



# Growth & Innovation

The cornerstone  
of a dynamic enterprise

**ANNUAL REPORT**  
**2011-12**



## VISION

A global engineering enterprise providing solutions for a better tomorrow



## MISSION

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

## VALUES

**GOVERNANCE:** We are stewards of our shareholders' investments and we take that responsibility very seriously. We are accountable and responsible for delivering superior results that make a difference in the lives of the people we touch.

**RESPECT :** We value the unique contribution of each individual. We believe in respect for human dignity and we respect the need to preserve the environment around us.

**EXCELLENCE :** We are committed to deliver and demonstrate excellence in whatever we do.

**LOYALTY :** We are loyal to our customers, to our company and to each other.

**INTEGRITY :** We work with highest ethical standards and demonstrate a behaviour that is honest, decent and fair. We are dedicated to the highest levels of personal and institutional integrity.

**COMMITMENT:** We set high performance standards for ourselves as individuals and our teams. We honour our commitments in a timely manner.

**INNOVATION :** We constantly support development of newer technologies, products, improved processes, better services and management practices.

**TEAM WORK :** We work together as a team to provide best solutions & services to our customers. Through quality relationships with all stakeholders we deliver value to our customers.

GR-ELICIT



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# Letter to Shareholders



## Dear Shareholders,

2011-12 proved to be another year of success for your company BHEL. We exceeded the ambitious goals that we had set ourselves for 2012 in Strategy Plan 2007-12. Our turnover increased to ₹ 49,510 crore, while our net profit also rose to ₹ 7040 crore - a new record. It is not only in our financial key performance indicators that we have made major strides at BHEL: we systematically expanded our innovation and project execution capabilities.

Let me begin by giving you a brief overview of the performance of the company and then share some thoughts from a strategic perspective.

### Key Performance Indicators:

- BHEL has recorded highest ever turnover and profit during 2011-12, at a time when the economic and business environment in India was undergoing some uncomfortable changes. With the turnover and net profit of ₹ 49,510 crore and ₹ 7,040 crore, your company has registered growth of 19.9% and 24.3% in 2010-11 respectively during the year excluding onetime impact of change in policy in 2010-11 related to provisions for warranty obligations for earlier years.
- Despite stagnation in the power sector and intense competitive pressure in domestic and overseas markets, BHEL secured orders worth ₹ 22,096 crore, during the year. At the end of the year, cumulative orders in hand for execution in 2012-13 and beyond, stand at about ₹ 1,35,300 crore.
- We significantly increased our execution capabilities. As a result, during XI Plan period, BHEL commissioned 25,385 MW of Utility sets against 13,613 MW achieved in X Plan period.
- The installed capacity of BHEL supplied Utility sets went past the One Lakh MW mark totaling to 1,06,202 MW and your company maintained its lion's share in the country's total installed capacity of 1,80,413 MW.
- New rating 300 MW sets introduced, further enhancing our range of thermal sets on offer in subcritical range.
- First time in country new rating 525 MW thermal sets was commissioned by BHEL.
- Continuing its focus on Engineering and R&D, company invested ₹ 1,198.82 crore in R&D and filed 351 patents during the year. This is enabling us to build and consolidate our innovation capabilities in emerging and existing areas.
- BHEL made a capital investment of ₹ 1,122 crore during 2011-12 towards augmentation of manufacturing capacity and modernization of facilities in manufacturing units and at power project sites. With this, in XI Plan period, BHEL has made a capital investment of ₹ 6,298 crore as against ₹ 1,092 crore in X Plan- a six-fold increase. Maintaining our leadership position in India.
- Earnings Per Share (EPS) is placed at ₹ 28.76 - an increase of 24.3% over that of 2010-11 on post split on number of shares basis.
- Based on self assessment, BHEL is slated to be rated as 'Excellent' on MoU criteria for 2011-12.

### Positioning for the Future

- BHEL has formulated its Strategic Plan 2012-17. The plan attempts to steer your company towards becoming a global engineering enterprise. Key drivers

of our success are expanding our offerings in Power sector by building EPC capