)	0	0	0	0
Super Rapid Gun Mount	Nos.			0	0		
	Nos.	0	0.00	0	0	0	0
Gas Turbine	MW/ Nos.		213.70	0	0		
	MW/ Nos.	(400/4)	(852.74)	0	0	0	0
Others			736.32	0	36.78		37.37
		0	(639.57)	0	(28.72)	0	(36.78)
		TOTAL	3537.36	349.94		322.65	

(₹ in Crore)

Product	Unit	Sales during the year 2014-2015		Op. Stock of Fin. Goods as on 01.04.2014		Cl. Stock of Fin. Goods as on 31.3.2015	
		Qty.	Value	Qty.	Value	Qty.	Value
HPBP, Trichy							
Boilers	MT	310796	6508.65	39042	445.06	48786	582.66
	MT	(311288)	(8466.15)	(25498)	(358.83)	(39042)	(445.06)
Valves	Nos.	75053	790.05	17623	30.17	13125	59.41
	Nos.	(130485)	(703.02)	(18964)	(42.13)	(17623)	(30.17)
Income from testing & other services	₹		11.74	0	0		
	₹	0	(10.59)	0	0	0	0
Seamless steel tubes	MT	153	2.11	79	1.01	624	9.49
	MT	(187)	(2.46)	(97)	(1.73)	(79)	(1.01)
		TOTAL	7312.55	476.24		651.56	
BAP, Ranipet							
Boiler auxiliaries	MT	149293	1541.13	47304	311.03	37888	307.08
	MT	(129139)	(2018.80)	(40734)	(296.98)	(47304)	(311.03)
Income from testing & other services			9.01				
		0	(2.58)	0	0.00	0.00	0.00
Income from external erection & other services			5.86				
		0	(5.68)	0	0.00	0.00	0.00
		TOTAL	1556.00	311.03		307.08	
HPEP, Hyderabad							
Utility Sets (60 MW)	Nos.	7+P	507.86	P	30.65	P	40.56
	Nos.	(7+P)	(388.90)	(P)	(24.41)	(P)	(30.65)
Small & Medium Sets	Nos.	5+P	186.27	P	16.23	1+P	15.45
	Nos.	(11+P)	(354.47)	(2+P)	(11.70)	(P)	(16.23)
Pumps and heaters	Nos.	156+P	1041.96	P	23.72	11+P	34.58
	Nos.	(31+P)	(1904.88)	(P)	(2.09)	(P)	(23.72)
Compressors	Nos.	2+P	168.05	P	7.71	1+P	3.46
	Nos.	(11+P)	(116.82)	(1+P)	(3.45)	(P)	(7.71)
Gas Turbine	Nos.	P	323.91	0	9.50	P	9.50
	Nos.	(12+P)	(635.28)	0	0.00	0	(9.50)
Bowl Mills	Nos.	79+P	577.78	0	0	6+P	4.44
	Nos.	(50+P)	(1235.44)	0	0	0	0
Heat Exchangers	Nos.		1.20	0	0		
	Nos.	0	(2.77)	0	0	0	0
Erection Income			47.60	0	0		
			(37.03)	0	0	0	0
Castings				0	0		
			(0.75)	0	0	0	0
Breakers	Nos.	3	6.82				
	Nos.	(3)	(12.46)	0	0	0	0
Oil Rigs	Nos.	3+P	429.88	0	0.00	0	0
	Nos.	(P)	(513.44)	0	0	0	0
Others (Services)			3.67				
		TOTAL	3295.00	87.81		107.99	

(₹ in Crore)

Product	Unit	Sales during the year 2014-2015		Op. Stock of Fin. Goods as on 01.04.2014		Cl. Stock of Fin. Goods as on 31.3.2015	
		Qty.	Value	Qty.	Value	Qty.	Value
ISG, Bengaluru							
Other Services			805.80	0	0		
		0	(1024.82)	0	0	0	0
		TOTAL	805.80		0.00		0.00
EDN, Bengaluru							
Power devices	Nos.	6	0.03	125	0.14	2482	0.39
	Nos.	(3540)	(1.32)	(82)	(0.08)	(125)	(0.14)
Photovoltaics	kWs	58933	339.37	55	0.27	173	13.81
	kWs	(33761)	(177.10)	(48)	(0.21)	(55)	(0.27)
Control Equipments	Cubicles	3516	1052.06	276	20.36	199	10.93
	Cubicles	(3709)	(1274.53)	(266)	(17.45)	(276)	(20.36)
		TOTAL	1391.46		20.77		25.13
EPD, Bengaluru							
Insulators & bushings	MT	8318	109.73	661	7.17	704	9.21
	MT	(7333)	(120.26)	(888)	(10.02)	(661)	(7.17)
Ceralin	MT	2125	30.48	156	1.67	451	4.56
	MT	(3543)	(53.69)	(188)	(2.35)	(156)	(1.67)
Control Panel	Nos.		76.28	56	1.31		2.95
	Nos.	0	(42.12)			(56)	(1.31)
Income from testing & other services		0	0.33				
		(0)	(3.39)	(0)	(0.00)	(0)	(0.00)
		TOTAL	216.82		10.15		16.72
Power Group							
Income from erection & Other services & spares			7112.61		-7.05		-5.59
			(7449.24)		(0.19)		(-7.05)
		TOTAL	7112.61		(7.05)		(5.59)
IP, Jagdishpur							
Insulators	CMT	6569	84.19	1214.51	16.77	1024.46	14.27
	CMT	(5767)	(81.07)	(1048)	(13.27)	(1215)	(16.77)
Ceralin	MT	3373	48.54	269	4.18	178.42	2.70
	MT	(2945)	(53.58)	(83)	(1.55)	(269)	(4.18)
		TOTAL	132.73		20.95		16.97
IVP Goindwal							
Industrial Valves	Nos.	0	0.00	1220	5.80	1633	9.17
	Nos.	0	0.00	(1050)	(5.38)	(1220)	(5.80)
Fuel Pipe Coupling	Nos.			84	0.04		
	Nos.			0	0.00	(84)	(0.04)
Wall Blowers	Nos.					11.00	0.06
		TOTAL	0.00		5.84		9.23
CFP, Rudrapur							
Busduct Project	Sets	35	127.04	24	10.21	18	15.41
	Sets	(49)	(198.67)	(22)	(9.05)	(24)	(10.21)
		TOTAL	127.04		10.21		15.41
HERP, Varanasi							
Spares & Repairs for Boiler/ Turbine & Auxiliaries			231.34		1.49		2.91
			(237.84)	0.00	(0.12)	0.00	(1.49)
		TOTAL	231.34		1.49		2.91

(₹ in Crore)

Product	Unit	Sales during the year 2014-2015		Op. Stock of Fin. Goods as on 01.04.2014		Cl. Stock of Fin. Goods as on 31.3.2015	
		Qty.	Value	Qty.	Value	Qty.	Value
<b>Transmission Business Group</b>							
Spares (Including Services)			557.08 (554.69)		8.66 (16.66)		5.84 (8.66)
<b>TOTAL</b>			<b>557.08</b>		<b>8.66</b>		<b>5.84</b>
<b>EMRP, Mumbai</b>							
Repair & Project work			33.91 (19.29)		0.07 0.00		0.07 (0.07)
<b>TOTAL</b>			<b>33.91</b>		<b>0.07</b>		<b>0.07</b>
<b>FP, Jagdishpur</b>							
Fabricated Items	MT	2194	12.57		0.00		
	MT		(0.04)		0.00		0.00
<b>TOTAL</b>			<b>12.57</b>		<b>0.00</b>		<b>0.00</b>
<b>International Operations</b>							
Income from Sales (Revenue Recognition Adjustment)			9.86 (-13.15)		(1.18) 0.00		-0.10 (-1.18)
<b>TOTAL</b>			<b>9.86</b>		<b>(1.18)</b>		<b>-0.10</b>
<b>Industry Sector</b>							
Income from Sales (Revenue Recognition Adjustment)			41.06 (70.94)		(1.44) (-0.14)		-2.11 (-1.44)
<b>TOTAL</b>			<b>41.06</b>		<b>-1.44</b>		<b>-2.11</b>
<b>PE&amp;SD</b>							
Industrial sets			18.57 (74.98)				
Gas Turbine			48.03 (62.53)				
Thermal sets			114.50 (0.03)				
Compressors			0.41				
<b>TOTAL</b>			<b>181.51</b>				
<b>RMSG</b>							
DG Sets & Erection services			120.01 (111.25)				
<b>TOTAL</b>			<b>120.01</b>				
<b>HPVP</b>							
Boilers	MT	1475	30.64	438	9.90	675.53	14.05
	MT	(4845.00)	(60.30)	(164)	(1.11)	(438.00)	(9.90)
Cryogenics	MT	9.06	2.80				
	MT	(1767.00)	(43.23)				
Others	MT	1.19	3.94				
	MT	(16.00)	(1.51)				
<b>TOTAL</b>			<b>37.38</b>		<b>9.90</b>		<b>14.05</b>
<b>CFFP, Haridwar</b>							
Steel Casting	MT	60	3.09	4.70	0.18		
	MT	(14.00)	(1.14)			(4.70)	(0.18)
NF Castings	MT	0.32	0.07				
	MT	(1.00)	(0.27)				
Steel Forging : Medium	MT					9.63	0.63
<b>TOTAL</b>			<b>3.16</b>		<b>0.18</b>		<b>0.63</b>
<b>GRAND TOTAL</b>			<b>30947.04</b>		<b>1498.80</b>		<b>1743.74</b>
			<b>(40337.92)</b>		<b>(1361.00)</b>		<b>(1498.80)</b>

(₹ in Crore)

	For the year ended 31.03.2015	For the year ended 31.03.2014
<b>b. Value of imports</b>		
CIF basis		
Raw materials	1968.35	2248.67
Components and spare parts	2103.90	4013.10
Capital goods	113.88	85.30
<b>c. Expenditure in foreign currency</b>		
Royalty	104.99	112.06
Know-how	10.82	1.58
Professional & Consultancy fees	9.93	14.28
Interest and others (incl. on foreign sites)	227.89	282.69
Dividend : @		
a) number of non-resident shareholders	8026	9339
b) number of shares held	389362343	361310807
c) gross amount of dividend	59.18	118.87
d) year to which dividend relates	2013-14	2012-13
	(Final Dividend)	(Final Dividend)
Interim Dividend : @		
a) number of non-resident shareholders	7154	8725
b) number of shares held	352044945	393383985
c) gross amount of dividend	19.01	51.53
d) year to which dividend relates	2014-15	2013-14
	(Interim Dividend)	(Interim Dividend)
@ The company has not made any remittance of dividend in foreign currency. The payments have been made in Indian Rupees to the Bankers/Power of Attorney holders of non-resident shareholders.		
<b>d. Value of consumption of raw materials, components, stores &amp; spare parts.</b>		
#Imported (including custom duty)	4213.10	6954.22
Indigenous	9963.43	10756.23
Percentage of total consumption		
Imported	30	39
Indigenous	70	61
<b>e. Earnings in foreign exchange</b>		
Export of goods (FOB basis)	747.36	1358.41
Interest	2.72	0
Erection & other services	275.41	250.16
Miscellaneous	29.24	0
FE in Deemed Exports (incl. domestic contracts and SEZ export)	4378.77	7169.17
# Includes canalised items wherever ascertained.		



(₹ in Crore)

		For the year ended 31.03.2015		For the year ended 31.03.2014	
f. Statement for raw materials and components consumed					
Group of materials	Units	Quantity	Value	Quantity	Value
Ferrous materials					
	MT	233766		252360	
	Meters	4990653		5894301	
	Nos.	1381094		2744341	
	Sq.M	4580		201723	
	Kg.	36771808		36344557	
	Others	110		680	
			2415.50		2522.14
Non-ferrous materials					
	MT	9994		13253	
	Meters	1417133		1316512	
	Nos.	105614		195572	
	Sq.M.	95		327	
	Kg.	5674244		5749753	
	RL	16397		14680	
	Others	25040		29781	
			381.37		425.72
Insulating materials					
	Meters	44533937		39478186	
	MT	14508		14031	
	Nos.	188061		208777	
	Sq.M.	3473306		3681993	
	Kg	472804		674542	
	LT	6037487		6729480	
	RL	112677		80972	
	M2	114513		163327	
	KL	0		6748	
	ST	461		112	
	Others	24934		7660	
			219.83		277.08
Insulated cables and Magnet wires					
	Meters	6356213		6015498	
	Nos.	49260		129112	
	Kg	445209		8163	
	Others	5	78.97	4	86.27
Components			6040.61		8971.01
Others			4567.71		4859.04
			13703.99		17141.26

# 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** hereinafter referred to as “the Holding Company”) and its subsidiary (the Holding Company and its subsidiary together referred to as “the Group”) and jointly controlled entities, comprising of the Consolidated Balance Sheet as at 31<sup>st</sup> March, 2015, the Consolidated Statement of Profit and Loss, the Consolidated Cash Flow Statement for the year then ended, and a summary of the significant accounting policies and other explanatory information (hereinafter referred to as “the consolidated financial statements”).

## **Management’s Responsibility for the Consolidated Financial Statements**

The Holding Company’s Board of Directors is responsible for the preparation of these consolidated financial statements in terms of the requirements of the Companies Act, 2013 (hereinafter referred to as “the Act”) that give a true and fair view of the consolidated financial position, consolidated financial performance and consolidated cash flows of the Group including its Jointly controlled entities in accordance with the accounting principles generally accepted in India, including the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014. The respective Board of Directors of the companies included in the Group and jointly controlled entities are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding the assets of the Group and for preventing and detecting frauds and other irregularities; the selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent;

and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, 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, which have been used for the purpose of preparation of the consolidated financial statements by the Directors of the Holding Company, as aforesaid.

## **Auditor’s Responsibility**

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. While conducting the audit, we have taken into account the provisions of the Act, the accounting and auditing standards and matters which are required to be included in the audit report under the provisions of the Act and the Rules made there under. We conducted our audit in accordance with the Standards on Auditing specified under Section 143(10) of the Act. 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 the disclosures in the consolidated financial statements. The procedures selected depend on the auditor’s judgment, 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 financial control relevant to the Holding Company’s preparation 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 whether the Holding Company has an adequate internal financial controls system over financial reporting in place and the operating effectiveness of such

controls. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of the accounting estimates made by the Holding Company's Board of Directors, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence obtained by us and the audit evidence obtained by the other auditors in terms of their reports referred to in sub-paragraph (a) of the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the consolidated financial statements.

## Opinion

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid consolidated 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, of the consolidated state of affairs of the Group and its jointly controlled entities as at 31<sup>st</sup> March, 2015, and their consolidated profit and their consolidated cash flows for the year ended on that date.

## Emphasis of Matter

We draw attention to :

For Parent company amount outstanding in projects under hold for more than 3 years amounting to ₹ 1845 Crores (Refer note no. 31(21))

Our opinion is not qualified in respect of above matter.

## Other Matters

- (a) We did not audit the financial statements of 1 subsidiary, and 2 jointly controlled entity, whose financial statements reflect total assets of ₹ 262.37 Crores as at 31<sup>st</sup> March, 2015, total revenues of ₹ 324.10 Crores and net cash outflows amounting to ₹ 0.76 Crores for the year ended on that date, as considered in the consolidated financial statements. These financial statements have been audited by other auditors whose reports have been furnished to us by the Management and our opinion on the consolidated financial statements, in so far as it relates to the amounts

and disclosures included in respect of these subsidiary and jointly controlled entity, and our report in terms of sub-sections (3) and (11) of Section 143 of the Act, insofar as it relates to the aforesaid subsidiary and jointly controlled entity, is based solely on the reports of the other auditors.

- (b) We did not audit the financial statements of 2 jointly controlled entities, whose financial statements reflect total assets of ₹ 2578.08 Crores as at 31<sup>st</sup> March, 2015, total revenues of ₹ 296.43 Crores and net cash outflows amounting to ₹ 6.92 Crores for the year ended on that date, as considered in the consolidated financial statements. These financial statements are unaudited and have been furnished to us by the Management and our opinion on the consolidated financial statements, in so far as it relates to the amounts and disclosures included in respect of these jointly controlled entities, and our report in terms of sub-sections (3) and (11) of Section 143 of the Act in so far as it relates to the aforesaid jointly controlled entities, is based solely on such unaudited financial statements. In our opinion and according to the information and explanations given to us by the Management, these financial statements are not material to the Group.

Our opinion on the consolidated financial statements, and our report on Other Legal and Regulatory Requirements below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors and the financial statements certified by the Management.

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. The accounts of Latur Power company Ltd. have not been consolidated as the said company is under liquidation and full amount of equity investment has been realized

## Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2015 ("the Order"), issued by the Central Government of India in terms of sub-

section (11) of Section 143 of the Act, based on the comments in the auditors' reports of the Holding company, subsidiary companies and jointly controlled companies incorporated in India, we give in the Annexure a statement on the matters specified in paragraphs 3 and 4 of the Order, to the extent applicable.

2. As required by Section 143 (3) of the Act, we report, to the extent applicable, that:

- (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated financial statements.
- (b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidated financial statements have been kept so far as it appears from our examination of those books and the reports of the other auditors.
- (c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss, and the Consolidated Cash Flow Statement dealt with by this Report are in agreement with the relevant books of account maintained for the purpose of preparation of the consolidated financial statements.
- (d) In our opinion, the aforesaid consolidated financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Rule 7 of the Companies (Accounts) Rules, 2014.
- (e) On the basis of the written representations received from the directors of the Holding Company as on 31<sup>st</sup> March, 2015 taken on record by the Board of Directors of the Holding Company and the reports of the statutory auditors of its subsidiary companies and jointly controlled companies incorporated in India,

none of the directors of the Group companies and jointly controlled companies incorporated in India appointed during FY 2014-15 is disqualified as on 31<sup>st</sup> March, 2015 from being appointed as a director in terms of Section 164 (2) of the Act. Prior to 01-04-2014, in terms of notification no. GSR 829(E) dated 21.10.2013 issued by the department of Company Affairs, Govt. of India, the provisions of section 274(1) (g) of the Companies Act, 1956 were not applicable to the company

- (f) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditor's) Rules, 2014, in our opinion and to the best of our information and according to the explanations given to us:
  - i. The consolidated financial statements disclose the impact of pending litigations on the consolidated financial position of the Group and jointly controlled entities—Refer Note 31(7) to the consolidated financial statements.
  - ii. Provision has been made in the consolidated financial statements, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts – Refer Note 31(10) to the consolidated financial statements in respect of such items as it relates to the Group and jointly controlled entities and
  - iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Holding Company and its subsidiary companies and jointly controlled companies incorporated in India.

For Wahi & Gupta  
Chartered Accountants  
**FRN-002263N**



**(CA Anuj Gupta)**  
M.No.076560

For DSP & Associates  
Chartered Accountants  
**FRN-006791N**



**(CA Sanjay Jain)**  
M.No. 084906

**Date : 26.05.2015**  
**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 Holding company, subsidiary company and jointly controlled companies incorporated in India, for the year ended March 31, 2015)**

- i) (a) The Group including its jointly controlled entities 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 Group including its jointly controlled entities and nature of its business and no material discrepancies were noticed on such verification to the extent verification was made 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 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 Group including its jointly controlled entities and the nature of its business.
- (c) In our opinion and according to the information and explanations given to us, the Group including its jointly controlled entities 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 Group including its jointly controlled entities and have been properly dealt with in the books of account.
- iii) According to the information given to us, the Group including its jointly controlled entities has not granted any loans, secured or unsecured to companies, firms and other parties covered in the register maintained under section 189 of the Companies Act, 2013. Therefore clauses (iii) (a) and (iii)(b) of Paragraph 3 of the Order are not applicable to the Group including its jointly controlled entities.
- 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 Group including its jointly controlled entities and the nature of its business, for the 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 Group including its jointly controlled entities, 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, the Group including its jointly controlled entities has not accepted any deposits from public during the year within the meaning of sections 73 to 76 or any other relevant provisions of the Companies Act, 2013 and the Companies (Acceptance of Deposits) Rules 2014.
- vi) We have broadly reviewed the books of account and records maintained by the Group including its jointly controlled entities pursuant to the Companies (Cost Records and Audit) Rules 2014 prescribed by the Central Government under section 148(1) of the Companies Act, 2013 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 and complete.



- vii) (a) According to the information and explanations given to us, in our opinion, the Group including its jointly controlled entities is generally regular in depositing with appropriate authorities undisputed statutory dues including Provident Fund, Employees' State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, duty of Customs, duty of Excise, Value Added Tax, Cess and any other statutory dues as applicable to it.
- (b) According to the information and explanations given to us, no undisputed amounts payable in respect of Provident Fund, Employees State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, duty of Customs, duty of Excise, Cess and any other statutory dues were outstanding as at March 31, 2015 for a period of more than six months from the date they became payable.
- (c) According to the information and explanations given to us, the particulars of Income Tax, Sales Tax, Wealth Tax, Service Tax, duty of Customs, duty of Excise, Value Added Tax and Cess which have not been deposited on account of dispute are as under:

(₹ in Crore)

Sl. 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, Entry Tax Act and Sales Tax Act of various States	Sales Tax, Entry Tax & Work Contract Tax	89.55	25.15	Assessing Officer
			302.06	35.96	Dy. Commissioner/ Jt. Commissioner/ Commissioner (Appeals)
			378.85	80.33	Appellate Tribunal
			409.35	107.49	High Court
			3.43	3.38	Supreme Court
			360.81	20.25	Various Appellate Authorities
2	Income Tax Act, 1961	Income Tax	1.17	-	Assessing Officer
			15.01	0.70	Commissioner (Appeals)
			0.32	-	High Court
3	Central Excise Act, 1944	Excise Duty	54.12	9.47	Commissioner (Appeals)
			359.63	8.44	Appellate Tribunal
			45.89	5.50	High Court
4	Service Tax under the Finance Act, 1994	Service Tax	77.96	2.13	Commissioner (Appeals)
			368.93	2.33	Appellate Tribunal
			14.47	-	High Court
5	Customs Act, 1962	Custom duty	2.93	2.83	Assessing Officer
6	The Building and other Construction Workers Welfare Cess Act, 1996	Cess	11.78	2.50	High Court

- (d) The Group including its jointly controlled entities has transferred the amount required to be transferred to Investor Education and Protection Fund within time in accordance with the relevant provisions of the Companies Act, 1956 (1 of 1956) and rules made thereunder.

- viii) The Group including its jointly controlled entities has no accumulated losses as at March 31, 2015 and has not incurred any cash losses during the financial year covered by our audit and the immediately preceding financial year.
- ix) According to the records of the Group including its jointly controlled entities examined by us and the information and explanations given to us, the Group including its jointly controlled entities has not defaulted in repayment of dues to financial institutions, banks or debenture holders.
- x) In our opinion and according to the information and explanations given to us, the Group including its jointly controlled entities has not given guarantees for loans taken by others from banks or financial institutions.
- xi) As per information and explanations given to us, the Group including its jointly controlled entities has not obtained any term loan during the year.
- xii) During the course of our examination of the books and records of the Group including its jointly controlled entities, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, no fraud on or by the Group including its jointly controlled entities has been noticed or reported during the year.

For Wahi & Gupta  
Chartered Accountants  
**FRN-002263N**



**(CA Anuj Gupta)**  
M.No.076560

For DSP & Associates  
Chartered Accountants  
**FRN-006791N**



**(CA Sanjay Jain)**  
M.No. 084906

**Date : 26.05.2015**  
**Place : New Delhi**



Nb.MAB-III/Rep/26-06/CFS-BHEL/2015-16/586

भारतीय लेखा परीक्षा तथा लेखा विभाग

कार्यालय प्रधान निदेशक, वाणिज्यिक लेखा परीक्षा

एवं पदेन सदस्य, लेखा परीक्षा बोर्ड-III

नई दिल्ली

INDIAN AUDIT & ACCOUNTS DEPARTMENT

Office of the Principal Director of Commercial Audit

& Ex-Officio Member, Audit Board-III

New Delhi

To,

The Chairman and Managing Director,  
Bharat Heavy Electricals Limited,  
New Delhi

Sub: **Comments of the Comptroller and Auditor General of India on the Consolidated Financial Statements of Bharat Heavy Electricals Limited for the year ending 31<sup>st</sup> March 2015 under Section 143(6) (b) read with Section 129(4) of the Companies Act, 2013.**

Sir,

I am enclosing herewith the Comments of the Comptroller and Auditor General of India on the Consolidated Financial Statements of Bharat Heavy Electricals Limited for the year ending 31<sup>st</sup> March 2015 under Section 143(6)(b) read with Section 129(4) of the Companies Act, 2013.

The receipt of the letter alongwith the enclosures may kindly be acknowledged.

Yours faithfully,

Encl: As above

*Tanuja Mittal*  
(Tanuja S. Mittal)  
Principal Director

**COMMENTS OF THE COMPTROLLER AND AUDITOR GENERAL OF INDIA  
UNDER SECTION 143(6)(b) READ WITH SECTION 129(4) OF THE COMPANIES  
ACT, 2013 ON THE CONSOLIDATED FINANCIAL STATEMENTS OF BHARAT  
HEAVY ELECTRICALS LIMITED FOR THE YEAR ENDED 31 MARCH 2015.**

The preparation of consolidated financial statements of Bharat Heavy Electricals Limited for the year ended 31 March 2015 in accordance with the financial reporting framework prescribed under the Companies Act, 2013 is the responsibility of the Management of the Company. The Statutory Auditors appointed by the Comptroller and Auditor General of India under section 139(5) read with section 129(4) of the Act are responsible for expressing opinion on the financial statements under section 143 read with section 129(4) of the Act based on independent audit in accordance with the Standards on Auditing prescribed under section 143(10) of the Act. This is stated to have been done by them vide their Audit Report dated 26 May 2015.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 143(6)(a) read with Section 129(4) of the Act of the consolidated financial statements of Bharat Heavy Electricals Limited for the year ended 31 March 2015. We conducted a supplementary audit of the financial statements of Bharat Heavy Electricals Limited, but did not conduct supplementary audit of the financial statements of subsidiaries, associate companies and jointly controlled entities listed in Annexure for the year ended on that date. 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.

**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: 26 July 2015

ANNEXURE

**List of subsidiaries, associate companies and jointly controlled entities whose financial statements are not audited by the Comptroller and Auditor General of India**

A. Subsidiaries Companies

1. BHEL Electrical Machines Limited

B. Joint Ventures C

C. ompanies

1. BHEL-GE Gas Turbine Services Limited
2. NTPC-BHEL Power Projects Private Limited
3. Dada Dhuniwale Khandwa Project Limited
4. Raichur Power Corporation Limited



## Consolidated Balance Sheet

(As at 31<sup>st</sup> March, 2015)

(₹ in Crore)

Particulars	Note No.	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>I. EQUITY AND LIABILITIES</b>					
(1) <b>Shareholders' Funds</b>					
(a) Share capital	1	489.52		489.52	
(b) Reserves & surplus	2	33717.08	34206.60	32667.35	33156.87
(2) <b>Share application money pending allotment</b>					13.36
(3) <b>Minority Interest</b>			2.23		4.18
(4) <b>Non-current liabilities</b>					
(a) Long-term borrowings	3	1733.62		1961.35	
(b) Other long term liabilities	4	5359.02		6600.18	
(c) Long term provisions	5	6770.09	13862.73	7510.46	16071.99
(5) <b>Current liabilities</b>					
(a) Short-term borrowings	6	96.15		2663.84	
(b) Trade payables	7	9087.71		8831.92	
(c) Other current liabilities	8	9311.98		11661.32	
(d) Short-term provisions	9	4321.28	22817.12	2841.00	25998.08
<b>TOTAL</b>			<b>70888.68</b>		<b>75244.48</b>
<b>II. ASSETS</b>					
(1) <b>Non current assets</b>					
(a) Fixed assets					
(i) Tangible assets	10	4069.99		4561.59	
(ii) Intangible assets		160.09		167.81	
(iii) Capital work-in-progress		2605.01		2909.38	
(iv) Intangible assets under development		17.29	6852.38	21.44	7660.22
(b) Non-current investments	11	5.91		5.91	
(c) Deferred tax assets (net)	12	2229.42		1975.92	
(d) Long-term loans and advances	13	1312.64		1314.62	
(e) Other non-current assets	14	11447.40	14995.37	11892.72	15189.17
(2) <b>Current assets</b>					
(a) Inventories	15	10111.89		9808.69	
(b) Trade receivables	16	26520.12		28198.55	
(c) Cash and bank balances	17	9948.90		12019.97	
(d) Short term loans and advances	18	2281.84		2113.54	
(e) Other current assets	19	178.18	49040.93	254.34	52395.09
<b>TOTAL</b>			<b>70888.68</b>		<b>75244.48</b>

### Significant Accounting Policies

### Other notes to financial statements

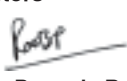
31

The accompanying Notes 1 to 31 & significant accounting policies form an integral part of the consolidated financial statements.

### For and on behalf of Board of Directors

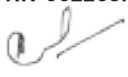
  
(I.P. Singh)  
Company Secretary

  
(P.K. Bajpai)  
Director (Finance)

  
(B. Prasada Rao)  
Chairman and Managing Director

As per our report of even date attached

For Wahi & Gupta  
Chartered Accountants  
FRN-002263N

  
(CA Anuj Gupta)  
Partner  
M.No.076560

For DSP & Associates  
Chartered Accountants  
FRN-006791N

  
(CA Sanjay Jain)  
Partner  
M.No. 084906

Place : New Delhi  
Date : 26.05.2015

## Consolidated Statement of Profit and Loss

For the year ended 31<sup>st</sup> March, 2015

(₹ in Crore)

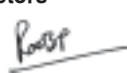
Particulars	Note No.	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
<b>I. Revenue from operations (Gross)</b>	<b>20</b>	<b>31554.76</b>	<b>40801.99</b>
Less: Excise duty		921.66	1344.70
Less: Service tax		485.58	609.00
<b>Revenue from operations (Net)</b>		<b>30147.52</b>	<b>38848.29</b>
<b>II. Other operational income</b>	<b>21</b>	<b>641.07</b>	<b>721.12</b>
<b>III. Other income</b>	<b>22</b>	<b>1230.59</b>	<b>1623.02</b>
<b>Total revenue (I to III)</b>		<b>32019.18</b>	<b>41192.43</b>
<b>IV. Expenses</b>			
Cost of material consumption, erection and engineering expenses	<b>23</b>	<b>18278.50</b>	<b>22465.27</b>
(Increase)/Decrease in work in progress & finished goods	<b>24</b>	<b>-339.50</b>	<b>1053.39</b>
Employee benefits expense	<b>25</b>	<b>5475.48</b>	<b>5956.57</b>
Finance costs	<b>26</b>	<b>92.43</b>	<b>133.46</b>
Depreciation & amortisation expense	<b>10.1</b>	<b>1082.01</b>	<b>985.36</b>
Other expenses of manufacture, administration, selling and distribution	<b>27</b>	<b>3655.50</b>	<b>3323.86</b>
Provisions (net)	<b>28</b>	<b>1604.67</b>	<b>2260.83</b>
Less: Cost of jobs done for internal use		27.49	69.99
<b>Total expenses</b>		<b>29821.60</b>	<b>36108.75</b>
<b>V. Profit before prior period adjustments, exceptional items and tax</b>		<b>2197.58</b>	<b>5083.68</b>
<b>VI. Add/less: Prior period adjustments (net)</b>	<b>29</b>	<b>-10.29</b>	<b>-6.00</b>
<b>VIII. Profit before tax for the year</b>		<b>2187.29</b>	<b>5077.68</b>
<b>IX. Less: Tax expense</b>	<b>30</b>		
a) Current tax		968.87	1934.68
b) Deferred tax		-232.02	-359.34
<b>X. Profit for the year before minority interest</b>		<b>1450.44</b>	<b>3502.34</b>
<b>Less: Minority interest</b>		<b>-1.94</b>	<b>-0.52</b>
<b>XI. Profit after minority interest for the year</b>		<b>1452.38</b>	<b>3502.86</b>
Earning per share (Basic & Diluted) (Refer point no. 15 of Note 31) in ₹		5.93	14.31
Face Value per Share (Refer point no. 15 of Note 31) in ₹		2.00	2.00
<b>Significant accounting policies</b>			
<b>Notes to financial statements</b>	<b>31</b>		

The accompanying notes 1 to 31 & significant accounting policies form an integral part of the consolidated financial statements.  
Total Revenue includes ₹ **600.78 Crore** (previous year ₹ 446.54 Crore) share of jointly controlled entities.  
Total Expenses includes ₹ **543.41 Crore** (previous year ₹ 373.11) share of jointly controlled entities.

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 Wahi & Gupta  
Chartered Accountants  
FRN-002263N

  
(CA Anuj Gupta)  
Partner  
M.No.076560

For DSP & Associates  
Chartered Accountants  
FRN-006791N

  
(CA Sanjay Jain)  
Partner  
M.No. 084906

Place : New Delhi  
Date : 26.05.2015

## Consolidated Cash Flow Statement

for the year ended March 31, 2015

(₹ in Crore)

	2014-15	2013-14
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>		
Net Profit Before Tax as per Statement of Profit and Loss	<b>2187.29</b>	<b>5077.68</b>
Adjustment for		
Depreciation/Amortisation	1082.34	991.39
Lease Equalisation	0.60	0.51
Provisions (Net)	1124.47	1629.68
Bad Debts & LD & investment written off	62.64	68.90
Profit on sale of Fixed assets	-5.74	-0.06
Profit on sale of short Term Investments	0.00	-0.02
Finance costs	92.43	133.49
Interest/Dividend Income	-850.82	-661.70
Operating Profit before Working Capital changes	<b>3693.21</b>	<b>7239.87</b>
Adjustment for		
Trade & Other Receivables	956.31	-1135.33
Inventories	-353.45	2039.05
Trade Payable & Advances	-2427.65	-1473.09
Cash generated from operations	<b>1868.42</b>	<b>6670.50</b>
Direct Taxes Paid (Net of refund)	-1047.23	-2158.50
<b>NET CASH INFLOW / (OUTFLOW) FROM OPERATING ACTIVITIES</b>	<b>821.19</b>	<b>4512.00</b>
<b>B. CASH FLOW FROM INVESTING ACTIVITIES</b>		
Purchase of Fixed Assets	-325.63	-1604.13
Sale and Disposal of Fixed Assets	48.64	233.52
Sale and Disposal of short term Investments	0.00	0.02
Sale of Investment in Subsidiary & Joint Ventures	0.00	0.02
Pursuant to Amalgamation	0.00	-108.20
Interest & Dividend income	927.39	610.91
<b>NET CASH USED IN INVESTING ACTIVITIES</b>	<b>-650.40</b>	<b>867.86</b>
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>		
Short-term & Long-term borrowings (Net)	-2806.24	1990.45
Share application money pending allotment	-13.36	-2.28
Dividend Paid (including tax on dividend)	-614.07	-1335.31
Finance costs	-108.99	-129.53
<b>NET CASH USED IN FINANCING ACTIVITIES</b>	<b>3542.66</b>	<b>-523.33</b>
<b>D. NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>-2071.07</b>	<b>4167.47</b>
Opening Balance of Cash and Cash Equivalents	12019.97	7852.50
Closing Balance of Cash and Cash Equivalents (Refer note no. 17)	9948.90	12019.97

Note 1 : Cash & Cash Equivalents consists of cash and bank balance & deposits with banks.

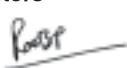
2 : Previous year's figures have been regrouped/rearranged wherever necessary.

3 : Cash & Cash Equivalents includes ₹ **3.72 Crore** (previous year ₹ 3.87 Crore) unclaimed dividend lying in designated bank accounts

For and on behalf of Board of Directors

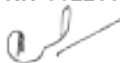
  
(I.P. Singh)  
Company Secretary

  
(P.K. Bajpai)  
Director (Finance)

  
(B. Prasada Rao)  
Chairman and Managing Director

As per our report of even date attached

For Wahi & Gupta  
Chartered Accountants  
FRN-002263N

  
(CA Anuj Gupta)  
Partner  
M.No.076560

For DSP & Associates  
Chartered Accountants  
FRN-006791N

  
(CA Sanjay Jain)  
Partner  
M.No. 084906

Place : New Delhi  
Date : 26.05.2015

## 1 - Share Capital

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>Authorised</b>				
1000,00,00,000 equity shares of ₹ 2 each (previous year 1000,00,00,000 equity shares of ₹ 2 each)		<u>2000.00</u>		<u>2000.00</u>
<b>Issued, Subscribed &amp; Paid up Capital</b>		<b>489.52</b>		489.52
244,76,00,000 fully paid equity shares of ₹ 2 each (previous year 244,76,00,000 equity shares of ₹ 2 each)				
a) The reconciliation of the number of equity shares outstanding is set out below:				
	<b>Number</b>	<b>Amount</b>	<b>Number</b>	<b>Amount</b>
Shares outstanding at the beginning of the year	<b>2447600000</b>	<b>489.52</b>	2447600000	489.52
Shares bought back during the year	-	-	-	-
Shares outstanding at the end of the year	<u><b>2447600000</b></u>	<u><b>489.52</b></u>	2447600000	489.52
b) Details of shares held by shareholders holding more than 5% shares at the year end	<b>No. of shares</b>	<b>% age of holding</b>	<b>No. of shares</b>	<b>% age of holding</b>
President of India (POI) alongwith nominees	<b>1543452000</b>	<b>63.06%</b>	1543452000	63.06%
Life Insurance Corporation of India	<b>230516784</b>	<b>9.42%</b>	242890195	9.92%
Face Value per share (₹)		<u><b>2.00</b></u>		<u>2.00</u>
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.				

## 2 - Reserves & surplus

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>Capital reserve</b>		
Opening Balance	36.56	2.74
Add: Addition pursuant to amalgamation		0.02
Add: Adjustment on amalgamation		33.80
Add: Additions		-
Less: Deductions	-	-
	36.56	36.56
<b>General reserve</b>		
Opening balance	31379.69	28875.91
Add: transfer from surplus of profit & loss	1003.43	2503.79
Less: Deductions		
	32383.12	31379.69
<b>Surplus i.e. balance in statement of profit &amp; loss</b>		
Opening balance	1251.10	1164.56
Pursuant to amalgamation		-81.25
Less Depreciation adjustment (Refer para no. 20 of note 31)	40.57	
Add: net profit for the year	1452.38	3502.86
Less: Adjustments	0.65	1.12
Profit available for appropriation	2662.26	4585.05
Less: Appropriation-		
-General reserve	1003.43	2503.79
-Dividend (including interim dividend of ₹ 149.07 Crore, previous year ₹ 337.53 Crore)	300.82	709.57
-Corporate dividend tax (including ₹ 29.72 Crore, previous year ₹ 57.36 Crore)	60.61	120.59
	1297.40	1251.10
	33717.08	32667.35

## 3 - Long-term borrowings

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>Secured</b>		
Loans from banks	403.00	494.79
(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.	1269.22	1361.58
(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 hypothecation dated 14 <sup>th</sup> July 2011 shall be subject to a first charge in favour of PFC)		
	1672.22	1856.37
<b>Unsecured</b>		
Long term maturities of finance lease obligations	61.40	104.98
	61.40	104.98
	1733.62	1961.35

Includes ₹1672.62 Crore (previous year ₹ 1856.56 Crore) share of jointly controlled entities.



## 4 - Other long-term liabilities

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Trade payables	701.82	764.91
Advances received from customers & others	4563.04	5759.89
Deposits from contractors & others	94.16	75.38
	<u>5359.02</u>	<u>6600.18</u>

Includes ₹ **NIL Crore** (previous year ₹ NIL Crore) share of jointly controlled entities.

## 5 - Long-term provisions

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Provision for employee benefits	2713.84	2443.46
Contractual Obligation	3605.24	4701.04
Other long-term provisions	451.01	365.96
	<u>6770.09</u>	<u>7510.46</u>

Includes ₹ **10.46 Crore** (previous year ₹ 10.51 Crore) share of jointly controlled entities.

## 6 - Short-term borrowings

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>Secured</b>		
<b>Loans from banks</b>		
Amount payable to KPCL	94.01	111.90
Cash credit	2.14	1.94
(secured by hypothecation of raw materials, components, stores & spares, work in progress, finished goods, Trade Receivables and other current assets)		-
<b>Rupee export packing credit</b>	0.00	2550.00
(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)		
	<u>96.15</u>	<u>2663.84</u>

Includes ₹ **94.01 Crore** (previous year ₹ 107.40 Crore) share of jointly controlled entities.

## 7 - Trade payables

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Trade Payables	9043.60	8757.59
Acceptances	44.11	74.33
	<b>9087.71</b>	<b>8831.92</b>

Includes ₹ **283.88 Crore** (previous year ₹ 107 Crore) share of jointly controlled entities.

## 8 - Other current liabilities

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Current maturities of finance lease obligation	57.06	67.88
Advances received from customers & others	7052.17	9016.39
Deposits from Contractors & others	519.29	539.85
Unclaimed dividend	3.72	3.87
Other payables/ liabilities*	1672.85	2008.88
Bonds		1.00
Interest accrued but not due	0.40	7.22
Interest accrued and due on:		
Bonds	0.00	5.52
Packing credit	0.00	2.89
State Government Loans	2.33	2.33
Finance lease	4.16	5.49
	<b>9311.98</b>	<b>11661.32</b>

Advances received from customers & others include valuation adjustment

- ₹ **2637.89 Crore** (previous year ₹ 4025.65 Crore)

Includes ₹ **188.65 Crore** (previous year ₹ 217.56 Crore) share of jointly controlled entities.

\* includes Employees dues and Statutory dues

## 9 - Short-term provisions

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Provision for employee benefits	576.03	570.83
Proposed dividend	156.51	376.80
Corporate dividend tax	31.84	64.04
Contractual obligation	2513.97	944.83
Other short-term provisions	1042.93	884.50
	<b>4321.28</b>	<b>2841.00</b>

Includes ₹ **34.73 Crore** (previous year ₹ 10.92 Crore) share of jointly controlled entities.

## 10 - Fixed assets

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>(i) Tangible assets</b>		
Gross block	12254.50	11697.05
Less: Accumulated depreciation	8186.69	7138.30
Less: Accumulated impairment	0.07	0.00
Less: Lease adjustment account	-2.25	-2.84
Net Block	<u>4069.99</u>	<u>4561.59</u>
<b>(ii) Intangible assets</b>		
Gross block	444.43	405.89
Less: Accumulated depreciation/amortisation	284.34	238.08
Net block	<u>160.09</u>	<u>167.81</u>
<b>(iii) Capital work in progress</b>		
Construction work-in-progress -Civil	277.47	235.04
Construction work-in-progress -Others	328.48	247.40
Construction stores (including in transit)	2.88	8.95
Plant & machinery and other equipments		
-Under Erection/ Fabrication/awaiting erection	1923.26	2271.96
-In transit	72.92	146.03
	<u>2605.01</u>	<u>2909.38</u>
<b>(iv) Intangible assets under development</b>	<u>17.29</u>	<u>21.44</u>
	17.29	21.44
<b>Total</b>	<u><u>6852.38</u></u>	<u><u>7660.22</u></u>
<b>Refer to details in Note no. 10.1</b>		

Includes ₹ 2187.06 Crore (previous year ₹ 2315.26 Crore) share of jointly controlled entities.

## Note 10.1

### Fixed assets

(₹ in Crore)

	Gross Block			Depreciation/Amortisation						Net Block	
	Cost As at 01.04.2014	Additions/ adjustments during the year	Deductions/ adjustments during the year	Cost As at 31.03.2015	Accumulated Depreciation/ Amortisation as at 01.04.2014	Depreciation for the year	Depreciation Adjustment	Lease Adjustment Account as at 31.03.2015	Accumulated Depreciation/ Amortisation as at 31.03.2015	As at 31.03.2015	As at 31.03.2014
<b>Factory/ Office Complex</b>											
<b>(i) Tangible assets</b>											
Freehold land (incl. development exp.)	25.61		0.15	25.46						25.46	25.61
Leasehold land (incl. development exp.)	68.76	8.12	3.05	73.83	1.04	0.64			1.68	72.16	67.72
Roads, bridges and culverts	30.60	2.17	0.77	32.00	5.83	8.29	4.16		18.28	13.72	24.77
Buildings	1802.52	142.03	28.23	1916.33	699.80	97.40	-11.30		785.90	1130.43	1102.72
Leashold buildings	3.12			3.12	1.44	0.05			1.49	1.63	1.68
Drainage, sewerage and water supply	30.11	1.51	0.23	31.39	12.78	0.86	0.41		14.05	17.34	17.33
Railway siding	16.70	2.81		19.51	9.98	0.80			10.78	8.73	6.72
Locomotives and wagons	52.59	2.65		55.24	23.73	3.13	0.30		27.16	28.09	28.86
Plant & Machinery	7318.01	335.79	13.25	7640.55	4735.06	718.39	-14.93		5438.52	2202.03	2582.95
Electronic data processing equipments	177.30	29.19	0.10	206.39	171.03	2.79	27.67		201.49	4.90	6.27
Electrical installations	338.58	11.69	0.97	349.30	141.47	29.39			170.86	178.44	197.11
Construction Equipment	267.31	8.12	2.37	273.06	194.68	29.13	-0.74		223.07	49.98	72.63
Vehicles	20.12	5.15	0.46	24.82	16.64	1.28	0.69		18.61	6.21	3.48
Furniture & fixtures	56.48	5.21	0.54	61.14	19.30	7.34	0.72		27.36	33.78	37.18
Office & other equipments	183.99	22.59	1.19	205.39	93.53	38.45	12.73		144.71	60.69	90.46
Fixed assets costing up to ₹ 10000/-	111.19	6.53	1.36	116.37	111.19	6.55	-1.37		116.36		
Capital expenditure	0.44		0.44		0.44		-0.44				
Assets Given on Lease	497.15			497.15	493.79		3.36	2.25	497.15	2.25	6.20
Assets taken on Lease											
Plant & Machinery	0.16			0.16	0.16				0.16		
EDP Equipment taken on lease	396.66	5.87	33.83	368.70	261.09	70.51	-13.60		318.00	50.70	135.57
Office & other equipment taken on lease	4.17	0.45	0.45	4.17	1.04	1.31	0.20		2.55	1.61	3.13
Other assets taken on lease	2.92	0.48	0.10	3.30	2.68	0.43	-0.45		2.66	0.64	0.24
<b>Total Tangible Assets-Factory</b>	<b>11404.51</b>	<b>590.38</b>	<b>87.49</b>	<b>11907.37</b>	<b>6996.71</b>	<b>1016.73</b>	<b>7.40</b>	<b>2.25</b>	<b>8020.82</b>	<b>3888.79</b>	<b>4410.64</b>
<b>(ii) Intangible Assets</b>											
- Internally developed											
Software	0.65			0.65	0.60				0.60	0.05	0.05
Patents & Trade Marks											
Technical Know How											
Others	59.88	10.63		70.51	34.70	13.98	0.08		48.76	21.75	25.18
- Others											
Software	149.83	16.03	5.30	160.57	132.03	14.51	-4.87		141.68	18.88	17.80

(₹ in Crore)

	Gross Block				Depreciation/Amortisation					Net Block	
	Cost As at 01.04.2014	Additions/ adjustments during the year	Deductions/ adjustments during the year	Cost As at 31.03.2015	Accumulated Depreciation/ Amortisation as at 01.04.2014	Depreciation for the year	Depreciation Adjustment	Lease Adjustment Account as at 31.03.2015	Accumulated Depreciation/ Amortisation as at 31.03.2015	As at 31.03.2015	As at 31.03.2014
Patents & Trade Marks											
Technical Know- how	171.28	17.22		188.50	60.67	19.65	-0.96		79.36	109.14	110.61
Others	24.25		0.05	24.20	10.08	3.85			13.93	10.27	14.17
<b>Total intangible Assets-Factory</b>	<b>405.89</b>	<b>43.89</b>	<b>5.35</b>	<b>444.43</b>	<b>238.08</b>	<b>51.99</b>	<b>-5.75</b>		<b>284.34</b>	<b>160.09</b>	<b>167.81</b>
<b>Total of Factory Assets</b>	<b>11810.40</b>	<b>634.26</b>	<b>92.84</b>	<b>12351.80</b>	<b>7234.79</b>	<b>1068.72</b>	<b>1.65</b>	<b>2.25</b>	<b>8305.16</b>	<b>4048.88</b>	<b>4578.45</b>
<b>Township/ Residential Tangible assets</b>											
Freehold land (incl. development exp.)	2.39	0.15		2.54						2.54	2.39
Leasehold land (incl. development exp.)	11.43	0.25		11.68	0.66	0.12			0.78	10.89	10.77
Roads, bridges and culverts	7.22	0.59		7.81	3.20	0.61	2.13		5.94	1.87	4.03
Buildings	178.36	43.34		221.70	72.41	5.77	6.55		84.73	136.97	105.95
Leasehold buildings	0.27			0.27	0.27				0.27		
Drainage, sewerage and water supply	19.94	2.81	0.02	22.73	15.10	0.53	0.24		15.87	6.86	4.84
Plant and Machinery	23.76	2.55	0.04	26.27	14.10	2.12	-0.04		16.18	10.09	9.66
Electronic Data Processing Equipment	0.03	0.02		0.05		0.02			0.02	0.03	0.03
Electrical installations	19.53	2.13		21.66	15.88	1.04	0.05		16.97	4.69	3.65
Vehicles	1.00		0.08	0.92	0.96	0.03	-0.08		0.90	0.01	0.04
Furniture & fixtures	1.30	0.29	0.04	1.55	0.58	0.31	-0.03		0.87	0.68	0.72
Office & other equipments	24.27	2.75	0.18	26.84	15.40	2.65	2.24		20.29	6.55	8.87
Fixed assets costing up to ₹ 10000/-	3.03	0.10		3.13	3.03	0.10			3.13		
<b>Total Tangible Assets- Township</b>	<b>292.54</b>	<b>54.96</b>	<b>0.36</b>	<b>347.13</b>	<b>141.59</b>	<b>13.29</b>	<b>11.05</b>		<b>165.93</b>	<b>181.20</b>	<b>150.95</b>
<b>Total of Township Assets</b>	<b>292.54</b>	<b>54.96</b>	<b>0.36</b>	<b>347.13</b>	<b>141.59</b>	<b>13.29</b>	<b>11.05</b>		<b>165.93</b>	<b>181.20</b>	<b>150.95</b>
<b>Total of Tangible Assets</b>	<b>11697.05</b>	<b>645.34</b>	<b>87.86</b>	<b>12254.50</b>	<b>7138.30</b>	<b>1030.02</b>	<b>18.45</b>	<b>2.25</b>	<b>8186.76</b>	<b>4069.99</b>	<b>4561.59</b>
<b>Total of Intangible Assets</b>	<b>405.89</b>	<b>43.89</b>	<b>5.35</b>	<b>444.43</b>	<b>238.08</b>	<b>51.99</b>	<b>-5.75</b>		<b>284.34</b>	<b>160.09</b>	<b>167.81</b>
<b>Total of Factory &amp; Township</b>	<b>12102.94</b>	<b>689.23</b>	<b>93.21</b>	<b>12698.92</b>	<b>7376.38</b>	<b>1082.01</b>	<b>12.71</b>	<b>2.25</b>	<b>8471.10</b>	<b>4230.08</b>	<b>4729.40</b>
<b>Previous year</b>	<b>11083.90</b>	<b>1287.67</b>	<b>268.70</b>	<b>12102.94</b>	<b>6420.23</b>	<b>985.36</b>	<b>-29.22</b>	<b>2.84</b>	<b>7376.38</b>	<b>4729.40</b>	<b>4667.02</b>

Gross Block as at 31.03.2015 includes assets condemned and retired from active use ₹ 122.20 Crore (Previous year ₹ 85.29 Crore)

Net Block as at 31.03.2015 includes assets condemned and retired from active use ₹ 1.31 Crore (Previous year ₹ 0.02 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.

	2014-15	2013-14
₹ in Crore	49.16	42.04

There is no impairment loss in fixed assets during the year except in case of P&M of BHEL EML ₹ 0.07 Crore and the same shown in Depreciation adjustment

Change due to shareholding in RPCL has been included in respective adjustment columns.

Gross Block includes ₹ 99.17 Crore (previous year ₹ 41.70 Crore) Share of joint controlled entities

Depreciation for the year includes ₹ 3.69 Crore (Previous Year ₹ 1.50 Crore) Share of joint controlled entities.

Depreciation adjustment includes adjustment to retained earning ₹ 62.01 Crore (refer para 20 of note 31)



## 11 - Non-current investments

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>Long Term Investments (at cost)</b>				
<b>Unquoted Shares (Fully paid up):</b>				
<b>TRADE:</b>				
1892 (previous year 1892) 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
<b>Joint Ventures Companies</b>				
1999999 (previous year 1999999) Equity Shares of ₹ 10/- each of Powerplant Performance Improvement Ltd.	2.00		2.00	
Less: Provision for diminution in value	2.00	0.00	2.00	0.00
<b>OTHER THAN TRADE</b>				
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		*		*
<b>Share Money paid in advance to</b>				
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		5.91
<b>Aggregate value of Unquoted Investments</b>		5.91		5.91
<b>Aggregate provision in diminution in value of Investments</b>		2.00		2.00

## 12 - Deferred tax assets (Net)

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Provisions	1518.82	1323.32
Statutory dues	639.31	609.47
Modvat Adjustment	2.88	50.05
Others	12.03	41.66
	<u>2173.04</u>	<u>2024.50</u>
Deferred Tax Liabilities		
Depreciation	-56.38	48.58
Others		
<b>Deferred tax assets (net)</b>	<u>2229.42</u>	<u>1975.92</u>

Includes ₹ 6.20 Crore (previous year ₹ 5.97 Crore) share of jointly controlled entities.

## 13 - Long-term loans and advances

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Loans to employees	0.28	0.11
Loans to Public Sector Undertakings (Bharat Pumps and Compressor Ltd. For capital investment)	4.00	8.00
Interest accrued and or due on loans	<u>0.26</u> <u>4.54</u>	<u>0.32</u> 8.43
<b>Sub classification:-</b>		
Secured, considered good ₹ 4.02 Crore (previous year ₹ 8.09 Crore)		
Unsecured, considered good ₹ 0.52 Crore (previous year ₹ 0.34 Crore)		
<b>Advances (Recoverable in cash or in kind or for value to be received)</b>		
For purchases	336.11	413.29
Capital advance	123.62	178.70
To Others	<u>57.95</u> <u>517.68</u>	<u>58.86</u> 650.85
<b>Sub classification:-</b>		
Unsecured, considered good ₹ 517.68 Crore (previous year ₹ 650.85 Crore)		
<b>Deposits</b>		
Balance with customs, Port Trust and other Govt Authorities	78.33	55.54
Other Deposits	110.80	67.39
Advance Tax/TDS (Net of Provision for Taxation)	644.13	565.76
Less: Provisions	<u>42.84</u> <u>790.42</u>	<u>33.35</u> 655.34
<b>Sub classification:-</b>		
Unsecured, considered good ₹ 790.42 Crore (previous year ₹ 655.34 Crore)		
Doubtful ₹ 42.84 Crore (previous year ₹ 33.35 Crore)		
	<u>1312.64</u>	<u>1314.62</u>
Includes:		
Due from Officers	0.01	0.01

Includes ₹ 93.53 Crore (previous year ₹ 147.79 Crore) share of jointly controlled entities.

## 14 - Other non-current assets

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
Long term trade receivables	14766.04		14870.40	
Less: Provision for bad & doubtful debts	2957.39		2403.34	
Less: Automatic price reduction adjustment a/c	361.25	11447.40	574.34	11892.72
		<u>11447.40</u>		<u>11892.72</u>
<b>Sub classification: Long term trade receivables</b>				
Secured, considered good		-		-
Unsecured, considered good		11447.40		11892.72
Doubtful		3318.64		2977.68
		<u>14766.04</u>		<u>14870.40</u>
Long term trade receivables include deferred debts-				
- (₹ 10219.60 Crore (previous year ₹ 11619.96 Crore)				
Includes ₹ 32.95 Crore (previous year ₹ 11.67 Crore) share of jointly controlled entities.				

## 15 - Inventories

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
Raw material & components	4091.65		3883.17	
Material-in-transit	469.09	4560.74	594.74	4477.91
Work-in-progress (including items with sub-contractors)		3212.12		3014.84
Finished goods	1746.24		1500.09	
Inter division transfers in transit	201.99	1948.23	307.07	1807.16
Stores & spare parts				
Production	227.19		227.37	
Fuel stores	5.50		17.06	
Miscellaneous	46.55	279.24	48.69	293.12
Materials with fabricators/contractors		141.73		197.39
Loose tools		35.28		37.77
Scrap (at estimated realisable value)		71.54		67.24
Less: Provision for non-moving inventory		136.99		86.74
		<u>10111.89</u>		<u>9808.69</u>

Refer to Significant Accounting Policy No. 9 regarding mode of valuation

Includes ₹ 4.95 Crore (previous year ₹ 6.82 Crore) share of jointly controlled entities.

## 16 - Trade receivables

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Debts outstanding for a period exceeding six months	15473.64	15063.71
Other debts	12812.63	14332.69
	28286.27	29396.40
Less : Provision for bad & doubtful debts & automatic price reduction adjustment	1766.15	1197.85
	26520.12	28198.55
Trade receivables include deferred debts-		
– ₹ 7065.22 Crore (previous year ₹ 6345.85 Crore)		
Trade receivables include goods despatched pending billing-		
– ₹ 1192.30 Crore (previous year ₹ 1328.75 Crore)		
Trade receivables include valuation adjustment-		
– ₹ 1740.69 Crore (previous year ₹ 1342.28 Crore)		
<b>Particulars of current trade receivables :</b>		
Secured, considered good	-	-
Unsecured, considered good	26520.12	28198.55
Doubtful	1766.15	1197.85
	28286.27	29396.40

Includes ₹ 294.19 Crore (previous year ₹ 117.66 Crore) share of jointly controlled entities.

## 17 - Cash & Bank Balances

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
<b>Cash &amp; Cash equivalents</b>		
Balances with Banks*	2611.63	2478.33
Cheques, Demand Drafts on hand	290.74	200.80
Cash & Stamps in on hand	0.60	0.93
Remittances in transit	0.00	0.06
<b>Other Bank Balances</b>		
Fixed Deposit having maturity more than 3 months & less than 12 months	7045.10	9339.85
Fixed Deposit having maturity more than 12 months	0.83	
	9948.90	12019.97
<b>*Includes</b>		
Earmarked against unclaimed dividend	3.72	3.87
Non-repatriable account	4.11	5.87

Includes ₹ 135.94 Crore (previous year ₹ 146.56 Crore) share of jointly controlled entities.

## 18 - Short-term loans and advances

(₹ in Crore)

	Figures as at 31.03.2015		Figures as at 31.03.2014	
<b>Loans</b>				
Loans to Employees	0.19		0.17	
Loans to Public Sector Undertakings (Bharat Pumps and Compressor Ltd. For capital investment)	8.00		8.00	
Interest accrued and or due on loans	1.93	10.12	1.95	10.12
<b>Sub classification:-</b>				
Secured, considered good ₹ 8.04 Crore (previous year ₹ 8.06 Crore)				
Unsecured, considered good ₹ 2.08 Crore (previous year ₹ 2.06 Crore)				
<b>Advances (Recoverable in cash or in kind or for value to be received)</b>				
To subsidiaries	0.59		0.05	
To employees	39.83		39.76	
For purchases	507.78		584.50	
To Others	1202.52	1750.72	1055.32	1679.63
<b>Sub classification:-</b>				
Secured, considered good ₹ 0.05 Crore (previous year ₹ 0.08 Crore)				
Unsecured, considered good ₹ 1750.67 Crore (previous year ₹ 1679.55 Crore)				
<b>Deposits</b>				
Balance with customs, Port Trust and other Govt. Authorities	504.51		439.33	
Others	129.84		87.10	
<b>Less: Provision for doubtful loans &amp; advances</b>	113.35	521.00	102.64	423.79
<b>Sub classification:-</b>				
Unsecured, considered good ₹ 521.00 Crore (previous year ₹ 423.79 Crore)				
Doubtful ₹ 113.35 Crore (previous year ₹ 102.64 Crore)				
		2281.84		2113.54
Includes:				
Due from Officers		0.14		0.15
Includes ₹ 58.08 Crore (previous year ₹ 89.69 Crore) share of jointly controlled entities.				

## 19 - Other current assets

(₹ in Crore)

	Figures as at 31.03.2015	Figures as at 31.03.2014
Interest Accrued on Banks Deposits	176.51	253.00
Other Current Assets	1.67	1.34
	178.18	254.34

Includes ₹ 3.15 Crore (previous year ₹ 1.81 Crore) share of jointly controlled entities.



## 20 - Revenue from operations

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Sales less returns	25012.29	33484.92
Income from external erection & other services & revenue from works contract	6542.47	7317.07
	<u>31554.76</u>	<u>40801.99</u>

Includes ₹ 590.65 Crore (previous year ₹ 434.02 Crore) share of jointly controlled entities.

## 21 - Other Operational Income

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Export Incentives	100.32	27.93
Rental income on leased assets	0.93	0.93
Lease equalisation account	-0.60 0.33	-0.51 0.42
Scrap sale	243.99	285.00
Receipt from sale/transfer of surplus stock	0.06	0.05
Others	296.37	407.72
	<u>641.07</u>	<u>721.12</u>

Includes ₹ Nil Crore (previous year ₹ 0.98 Crore) share of jointly controlled entities.

## 22 - Other Income

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
<b>A. Other income</b>		
Profit on sale of Short Term Investments	0.00	0.02
Profit from sale of fixed assets & capital stores (net)	5.74	0.06
Dividend	29.80	21.38
Exchange variation (net)	0.00	656.50
Others (including grants of ₹ Nil (previous year ₹ Nil Crore) from Govt of India for R & D Projects)	374.03	304.74
<b>Total (A)</b>	<u>409.57</u>	<u>982.70</u>
<b>B. Interest Income</b>		
From customers	0.07	0.09
From banks	808.15	623.11
Others	12.80	17.12
<b>Total (B)</b>	<u>821.02</u>	<u>640.32</u>
<b>Total Other Income</b>	<b>Total (A+B)</b> <u>1230.59</u>	<u>1623.02</u>

Includes ₹ 10.13 Crore (previous year ₹ 11.54 Crore) share of jointly controlled entities.

## 23 - Cost of material consumption, erection and engineering expenses

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Consumption of raw material & components	14198.83	17462.84
Consumption of stores & spares	475.57	573.52
Erection and Engineering exp. - payment to subcontractors	3604.10	4428.91
	<b>18278.50</b>	<b>22465.27</b>

Includes ₹ 509.42 Crore (previous year ₹ 341.15 Crore) share of jointly controlled entities.

## 24 - Increase/(Decrease) in work in progress & finished goods

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
<b>Work-in-progress</b>		
Closing Balance	3212.12	3014.84
Opening Balance	<u>3014.84</u>	<u>4202.56</u>
	197.28	-1187.72
<b>Finished Goods</b>		
Closing Balance	1746.24	1500.09
Opening Balance	<u>1500.09</u>	<u>1362.04</u>
	246.15	138.05
<b>Inter-division transfer in transit</b>	-103.93	-3.72
	<b>339.50</b>	<b>-1053.39</b>
<b>NOTE:</b>		
<b>Element of Excise duty in Finished Goods</b>		
Closing Balance	128.59	130.73
Opening Balance	<u>130.73</u>	<u>126.59</u>

Includes ₹ 0.25 Crore (previous year ₹ 0.17 Crore) share of jointly controlled entities.

## 25 - Employee benefits expense

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Salaries, wages, bonus, allowances & other benefits	4522.77	5038.01
Contribution to gratuity fund	89.56	107.27
Contribution to provident and other funds	337.77	329.85
Group insurance	11.94	10.63
Staff welfare expenses	513.44	470.81
	<b>5475.48</b>	<b>5956.57</b>

Includes ₹ 17.88 Crore (previous year ₹ 15.86 Crore) share of jointly controlled entities.

## 26 - Finance cost

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Interest expenses	91.99	104.20
Interest on income tax	0.00	4.47
Other Borrowing Costs	0.44	24.79
	92.43	133.46
Less: Borrowing Cost capitalised	0.00	0.00
	92.43	133.46

Includes ₹ 0.51 Crore (previous year ₹ 0.59 Crore) share of jointly controlled entities.

## 27 - Other expenses of manufacture, administration, Selling & distribution

(₹ in Crore)

	Figures for the current year ended 31.03.2015	Figures for the previous year ended 31.03.2014
Royalty, technical, Resident consultant's charges & other consultancy charges	121.45	136.76
Rent	83.46	83.10
Excise duty	225.32	285.64
Power & Fuel	556.46	605.54
Rates & taxes	74.90	75.04
Service tax	9.94	8.26
Exchange variation (Net)	387.94	
Insurance	123.37	119.39
Repairs:		
Buildings	88.30	84.06
Plant & machinery	44.06	44.93
Others	133.77	136.11
Other expenses in connection with exports	23.80	23.30
Losses written off	0.02	0.05
Preliminary expenses written off		0.31
Bad debts written off	31.44	8.59
Carriage outward	321.54	382.59
Travelling & conveyance	168.25	189.75
Miscellaneous expenses	1065.18	1033.57
Liquidated damages charged off	31.18	60.26
Donations	0.01	0.06
Corporate social responsibility & sustainability development expenses (includes ₹ 62.94 Crore for amount yet to be spent on committed projects)	165.11	46.55
	3655.50	3323.86

Includes ₹ 16.69 Crore (previous year ₹ 13.68 Crore) share of jointly controlled entities.

## 28 - Provisions (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2015		Figures for the previous year ended 31.03.2014	
<b>Doubtful debts, Liquidated Damages and Loans &amp; advances</b>				
Created during the year	1765.75		1470.10	
Less written back during the year	804.40	961.35	713.86	756.24
<b>Contracutal Obligations</b>				
Created during the year	1048.61		1119.53	
Less written back during the year	568.41	480.20	488.38	631.15
<b>Others</b>				
Created during the year	494.93		947.41	
Less written back during the year	331.81	163.12	73.97	873.44
		1604.67		2260.83

Includes ₹ -0.84 Crore (previous year ₹ 1.96 Crore) share of jointly controlled entities.

## 29 - Prior period adjustments (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2015		Figures for the previous year ended 31.03.2014	
<b>INCOME</b>				
Sales less returns	-10.35		0.00	
Other income	0.66	-9.69	0.04	0.04
<b>EXPENDITURE</b>				
Payment to Subcontractors	0.66		0.14	
Consumption of Raw material & components			0.40	
Depreciation	0.33		6.03	
Interest Cost			0.03	
Misc. Expenses	-0.39	0.60	-0.56	6.04
		-10.29		-6.00

Includes ₹ Nil Crore (previous year ₹ Nil Crore) share of jointly controlled entities.

## 30 - Tax expense

(₹ in Crore)

	Figures for the current year ended 31.03.2015		Figures for the previous year ended 31.03.2014	
<b>a) Current tax</b>				
for current year	1023.13		1923.63	
for earlier years	-54.26	968.87	11.05	1934.68
<b>b) Deferred tax charge / (credit)</b>				
for current year	-342.05		-316.96	
for earlier years	110.03	-232.02	-42.38	-359.34
		736.85		1575.34

Includes ₹ 17.61 Crore (previous year ₹ 22.08 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, 2013 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 recognized 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 16<sup>th</sup> 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 1<sup>st</sup> April, 2001

Assets manufactured and given on finance lease are capitalized 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 recognized over the lease period.

#### (ii) Assets Given on Lease on or after 1<sup>st</sup> April, 2001

Assets manufactured and given on finance lease are recognized as sales at normal sale price / fair value/ NPV.

Finance income is recognized over the lease period.

Initial direct costs are expensed at the commencement of lease.

#### B) Assets Taken on Lease on or after 1<sup>st</sup> April, 2001

Assets taken on lease are capitalized 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 lesser 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 capitalized. Lease income arising there from is recognized as income over the lease period.

#### B) Assets Taken on Lease

Lease payments made for assets taken on operating lease are recognized 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
  - the company will have control over the assets, and
  - 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.
- b. 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 up to the total cost of the assets on straight-line method as per the useful life prescribed in Schedule II of the Companies Act, 2013, except where estimated useful life is shorter as shown hereunder:-

	(Years)
General plant & machinery	12.5
Automatic/semi- automatic machines	10
Erection equipment, Capital tools & tackles	5
Railway sidings, Locomotives & wagons	12.5
Drainage, sewerage & water supply	30
Servers and networks	5

In respect of additions to/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

- (ii) Where useful life of a part of the asset (costing at least ₹ 1 Crore or 10% of the cost of the asset, whichever is higher)

is different from the useful life of the remaining asset, useful life of that part is determined separately and depreciation charged accordingly.

- (iii) Fixed assets used outside India pursuant to long term contracts are depreciated over the duration of the initial contract.
- (iv) 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/-.
- (v) 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 temporary structures) are so depreciated after retaining 5% as residual value.
- (vi) Temporary structures are fully depreciated in the year of construction.
- (vii) 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.

#### In the case of BGGTS

Depreciation is provided on pro-rata basis on the straight line method over the estimated useful life of the assets, which are equal/lower than the rates prescribed under Schedule II of the Companies Act, 2013. In order to reflect the actual usage of assets, the estimated useful lives of the assets is based on a technical evaluation.

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 charged on a proportionate basis for all assets purchased and sold during the year. Individual assets costing less than ₹ 5000/- each are depreciated fully in the year of purchase.

#### In the case of Raichur Power Corporation Limited

Depreciation is provided on straight line method at the rates specified in the CERC Regulation 2009. In respect of assets for which rates are not specified in the CERC regulations, at the rates specified under Schedule II of the Companies Act, 2013.

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 II of the Companies Act, 2013.

At erection/project sites: The cost of roads, bridges, culverts, sheds, railway sidings, electrical installations and other similar enabling works (other than purely temporary erections, wooden structures) is fully amortized over the tenure of the contract.

#### 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 II to the Companies Act, 2013.

Depreciation on additions/deduction in respect of fixed assets are charged pro-rata from / up to the date in which the asset is available for use/ disposal.

In respect of individual assets costing less than ₹ 5000/-, full depreciation has been provided in the year of addition.

## 8. Investments

- (i) Long-term investments are carried at cost. Decline, other than temporary, in the value of such investments, is recognized 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

- (i) 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 recognized 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 recognized.

- c) 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

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 favor 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 recognized 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 realizable value, they are considered at 97.5% of the realizable 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 recognized as revenue on completion of supplies under the contract.

- (ii) Income from erection and project management services is recognized on work done based on:

Percentage of completion; or

The intrinsic value, reckoned at 97.5% of contract value, the balance 2.5% is recognized as income when the contract is completed.

- (iii) Income from engineering services rendered is recognized at realizable value based on percentage of work completed.
- (iv) Income from supply/erection of non-BHEL equipment/systems and civil works is recognized 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 recognized 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.

### In the case of NTPC BHEL Power Projects Pvt. Ltd.

In respect of employees seconded/deputed from NTPC/BHEL, company's contribution towards employee benefits is determined as a percentage of pay under an agreement, and is recognized in the Statement of Profit and Loss.

## 14. Claims by / against the Company

- (i) Claims for liquidated damages against the Company are recognized 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 recognized 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 realization.

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 recognized 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 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:

- The financial statements of the subsidiary company and interest in joint ventures in the consolidation are drawn up to the same reporting date as of the parent company.
- 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:

- 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 unrealized profits or losses in accordance with Accounting Standard - 21 on "Consolidated Financial Statements".
- 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".
- 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.
- 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 recognized in the Financial Statements as Goodwill or Capital Reserve as the case may be.
- 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.
- 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:

Name of Company		Country of Incorporation	Proportion (%) of Shareholding as on 31.03.2015	Proportion (%) of Shareholding as on 31.03.2014
<b>Subsidiary Company</b>				
1)	BHEL Electrical Machines Ltd. (BHEL EML)	India	51	51
<b>Joint Venture Companies</b>				
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 Limited	India	23.54	36.49

- The financial statements of BHEL EML are consolidated based on the audited financial statement for the year ended on 31.03.2015.

- (b) The interest in Joint Venture Companies in respect of BHEL-GE Gas Turbine Services Ltd. and Dada Dhuniwale Khandwa are considered based on audited financial statements for the year ended as on 31.03.2015.
- (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 company is under liquidation and full amount of equity investment has been provided for diminution in the value of investment.
- (d) The Latur Power Corporation Ltd. is under liquidation. The amount of investment made ₹ 2.50 Crore has been received back.
- (e) The interest in Joint Venture in respect of NTPC BHEL Power Projects Private Limited and Raichur Power Corporation Ltd. is considered based on unaudited financial statements for the year ended on 31.03.2015.

3	Capital & other commitments		2014-2015	2013-2014
a)	Estimated amount of contracts, net of advances, remaining to be executed on capital account and not provided for	₹ in Crore	299.28	345.46
	The above includes for acquisition of intangible assets	₹ in Crore	8.00	9.80
4	Land and buildings includes			
a)	i) Acres of land for which formal transfer/ lease deed have not been executed	Acres	8939.61	8939.61
	Net Block of above	₹ in Crore	74.20	74.68
	ii) Number of flats for which formal transfer/ lease deed have not been executed	Nos.	12	12
	Net Block of above	₹ in Crore	1.37	1.51
	iii) Number of buildings for which formal transfer/ lease deed have not been executed	Nos.	0	1
	Net Block of above	₹ in Crore	0.00	5.07
	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	528.18
	Net Block of above	₹ in Crore	67.81	68.28
b)	Acres of land leased to Ministry of Defence, Govt. of India Departments & others	Acres	30.60	30.60
c)	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	180.00	180.00
d)	Acres of land is under adverse possession/encroachment	Acres	586.05	598.78
e)	610.06 acres of land pending mutation at Haridwar (Cost of land mentioned above in 4 (b), (c) (d) & (e) is not material)			
5	The impact on the profit of providing 100 percent depreciation on fixed assets up to ₹ 10,000/- each, without considering such impact of earlier years, is as under: 100% depreciation on assets up to ₹ 10,000/- charged off in the accounting year.	₹ in Crore	8.27	10.64

Normal depreciation on above.	₹ in Crore	<b>1.42</b>	3.21
Excess amount charged.	₹ in Crore	<b>6.85</b>	7.43
6 Revenue from operations			
a Includes based on provisional prices	₹ in Crore	<b>56.23</b>	154.02
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	<b>1232.54</b>	1673.94
c Includes despatches of equipment held on behalf of customers at their request for which payment has been received by Company ; and	₹ in Crore	<b>17.10</b>	36.22
d Excludes for price reduction (net of refund) due to delay in delivery as per the terms of the contract	₹ in Crore	<b>45.43</b>	57.66
7 Contingent liabilities :			
A Claims against the company not acknowledged as debt :			
i) a Income Tax Pending Appeals	₹ in Crore	<b>16.50</b>	0.90
b Against which paid under protest included under the head "deposit "	₹ in Crore	<b>0.70</b>	0.00
ii) a Sales Tax Demand	₹ in Crore	<b>1519.87</b>	1344.13
b Against which paid under protest included under the head "deposit "	₹ in Crore	<b>267.80</b>	190.56
iii) a Excise Duty demands	₹ in Crore	<b>530.85</b>	489.55
b Against which paid under protest included under the head "deposit "	₹ in Crore	<b>23.40</b>	17.75
iv) a Custom Duty demands	₹ in Crore	<b>2.93</b>	3.14
b Against which paid under protest included under the head "deposit "	₹ in Crore	<b>2.83</b>	2.89
v) Court & Arbitration cases	₹ in Crore	<b>874.56</b>	1045.24
vi) a Liquidated Damages	₹ in Crore	<b>4107.19</b>	4347.41
b Amount deducted by customers towards LD included in vi)a	₹ in Crore	<b>2405.84</b>	2673.51
vii) Counter Claim by contractors	₹ in Crore	<b>4.76</b>	0.77
viii) a Service Tax Demand	₹ in Crore	<b>461.37</b>	294.13
b Against which paid under protest	₹ in Crore	<b>4.46</b>	0.70
ix) Others	₹ in Crore	<b>124.61</b>	91.52
(In view of the various court cases, litigations and claims disputed by the company, the 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 ₹ 55000 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 31.03.2015 is ₹ 45018.65 Crore (previous year ₹ 45083.60 Crore).			
b) Corporate Guarantee outstanding as on 31.03.2015 is ₹ 2752.27 Crore (Previous year ₹ 3312.07 Crore)			

9 Balances shown under Trade Receivables, Long term Trade receivable, Trade payables, contractors' advances, deposits and stock/ materials lying with sub-contractors/ fabricators are subject to confirmation, reconciliation & consequential adjustment, if any. As the Company is in the business of long term construction contracts, bills are raised on the customers as per contract by the units located at various places as per the approved billing schedule by the customer and the reconciliation is carried out on ongoing basis & provisions made, wherever considered necessary. Final reconciliation with customer is done on completion of project (Trial Operation and PG Test completed). The total receivables (including long term) are ₹ 42717 Crore, (including deferred debts ₹ 17267 Crore not due for payment). The amount reconciled with customer is around ₹ 1900 Crore against the outstanding amount of ₹ 5412 Crore in completed projects.

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)	
	2014-15	2013-14
Contract revenue recognised for the year	<b>24667.65</b>	33377.46
In respect of Contract in progress at the end of year :		
The aggregate amount of Cost incurred and recognised profits (less recognised losses)	<b>260748.35</b>	240909.16
Amount of advance received	<b>6861.91</b>	7952.36
Amount of retentions (deferred debts)	<b>18187.41</b>	19038.41
In respect of dues from customers after appropriate netting off		
Gross amount due from customer for the contract work as an asset	<b>4451.62</b>	2913.68
Gross amount due to customer for the contract work as a liability	<b>1590.01</b>	2167.28
Contingencies	-	-

b) The estimates of total costs and total revenue in respect of construction contracts entered on or after 1<sup>st</sup> April 2003 in accordance with Accounting Standard (AS) -7 (R) Construction Contracts are reviewed and up dated 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 31.03.2015 is Nil (previous year Nil).
- b) The foreign currency exposures that are not hedged by a derivative instrument or otherwise are as under :

		2014-15	2013-14
<b>a) Assets / Receivables</b>			
<b>In foreign currency</b>			
in US\$	in Crore	<b>58.83</b>	69.90
in EURO	in Crore	<b>56.24</b>	57.05
in LYD	in Crore	<b>0.81</b>	0.83
in RO	in Crore	<b>0.03</b>	0.03
<b>In Indian currency</b>			
in US\$	₹ in Crore	<b>3431.02</b>	4145.94

in EURO	₹ in Crore	<b>3794.70</b>	4635.44
in LYD	₹ in Crore	<b>36.72</b>	39.75
in RO	₹ in Crore	<b>4.96</b>	5.24
in Others	₹ in Crore	<b>49.93</b>	32.20

**b) Liabilities**

**In foreign currency**

in US\$	in Crore	<b>31.40</b>	27.24
in EURO	in Crore	<b>20.28</b>	18.84
in LYD	in Crore	<b>1.38</b>	1.42

**In Indian currency**

in US\$	₹ in Crore	<b>1978.08</b>	1649.57
in EURO	₹ in Crore	<b>1381.30</b>	1575.57
in LYD	₹ in Crore	<b>69.92</b>	69.36
in Others	₹ in Crore	<b>72.17</b>	210.24

12 a) Expenditure on departmental Repair & maintenance which are as under :

	(₹ in Crore)	
	<b>2014-15</b>	2013-14
Plant & Machinery	<b>234.03</b>	186.73
Buildings	<b>55.29</b>	56.43
Others	<b>43.45</b>	51.15
b) Agency Commission on exports included in expenses in connection with exports	<b>18.53</b>	11.15
c) Expenditure on research & development	<b>300.76</b>	311.38
d) Rent Residential	<b>53.12</b>	50.98
e) Payment to Auditors (Net of Service Tax)		
As Auditors	<b>0.69</b>	0.58
includes paid abroad	<b>0.07</b>	0.02
Reimbursement of expenses	<b>0.14</b>	0.16
Taxation matters(including certification)	<b>0.28</b>	0.15
includes paid abroad	<b>0.11</b>	0.02
Other services	<b>0.44</b>	0.36
f) Payment to Cost Auditors	<b>0.05</b>	0.12
g) Expenditure on entertainment	<b>6.07</b>	7.42
h) Expenditure on foreign travel		
Expenditure in Rupees	<b>11.79</b>	15.82
i) Expenditure on Publicity and Public relations		
Salaries allowances & other benefits	<b>10.76</b>	11.96
Other expenses	<b>10.11</b>	17.52
j) Director's Fees	<b>0.07</b>	0.10



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. (Under liquidation)
- 5 Raichur Power Corporation Ltd.
- 6 Dada Dhuniwale Khandwa Power Ltd.

ii) Key Management Personnel

S/Shri

B. Prasada Rao, P. K. Bajpai, R. Krishnan, W.V.K. Krishna Shankar, Atul Sobti, T.N. Veeraraghavan (from 07.01.2015), I.P. Singh, S. Basu, Anand Bansal, S. Srinivasa Rao, Y.K. Rastogi, R.S. Sharma, Raju Chandra Pal, Kalpana Yadav, M.K. Patil, R. Nagaraja, M. Maheshwar Rao, Atul Saraya (from 28.04.14), K. Rajendran (till 28.04.14), Anant N. Goyal (from 15.09.14), A.B. Ravichandran, Bhavaraju Srinivasa Rao (till 15.09.14), S. Kannan (from 01.08.14), Ritu Arora.

iii) Details of Transactions

<b>Joint Ventures</b>		<b>2014-15</b>	<b>2013-14</b>
Purchase of Goods and Services	₹ in Crore	<b>8.95</b>	39.96
Sales of Goods and services	₹ in Crore	<b>1592.70</b>	1982.39
Receiving of Services	₹ in Crore	<b>27.11</b>	40.60
Rendering of Services	₹ in Crore	<b>430.53</b>	289.86
Dividend income	₹ in Crore	<b>17.08</b>	16.90
Royalty income	₹ in Crore	<b>1.02</b>	1.29
Purchase of shares	₹ in Crore	<b>-</b>	25.00
Sale of Shares	₹ in Crore	<b>2.50</b>	0.00
Amounts due to BHEL at the end of the year	₹ in Crore	<b>1082.68</b>	1034.17
Amounts due from BHEL at the end of the year	₹ in Crore	<b>277.12</b>	466.79
Provision for Doubtful debts	₹ in Crore	<b>0.74</b>	10.81
Advances given	₹ in Crore	<b>0.75</b>	0.81

**Note :** Majority of transactions are with BGGTS, NBPPL and Raichur power corporation Ltd.

**Key Management Personnel (KMP)**

Payment of Salaries	₹ in Crore	<b>3.92</b>	4.15
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**Relatives of KMP**

Amounts due to BHEL at the end of the year	₹ in Crore	<b>0.01</b>	0.01
Payment of Salaries	₹ in Crore	<b>0.26</b>	0.24

## 14 Lease

Details of assets taken on lease on or after 1<sup>st</sup> April 2001 are as under:

### i) Finance Lease:

		2014-15	2013-14
a.	Outstanding balance of Minimum Lease payments		
	not later than one year	₹ in Crore	83.90
	later than one year and not later than five years	₹ in Crore	121.68
	later than five years	₹ in Crore	0.23
	<b>Total minimum lease payments at the balance sheet date</b>	₹ in Crore	205.81
b.	Present Value of (a) above		
	not later than one year	₹ in Crore	67.87
	later than one year and not later than five years	₹ in Crore	104.78
	later than five years	₹ in Crore	0.02
	<b>Total Present Value at the balance sheet date</b>	₹ in Crore	172.67
c.1	Finance charges	₹ in Crore	33.14
c.2	Present value of Residual value, if any	₹ in Crore	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.

		2014-15	2013-14
iii)	<b>Operating Lease</b>		
	The future minimum lease payments under non-cancellable operating lease are as under:		
	not later than one year	₹ in Crore	2.10
	later than one year and not later than five years	₹ in Crore	3.92
	later than five years	₹ in Crore	4.15
iv)	Details regarding rentals in respect of assets taken on lease prior to 1.4.2001 are as given below:		
	<b>Cost of Assets</b>		
	Land & Buildings	₹ in Crore	0.01
	Computers & peripherals	₹ in Crore	0.00
	<b>Rentals payable over unexpired period of lease</b>		
	Land & buildings	₹ in Crore	0.02
	Computers & peripherals	₹ in Crore	0.00

## 15 Earnings per Share:

		2014-15	2013-14
Weighted average number of Equity Shares outstanding during the year (A)	Nos. in Crore	244.760	244.760

Nominal Value of Equity Share	(₹)	<b>2.00</b>	2.00
Net Profit for the year after adjusting minority interest (B)	₹ in Crore	<b>1452.38</b>	3502.86
Basic and Diluted Earnings Per Share (B)/(A)	(₹)	<b>5.93</b>	14.31

**16 The disclosure relating to Accounting Standard -29** (₹ in Crore)

<b>a) Liquidated Damages</b>	<b>2014-15</b>	2013-14
Opening	<b>1728.77</b>	1356.49
Additions	<b>734.68</b>	697.84
Usage/ Write off/payment	<b>-31.24</b>	-61.51
Withdrawal/adjustments	<b>-207.18</b>	-264.05
Closing Balance	<b>2225.03</b>	1728.77
<b>Contractual Obligation</b>		
Opening	<b>5645.87</b>	5012.62
Additions	<b>1043.86</b>	1119.53
Usage/ Write off/payment	<b>-239.28</b>	-133.39
Withdrawal/adjustments	<b>-331.25</b>	-352.89
Closing Balance	<b>6119.20</b>	5645.87

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-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 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** RPCL, a JV of the company, proposes to Install a total of 2400 MW (3\*800 MW) 2 units of 800 MW at Yermarus and one 800 MW unit at Edlapur. MOEF clearance is awaited for Edlapur

**20** Due to the revision in depreciation policy, the depreciation for the year is higher by ₹ 77.59 Crore and profit before tax for the year is lower to this extent. Further, an amount of ₹ 40.57 Crore (net of deferred tax ₹ 21.44 Crore) for assets, whose remaining useful life is NIL as at 1<sup>st</sup> April, 2014, has been adjusted with the opening balance of retained earnings. The Company has revised the accounting policy for depreciation in pursuant to Schedule II of the Companies Act 2013.

**21** There is an outstanding of ₹ 3376 Crore pertaining to 20 projects on hold due to various reasons like environment clearance, fuel linkage, land acquisition, fund constraints, force majeure etc mainly hold imposed by BHEL due to strategic reasons. This includes ₹ 1845 Crore outstanding for more than 3 years in respect of 11 projects. Total advance available against these 20 hold projects is ₹ 1109 Crore.

- 22 Capital WIP includes pre operative expenses capitalised by RPCL, a JV of the company. Details are as follows:

	(₹ in Crore)	
Particulars	2014-15	2013-14
Opening Capital WIP	248.1	85.2
Less deductions due to change in share holding	88.05	0
Opening Capital WIP (Revised) (A)	160.05	85.2
Employee Benefit Expense	2.5	2.51
Financial Costs	164.02	154.27
Depreciation and amortization expense	0.46	0.5
Other Expenses	1.62	6.12
Other Incomes	-0.17	-0.50
Sub Total (B)	168.43	162.9
Closing WIP (A+B)	328.48	248.1

23 Additional Information:

(₹ in Crore)

Name of the entity in the	Net Assets, i.e., total assets minus total liabilities		Share in profit or loss	
	As % of consolidated net assets	Amount	As % of consolidated profit or loss	Amount
1	2	3	4	5
BHEL	98.44	33,672.53	97.72	1,419.29
Subsidiaries-Indian				
1. BHEL Electrical Machines Ltd. (BHEL EML)	0.01	4.62	-0.28	-4.03
Minority Interests in BHEL EML	-0.01	-2.23	0.13	1.94
(Investment as per the equity method)				
Joint Ventures - Indian				
(As per proportionate consolidation)				
1. NTPC-BHEL Power Projects Pvt. Ltd.	0.19	66.32	0.06	0.83
2. BHEL - GE Gas Turbine Services Ltd.	0.32	110.96	2.37	34.35
3. Dada Dhuniwale Khandwa Power Ltd.	0.07	22.88	0.00	0.01
4. Raichur Power Corporation Ltd.	0.97	331.52	-	-
<b>Total</b>	<b>100.00</b>	<b>34,206.60</b>	<b>100.00</b>	<b>1,452.38</b>

- 24 Previous year's figures have been regrouped /rearranged wherever considered necessary.

## 25. SEGMENT INFORMATION - CONSOLIDATED

(₹ in Crore)

		For the year ended 31.3.2015			For the year ended 31.3.2014		
A. PRIMARY SEGMENT - BUSINESS SEGMENTS							
		Power	Industry	Total	Power	Industry	Total
I. SEGMENT REVENUE							
a.	Segment Revenue	24574.17	6980.59	31554.76	32919.37	7882.62	40801.99
b.	Inter-Segment Revenue	-	-	-	-	-	-
c.	Operating Revenue-External (a) - (b)	24574.17	6980.59	31554.76	32919.37	7882.62	40801.99
II. SEGMENT RESULTS							
a.	Segment Results	3014.97	336.54	3351.50	5450.54	973.51	6424.05
b.	Unallocated expenses (Net of income)			1071.78			1212.91
c.	Profit before finance cost & Income Tax (a) - (b)			2279.72			5211.14
d.	Finance cost			92.43			133.46
e.	Net Profit before Income Tax (c) - (d)			2187.29			5077.68
f.	Income Tax			736.85			1575.34
g.	Net Profit after Income Tax			1450.44			3502.34
III ASSETS & LIABILITIES							
a.	Segment Assets	46524.74	11010.68	57535.42	48362.37	11940.97	60303.34
b.	Unallocated Assets			13353.26			14941.14
c.	Total Assets			70888.68			75244.48
d.	Segment Liabilities	29424.27	6161.18	35585.45	31634.41	6676.07	38310.48
e.	Unallocated Liabilities			1094.40			3759.59
f.	Total Liabilities			36679.85			42070.07
IV OTHER INFORMATION							
a.	Cost incurred during the period to acquire fixed assets (Incl. CWIP)	928.02	124.54		1354.62	271.53	
b.	Depreciation	800.68	213.20		760.34	183.59	
c.	Non Cash Expenses (other than depreciation)	1262.13	398.62		2094.17	235.56	
B. SECONDARY SEGMENT - GEOGRAPHICAL SEGMENTS							
		Within India	Outside India	Total	Within India	Outside India	Total
1	Net Sales / Income from Operations	30256.44	1298.33	31554.76	38791.39	2010.60	40801.99
2	Total Assets	70120.30	768.38	70888.68	74607.93	636.55	75244.48
3	Cost incurred during the period to acquire Fixed Assets	1134.60	0.35	1134.95	1729.07	-0.79	1728.28

### Notes:

- 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.
- 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'.
- BHEL EML (Subsidiary Co.) manufacturing of rotating electrical machines, considered under 'Industry segment'.



## Breaking the barriers!



*Ms. M. Girija awarded the All India Second Prize for the Best Woman Employee in non-executive category among Maharatna PSEs by SCOPE*

Ms M Girija, a young artisan in the welder trade from BHEL Trichy has broken the gender barrier by emerging as one of the top three performers in the recently concluded National Selection for the World Skill Competition 2015. Her achievement is augmented by the fact that she was the only female contestant in this competition. Her dedication and focussed training sessions at the Welding Research Institute of BHEL, Trichy enabled her to perform all the complex welding tasks during the competition. Recognizing her achievements, she has also been awarded the All India Second Prize for the Best Woman Employee in non-executive category among Maharatna PSEs by Standing Committee on Public Enterprises (SCOPE) for the year 2013-14. Currently pursuing her Diploma in Mechanical Engineering, Ms Girija intends to become a specialist in welding.

For all the young girls who wish to emulate her, she has the following words: "Be confident, work with passion and have courage to explore".

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## Additional Information for Stakeholders



## Ten Years Financials

(₹ in Crore)

	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06
<b>I EARNINGS/OUTGOINGS</b>										
<b>Earnings</b>										
Turnover (Gross)	30947	40338	50156	49510	43337	34154	28033	21401	18739	14525
Revenue from Operations (Net)	29542	38389	47618	47228	41566	32861	26212	19305	17237	13374
Other Operational Income	641	720	807	751	680	493	514	422	379	277
Other Income	1220	1616	1121	1266	1021	1155	983	1023	445	280
<b>Total Earnings</b>	<b>31403</b>	<b>40725</b>	<b>49546</b>	<b>49245</b>	<b>43267</b>	<b>34509</b>	<b>27709</b>	<b>20750</b>	<b>18061</b>	<b>13931</b>
<b>Outgoings</b>										
Cost of material consumption, Erection & Engineering Expenses	17758	22103	27899	28908	23209	20672	17620	11821	10182	8145
(Increase)/Decrease in work in progress & Finished Goods	(338)	1054	116	(823)	(127)	(787)	(1152)	(827)	(181)	(386)
Employee benefit expenses	5450	5933	5753	5466	5397	6540	2984	2608	2369	1879
Other expenses of manufacture, administration, selling and distribution (Incl. prior period items)	3648	3315	3777	3242	2537	2057	1823	1644	1496	1177
Provisions (Net)	1604	2259	1566	1403	2715	-934	1281	778	172	283
Less : Cost of job done for internal use	28	68	76	104	69	121	61	38	28	36
<b>Outgoings before finance cost &amp; depreciation</b>	<b>28094</b>	<b>34596</b>	<b>39035</b>	<b>38092</b>	<b>33662</b>	<b>27427</b>	<b>22495</b>	<b>15986</b>	<b>14009</b>	<b>11062</b>
<b>Profit before depreciation, finance cost &amp; tax</b>	<b>3309</b>	<b>6129</b>	<b>10511</b>	<b>11153</b>	<b>9605</b>	<b>7082</b>	<b>5214</b>	<b>4763</b>	<b>4052</b>	<b>2869</b>
Depreciation	1077	983	953	800	544	458	334	297	273	246
<b>Gross Profit</b>	<b>2232</b>	<b>5146</b>	<b>9558</b>	<b>10353</b>	<b>9061</b>	<b>6624</b>	<b>4880</b>	<b>4466</b>	<b>3779</b>	<b>2623</b>
Finance Cost	92	133	125	51	55	33	31	36	43	59
<b>Profit before tax</b>	<b>2140</b>	<b>5014</b>	<b>9432</b>	<b>10302</b>	<b>9006</b>	<b>6591</b>	<b>4849</b>	<b>4430</b>	<b>3736</b>	<b>2564</b>
Tax Expense (Net)	721	1553	2817	3262	2995	2280	1711	1571	1321	885
<b>Profit after tax</b>	<b>1419</b>	<b>3460</b>	<b>6615</b>	<b>7040</b>	<b>6011</b>	<b>4311</b>	<b>3138</b>	<b>2859</b>	<b>2415</b>	<b>1679</b>
Dividend	284	693	1323	1567	1525	1141	832	746	600	355
Corporate Dividend Tax	57	118	221	254	249	191	141	127	93	50
<b>Retained Profit</b>	<b>1078</b>	<b>2649</b>	<b>5071</b>	<b>5219</b>	<b>4237</b>	<b>2979</b>	<b>2165</b>	<b>1986</b>	<b>1722</b>	<b>1274</b>
<b>II WHAT THE COMPANY OWNED</b>										
<b>Fixed Assets</b>										
Gross Block	12589	12050	10783	9707	8050	6580	5225	4443	4135	3822
Less: Accumulated Depreciation & Lease Adj.	8448	7357	6325	5410	4649	4165	3754	3462	3146	2840
<b>Net Block</b>	<b>4141</b>	<b>4693</b>	<b>4458</b>	<b>4297</b>	<b>3401</b>	<b>2415</b>	<b>1471</b>	<b>981</b>	<b>989</b>	<b>982</b>
Capital WIP incl. Intangible Assets under development	517	642	1172	1348	1733	1530	1157	658	302	185
<b>Non-Current Investments</b>	<b>418</b>	<b>420</b>	<b>429</b>	<b>462</b>	<b>439</b>	<b>80</b>	<b>52</b>	<b>8</b>	<b>8</b>	<b>8</b>
Deferred Tax Assets(Net)	2221	1969	1551	1546	2164	1527	1840	1338	935	674
<b>Current Assets, Loans &amp; Advances and other non current assets</b>	<b>61170</b>	<b>65067</b>	<b>62518</b>	<b>59123</b>	<b>51523</b>	<b>42915</b>	<b>36901</b>	<b>27906</b>	<b>20980</b>	<b>16331</b>
<b>Total assets</b>	<b>68467</b>	<b>72791</b>	<b>70128</b>	<b>66776</b>	<b>59260</b>	<b>48467</b>	<b>41421</b>	<b>30892</b>	<b>23214</b>	<b>18180</b>

## Ten Years Financials (Contd.)

(₹ in Crore)

	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06
<b>III WHAT THE COMPANY OWED</b>										
Long Term Borrowings	61	105	129	123	102	81	105	61	58	539
Liabilities & Provisions	34321	39639	39555	41280	39004	32489	28377	20056	14368	10340
Total liabilities	34382	39744	39684	41403	39106	32570	28482	20117	14426	10879
<b>IV NET WORTH OF THE COMPANY</b>										
Share Capital	490	490	490	490	490	490	490	490	245	245
Reserves & Surplus	33595	32557	29954	24883	19664	15427	12449	10285	8544	7057
Less : Deferred Revenue Expenditure		-	-	-	-	-	-	-	-	-
Net Worth	34085	33047	30444	25373	20154	15917	12939	10775	8788	7301
<b>V NET WORKING CAPITAL</b>	26877	28026	24273	17892	12551	10426	8524	7850	6612	5991
<b>VI CAPITAL EMPLOYED</b>	31435	33139	29161	22651	16391	12968	10091	8873	7640	7001
<b>VII VALUE ADDED</b>	11983	15046	19460	19098	18476	13171	9894	8323	7182	5683
<b>VIII RATIOS</b>										
PBDIT to total assets (%) #	4.7%	8.6%	15.4%	17.7%	17.8%	15.8%	14.4%	17.6%	19.6%	17.3%
Gross profit to capital employed (%) #	6.9%	16.5%	36.9%	53.0%	61.7%	57.5%	51.5%	54.1%	51.6%	40.5%
Turnover/ gross block	2.5	3.3	4.7	5.1	5.4	5.2	5.4	4.8	4.5	3.8
Earnings per share (₹) †	5.80	14.14	27.03	28.76	24.56	17.61	12.82	11.68	9.86	6.86
Net worth per share (₹) †	139.26	135.02	124.38	103.67	82.34	65.03	52.86	44.02	35.90	29.83
Current Ratio	1.78	1.76	1.64	1.43	1.32	1.32	1.30	1.40	1.50	1.60
Total Debt / Equity	0.00	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.08
Return on Net Worth	4.2%	10.5%	21.7%	27.7%	29.8%	27.1%	24.3%	26.5%	27.5%	23.0%
Gross profit margin	7.2%	12.8%	19.1%	20.9%	20.9%	19.4%	17.4%	20.9%	20.2%	18.1%
Net profit margin	4.6%	8.6%	13.2%	14.2%	13.9%	12.6%	11.2%	13.4%	12.9%	11.6%

# On the basis of average assets and capital employed

† Figures are restated on post-split made in 2011-12 and bonus issue of 1:1 in 2007-08

## Value Addition Statement

(₹ in Crore)

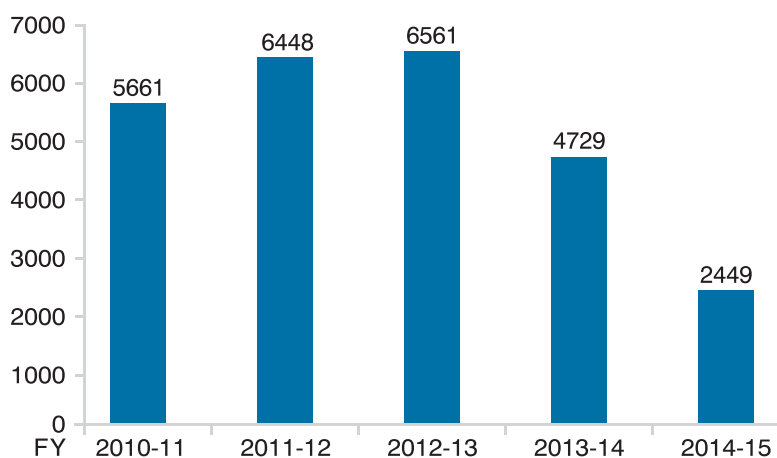
Description	2014-15	2013-14	2012-13	2011-12	2010-11
<b>A. Generation of Value Addition</b>					
Value of Production (less excise duty)	29755	37077	47219	47815	41527
Less - Direct Material, Power & Fuel and Payments to Contractors	17772	22031	27759	28717	23051
Value Added	11983	15046	19460	19098	18476
Less - Other Operating Exp (Net of income)	3224	2982	3196	2479	3461
Net Value Addition	8759	12064	16264	16619	15015
% to value of production	29.44%	32.54%	34.44%	34.76%	36.16%
<b>B. Application of Value Addition</b>					
Employees payments	5450	5934	5753	5466	5410
% to net value addition	62.22%	49.19%	35.37%	32.89%	36.03%
Depreciation	1077	983	953	800	544
% to net value addition	12.30%	8.15%	5.86%	4.81%	3.62%
Financing charges :					
- Interest on borrowings	92	133	125	51	55
% to net value addition	1.05%	1.10%	0.77%	0.31%	0.36%
Tax Provision (Income Tax, Def. Tax & Prior Period)	721	1554	2818	3262	2994
% to net value addition	8.23%	12.88%	17.32%	19.63%	19.94%
Dividend (incl. dividend tax)	341	810	1544	1821	1775
% to net value addition	3.90%	6.71%	9.49%	10.95%	11.82%
Retained Profit	1078	2651	5071	5219	4236
% to net value addition	12.30%	21.97%	31.18%	31.41%	28.22%

## Performance Annual Plan

(₹ in Crore)

Category of Investment	2014-15	2013-14
Schemes	217	340
Modernisation and Rationalisation, others	119	141
Customer Project Related Capital Investment	59	63
<b>Total</b>	<b>395</b>	<b>544</b>

## Contribution to Exchequer (₹ in Crore)



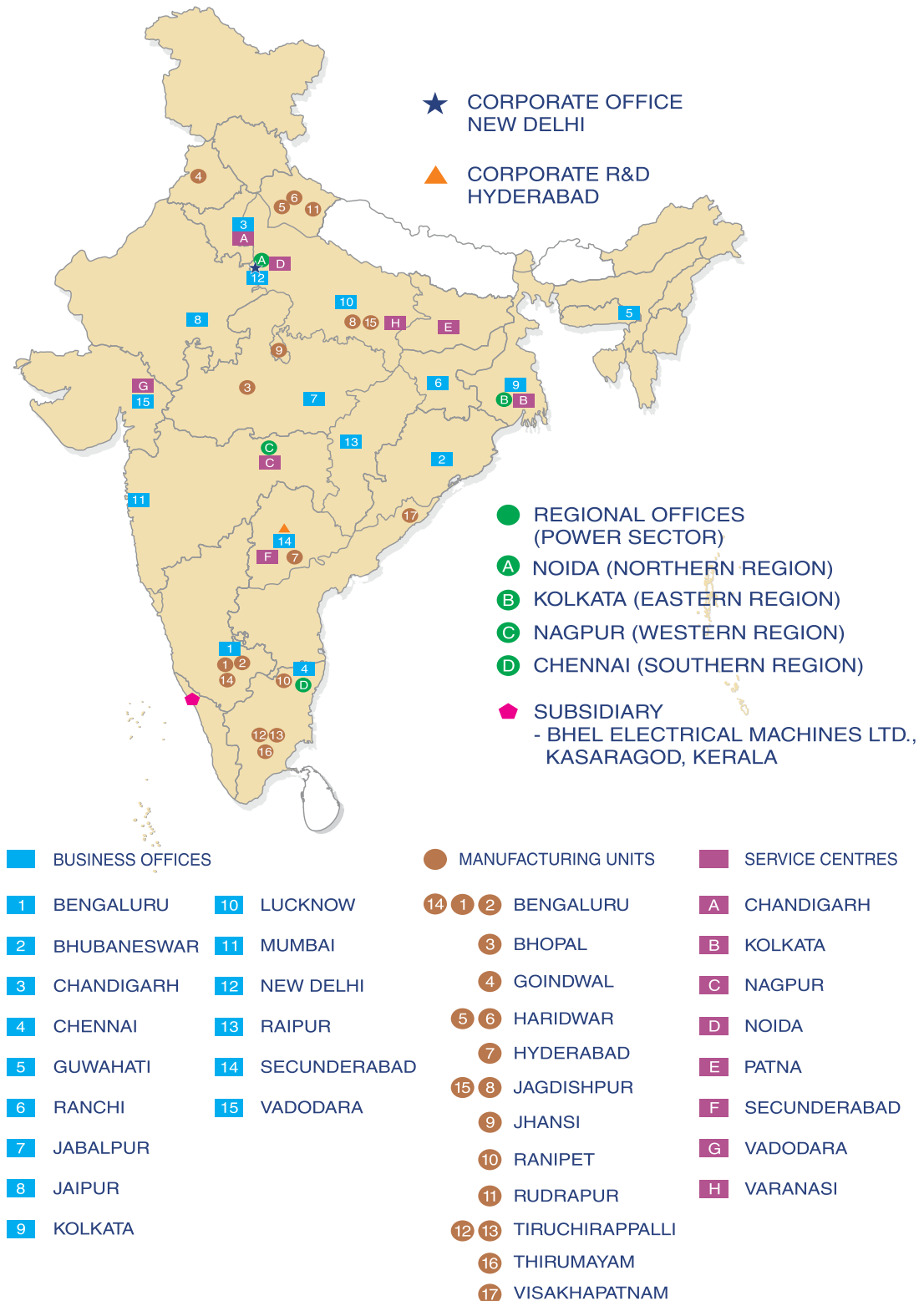
## Enterprise Value

(₹ in Crore)

	2014-15	2013-14	2012-13	2011-12	2010-11
Market value of equity	57506	48169	43322	62940	100971
Add: Debt	127	2740	1500	193	163
less: Cash & Cash Equivalent	9813	11873	7732	6672	9630
<b>Enterprise Value</b>	<b>47820</b>	<b>39036</b>	<b>37090</b>	<b>56461</b>	<b>91504</b>



# BHEL in India



This graphical representation does not purport to be the political map of 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 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

- BHEL can engineer, manufacture and supply Reactor side Components like Steam Generator, Reactor Header, End Shield, special purpose Heat Exchangers, Pressure Vessels, etc. for PHWR based Nuclear Power plants up to 700 MWe capacity. BHEL also provides complete solution to Secondary Side of Nuclear Power Projects and has capability to supply Turbines, Turbo Generators and Condensers, etc. for Nuclear Power plants up to 700 MWe capacity.
- BHEL has the capability to design, manufacture and supply various components of both Reactor side and Secondary side for Nuclear Power Plant Projects up to 500 MWe rating based Fast Breeder Reactors (FBR)

## GAS-BASED POWER PLANTS

- Gas turbines and matching generators ranging up to 299 MW (ISO) rating tailored to meet specific needs with regard to plant layout, type of fuels, emission and noise requirements. The features of these machines include
  - Capability to burn a variety of fuels, both gaseous and liquids.
  - Mixed firing of many of these combinations of gases and liquids.
  - Low exhaust emission levels up to 15ppm of NOx with DLN combustors.
- 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 up to 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)
- Small hydro power plants 10- 25 MW unit rating capacity
- Electro Hydraulic Microprocessor based Digital Governor for conventional turbines
- Microprocessor based Digital Controller for lift irrigation schemes
- 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

## SOLAR POWER PLANTS

- EPC solutions from Concept to Commissioning for grid interactive and Stand alone 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.

## 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

## 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 / Membrane based treatment solutions for Power plants and Industries to meet Service/Potable/Boiler feed make-up water requirements
- Various types of Pre Treatment (Membrane / Conventional) Systems to condition Raw Water Suitable for further treatment applications
- Sewage & Effluent Treatment Plants for water re-use and re-cycling
- Operation & Maintenance of desalination and water treatment plants

## DEFENCE

- Super Rapid Gun Mount (SRGM) for naval ships
- Integrated Platform Management system (IPMS) for naval ships
- Training Simulator for vehicles, platforms, radars, weapons, missiles
- Turret Casting and Thermopressed components for Tanks
- Casting for ships
- Castings and Forgings for Defence application
- Strategic equipment, etc.

## SYSTEMS AND SERVICES

### Power Generation Systems

- Turnkey power stations/ EPC contracts
- Combined-cycle power plants
- Cogeneration systems
- Captive power plants
- Electrical Balance of Plant (eBoP)
- Concept to Commissioning solutions for Solar Photovoltaic systems
- 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

- EHV & UHV Sub-stations/Switchyards both AIS & GIS type ranging from 33 kV to 765 kV
- Shunt and Series Reactive compensation systems
- Power system studies, Feasibility studies
- HVDC transmission systems up to  $\pm 800$  kV

## 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
- Fuel Flexible boilers capable of all combination of blending / co-firing diverse qualities of imported/ indigenised coals, blending of lignite, petcoke, etc.
- Steam generators for industrial applications of the following types ranging from 40 to 450 T/Hour capacity, using coal, natural gas, industrial gases, biomass, lignite, oil, Bagasse or a combination thereof
  - Pulverized coal / lignite fired boilers
  - Stoker fired 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

### Electrostatic Precipitators (ESP)

- Electrostatic precipitators of any capacity with outlet emission as low as 17 mg/Nm<sup>3</sup> (efficiency up to 99.97%) for coal fired utility and industrial applications including Bio mass fired boilers, cement plants, steel plants, soda recovery boilers etc.
- Bag Filters for Utility and Industrial applications

### 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 1300m<sup>3</sup>/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 600m<sup>3</sup>/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 660m<sup>3</sup>/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 10 T /Hour to 120 T/ Hour catering to 60 MW to 1000 MW thermal power stations
- Ball 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
- Apart from strong presence in the Indian market for utility thermal power stations, BHEL also caters to the requirement of:
  - Steel Plants for Pulverised Coal Injection to Blast furnace
  - Cement Plants for coal pulverising

- Fertilizer Plants for their captive power generation

#### **Other systems**

- 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
- 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 up to 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/cm<sup>2</sup>) and 650 °C temperature
- Hot reheat and cold reheat Isolating Devices up to 900 mm pipe size class 1500 and steam of 650°C temperature
- High capacity Spring Loaded Safety Valves for set pressure up to 372 kg/cm<sup>2</sup> and temperature up to 630°C, and automatic electrically operated

pressure relief valves for set pressure up to 210 kg/cm<sup>2</sup> and temperature up to 593°C

- Safety relief valves for applications in power, process and other industries for set pressure up to 421 kg/cm<sup>2</sup> 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/cm<sup>2</sup> pressure and 540°C temperature
- Butterfly Valves (Fabricated/ cast body & door)

#### **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 supercritical 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 including Rifled tubes and Spiral finned tubes

#### **STEAM TURBINES**

- Steam Turbines of higher ratings up to 800 MW for thermal Sets conforming to international Specifications
- Steam turbines for 500 MW Nuclear Power Plants

#### **TURBOGENERATORS**

- Turbogenerators of higher rating up to 800 MW supercritical parameters
- Turbogenerators for 270 MW, 540 MW and 700 MW Nuclear Power Plants

#### **INDUSTRIAL SETS**

- Industrial turbo-sets of rating from 7 to 200 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 supercritical technology

## CONDENSER AND HEAT EXCHANGERS

### Surface Condenser

- 236 MW, 500 MW & 700 MW for Nuclear power plants
- 12.5 MW Marine applications
- Industrial Condensers

### Feed Water Heaters (HP Heaters, LP Heaters, Drain Coolers, Duplex Heater, etc.)

- Thermal : 7 to 500 MW (sub-critical) & 300-800 MW (supercritical 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.
- 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 up to Fr-9E, and Compressor applications of all ratings
- Steam jet air ejectors for all condensers up to 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 up to 150 MW, GTG up to Fr-9E
- Generator Air coolers up to 150 MW STG and GTG up to 9 FA

## PUMPS

- Pumps for various utility power plant applications up to a capacity of 1000 MW:
  - Boiler feed pumps (motor or steam turbine driven) and Boiler feed booster pumps
  - Condensate extraction pumps
  - Circulating water pumps (also known as Cooling water Pumps)

## 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 m<sup>3</sup>/hr
  - Gas – Air, CO<sub>2</sub>, N<sub>2</sub>, H<sub>2</sub>, NH<sub>3</sub>, Natural Gas, Wet Gas, Propylene etc.
  - Sealing system – Dry Gas Seal
  - Industry – Refineries, Fertilizers, Oil & Gas, Steel, Power and Natural Gas Transportation
  - 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

## SOLAR PHOTOVOLTAICS

- Mono/ Multi Crystalline Solar Cells (156 mm)
- Mono/ Multi Crystalline PV Modules (150 to 300 Wp)
- PV Systems: Grid Interactive, Hybrid and stand alone PV power plants
- Space grade solar panels
- Space grade batteries

## AUTOMATION AND CONTROL SYSTEMS

- Steam Generator/ Boiler Controls including Boiler Protection



- 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 Plant (AHP)
  - Coal Handling Plant(CHP)
  - Water System for power plant
  - Mill Reject System (MRS)
  - Condensate On-Load Tube Cleaning system (COLTCS)
  - Gas Booster Compressor (GBC)
  - Condensate Polishing Unit (CPU)
  - Heating, Ventilation & Air conditioning (HVAC)
  - Fuel Oil Unloading System (FOUS)
- Hydro Power Plant Control System
- Gas Turbine Control System
- Nuclear Power Plant Turbine & Secondary Cycle Control System
- Nuclear Power Plant Primary Cycle Control Centre Instrumentation Package(CCIP)
- Power block of solar thermal power plant
- Industrial Automation
- Sub-Station Automation System (SAS) and Supervisory Control & Data Acquisition System (SCADA) for Substation & PV Plants
- Non-FST HVDC control panels
- Electrical Control System (ECS) for Refineries
- Energy Management System (EMS) for Power Plant
- Electrical Interface System for MV/LV Switchgear

## POWER ELECTRONICS

- Excitation system
- AC Drive System
- Static Starters
- Induction Heating Equipment

## TRANSMISSION SYSTEM CONTROL

- Flexible AC Transmission system (FACTS) solutions
  - Fixed Series Compensation (FSC)
  - Thyristor Controlled Series Compensation (TCSC)
  - Static VAR Compensation (SVC)
  - Controlled Shunt Reactor (CSR)
  - IGBT based Static Compensator (STATCOM)
  - Phase Shifting Transformer (PST)

## POWER SEMICONDUCTOR DEVICES

- Diodes- Ranging from 1400-4400V/250-2000A
- Thyristors- Ranging from 1400-7000V/150-4950A
- Rotating Diodes for Turbo generators.

## 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, 420kV)

- Indoor switchgears up to 12 kV, 50 kA, 4000 Amp for thermal, nuclear, hydro and combined cycle Power Plant Projects
- Indoor switchgears up to 36 kV, 40 kA, 2500 Amp for Industries and refineries
- Indoor Compact switchgear 12 kV, 25 kA, 1250 Amp for distribution system
- Outdoor Vacuum circuit breakers (12 kV, 25 kA, 1250 Amp / 36 kV, 25 kA , 2000 Amp / 25 kV, 25 kA, 1600 Amp) for distribution network/ track side railway application
- Outdoor pole mounted 12 kV Autorecloser/ sectionaliser / capacitor switch for rural segment
- Gas insulated switchgears (36 kV, 40 kA, 2500 Amp/ 145 kV, 40 kA, 2500 Amp/ 420 kV, 50 kA, 3150 Amp) For transmission & distribution network, Refineries/ hydro station/ metro.
- SF<sub>6</sub> circuit breakers (400 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 up to 1200 kV
  - Generator transformers (up to 500 MVA, 400 kV, 3 Ph / 400 MVA, 765 kV, 1 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 3 phase (up to 500 MVA  $\pm 500$  kV)
- Converter Transformers 1 phase (up to 300 MVA  $\pm 800$  kV)
- Shunt Reactors (up to 150 MVar, 420 kV, 3 Ph / 110 MVar, 765 kV, 1 Ph)
- Controlled Shunt Reactors (up to 200 MVar, 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 Phase) for transmission lines)
- Instrument transformers
  - Current transformers up to 400 kV
  - Electro-magnetic voltage transformers up to 220 kV
  - Capacitive voltage transformers (33KV to 1200 kV)
- Special Transformers
  - Rectifier transformer (up to 120 kA, 132 kV)
  - Furnace transformer (up to 33 kV, 60 MVA)
- ESP transformers up to 95 kVp, 1600 mA
- Smoothing reactors up to 3.3 mH, 2700 Amp.
- Dry Type reactor up to 300 mH, 120 Amp.
- DC Choke up to 0.5 mH, 4600 Amp.
- Dry type transformers up to 15 MVA 33 kV.

## 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 up to 400kV

## BUSHINGS

- 52 to 400 kV OIP condenser bushings for transformer applications
- 25 kV Locomotive bushings
- Special application bushings like Oil cable box, wall bushing, higher creepage, high cantilever load, High altitude 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 765 kV class Transformer
- Off Circuit Tap Switch up to 400 kV class Transformer

## 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 (up to 400 kV) for EHV Transmission projects
- Synchronizing Trolley / Swing Panels
- Protection panels for large Generators up to 800 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 Switchgear, SCAP, Thyristor, RAPCON and STATCON Panels

## INSULATORS

### PORCELAIN INSULATORS

- High-tension Porcelain Disc insulators for AC/ DC applications, ranging from 70kN to 420 kN electro-mechanical strength, for clean and polluted atmospheres, Suitable for application up to 1200kV AC &  $\pm 800$ 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 up to 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.

#### **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 - AC - 415 V to 13800 V
- Frequency - 50 Hz & 60 Hz
- Enclosure - TETV, TEFC, 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) (1500 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

#### **TRANSPORTATION EQUIPMENT**

##### **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 & EMUs
- 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
- Eddy current clutch for radiator fan
- DC blower motors (up to 50 kW) for dynamic braking system
- Traction grade gears and pinions

##### **Rolling Stock**

- AC electric locomotives (up to 5000 HP, 25 kV AC, 1500 V DC)
- AC-DC dual voltage electric locomotives
- Diesel-electric (up to 2600 HP) & Diesel hydraulic locomotives
- AC EMU 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 DE Locos
- Rectifiers (up to 1200V), converter/ inverter for AC/ DC EMUs
- Aux converters/ Static Inverter for AC Locos

### Traction Transformer

- Electric loco transformer up to 5400 kVA for conventional locomotives & up to 7775 KVA for 3 phase drive locomotives.
- AC EMU transformers up to 1050 KVA conventional AC EMU/ MEMUs & up to 1578 kVA for 3 phase EMU

## 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
  - Independent Rotary drive unit
  - Mud System including pumps
  - Power packs and rig electrics
  - Rig instrumentation
  - Rig utilities and accessories
  - Refurbishment and upgradation 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
  - AC Power Pack up to 1450 kVA for 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)

## FABRICATED EQUIPMENT AND MECHANICAL PACKAGES

- Air separation Units for extraction of N<sub>2</sub>, O<sub>2</sub> and Argon
- Cryogenic systems for liquid N<sub>2</sub>, O<sub>2</sub> and Argon
- Cryogenic storage tanks, Mounded storage systems and storage spheres
- Column and Reactors for Petrochemical plants
- Pressure Vessels, Shell and Tube type and Air Fin Type Heat Exchangers
- Fired Heaters
- Purge Gas Recovery Unit for Fertilizer Industry

## 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

AIS	Air Insulated Substation	M&A	Merger & Acquisitions
APPDCL	Andhra Pradesh Power Development Company Limited	MEMU	Mainline Electric Multiple Unit
ASEAN	Association of South East Asian Nations	MHI&PE	Ministry of Heavy Industries & Public Enterprises
BHPVL	Bharat Heavy Plates & Vessels Limited	MOEF	Ministry of Environment & Forests
BSE	Bombay Stock Exchange	MoU	Memorandum of Understanding
BSPGCL	Bihar State Power Generation Company Limited	MUs	Million Units
C&I	Control & Instrumentation	NALCO	National Aluminium Company
CCPP	Combined Cycle Power Plant	NEEPCO	North Eastern Electric Power Corporation Limited
CDM	Clean Development Mechanism	NPCIL	Nuclear Power Corporation of India Limited
CEA	Central Electricity Authority	NPGL	Nabinagar Power Generation Company Limited
CFBC	Circulating Fluidised Bed Combustion	NSE	National Stock Exchange
CIS	Commonwealth of Independent States	NSPCL	NTPC-SAIL Power Company Private Limited
CISF	Central Industrial Security Force	NTPC	National Thermal Power Corporation
CLW	Chittaranjan Locomotive Works	OA	Operational Availability
CMIE	Centre for Monitoring Indian Economy	OECD	Organisation for Economic Co-operation and Development
CPCL	Chennai Petroleum Corporation Limited	OEM	Original Equipment Manufacturer
CPRI	Central Power Research Institute	ONGC	Oil and Natural Gas Corporation Limited
CPSE	Central Public Sector Enterprise	OPGCL	Odisha Power Generation Corporation Limited
CSO	Central Statistical Office	OPTCL	Odisha Power Transmission Corporation Limited
CSR	Corporate Social Responsibility	OTPC	ONGC Tripura Power Company
CVC	Central Vigilance Commission	PGCIL	Power Grid Corporation of India Limited
DEMU	Diesel Electric Multiple Unit	PLM	Product Lifecycle Management
DETC	Diesel Electric Tower Car	PSEs	Public Sector Enterprises
DSIR	Department of Scientific and Industrial Research	PSPCL	Punjab State Power Corporation Limited
E&C	Engineering & Construction	R&M	Renovation & Modernisation
ED	Executive Director	RAPP	Rajasthan Atomic Power Project
EHV	Extra High Voltage	RCF	Rail Coach Factory
EMU	Electric Multiple Unit	RDSO	Research, Design & Standards Organisation
EPC	Engineering, Procurement & Construction	RPCL	Raichur Power Company Limited
ESP	Electrostatic Precipitator	S&P	Standard & Poor's
FACTS	Flexible Alternating Current Transmission System	SAIL	Steel Authority of India Limited
FD Fan	Forced Draft Fan	SCOPE	Standing Conference of Public Enterprises
GIS	Gas Insulated Substation	SCR	Silicon Controlled Rectifier
GSECL	Gujarat State Electricity Corporation Limited	SD	Sustainable Development
GTG	Gas Turbine Generator	SEBI	Securities and Exchange Board of India
GTO	Gate turn-off Thyristor	SECI	Solar Energy Corporation of India
GTPP	Gas Turbine Power Plant	SG	Steam Generator
HFO	Heavy Fuel Oil	SPV	Solar Photo Voltaic
HP Turbine	High Pressure Turbine	STATCOM	Static Synchronous Compensator
HVDC	High Voltage Direct Current	STPP	Super Thermal Power Plant
ICF	Integral Coach Factory	TANGEDCO	Tamil Nadu Generation and Distribution Corporation
ID Fan	Induced Draft Fan	TG	Turbine & Generator
IEA	International Energy Agency	TL&JV	Technology Licensing & Joint Venture
IGBT	Insulated-Gate Bipolar Transistor	TOLIC	Town Official Language Implementation Committee
IGCAR	Indira Gandhi Centre for Atomic Research	TPS	Thermal Power Station
IOCL	Indian Oil Corporation Ltd.	TSGENCO	Telangana Power Generation Corporation
IPR	Intellectual Property Right	UHVAC	Ultra High Voltage AC
IR	Indian Railways	UMPP	Ultra Mega Power Project
ISO	International Organization for Standardization	UPJVNL	UP Jal Vidyut Nigam Limited
ISRO	Indian Space Research Organisation	VCU	Vehicle Control Unit
JSEB	Jharkhand State Electricity Board	VFD	Variable Frequency Drive
KAPP	Kakrapar Atomic Power Project	WAG	W (broad gauge), A (AC traction), G (goods duty)
KBUNL	Kanti Bijlee Utpadan Nigam Ltd.	WBPDC	West Bengal Power Development Corporation Limited
KSCA	Kilogram-force per Square Centimetre Absolute		
LP Turbine	Low Pressure Turbine		



## Bankers

Allahabad Bank  
Andhra Bank  
Bank of Baroda  
Canara Bank  
Corporation Bank  
Central Bank  
Indian Bank  
Indian Overseas 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

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DSP & Associates, New Delhi  
Vinay Kumar & Co., Allahabad  
SBA & Co., Bhopal  
V. Narayanan & Co., Trichy  
Rao Associates, Bengaluru  
Anjaneyulu & Co., Hyderabad  
J.V. Ramanujam & Co., Chennai

## Cost Auditors

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Sanjay Kasliwal & Associates, Bhopal  
Narasimha Murthy & Co., Hyderabad  
Vishwanath Bhat & Co., Bengaluru  
Sunil Singh & Co., Lucknow  
RKMS & Associates, Chennai

## Cost Audit Report

Financial Year	Due date of filing Cost Audit Report	Actual date of filing Cost Audit Report
2013-14	27.09.2014	20.09.2014
2014-15	27.09.2015	Will be filed on due date

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Igniting the minds, forever!



The sides of the mountain sustain life, not the peak. This is where things grow, experience is gained, and technologies are mastered. The importance of the peak lies only in the fact that it defines the sides.



– Dr. A.P.J. Abdul Kalam



True to your vision, we continue to pioneer technology for people and the planet!  
Your visionary thoughts and actions will continue to inspire us.....

– BHEL





# Shoring up the defence!



INS Kolkata is the lead ship of the Kolkata-class guided-missile destroyers of the Indian Navy. She was constructed at Mazagon Dock Limited (MDL). The most distinctive and noticeable armament of the Kolkata class is its 76 mm Super Rapid Gun Mount (SRGM) naval gun located forward of the bridge. The gun provides anti-shipping capability and anti-air capability in addition to naval gun fire support for land based operations. The gun is manufactured and supplied by BHEL. BHEL has supplied more than 30 SRGMs to Indian Navy till date.

The ship was officially commissioned by the Honourable Prime Minister of India, Shri Narendra Modi in a ceremony on 16 August, 2014.



Goldmine 2015



## Bharat Heavy Electricals Limited

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[www.bhel.com](http://www.bhel.com)

Corporate Identity Number: L74899DL1964GOI004281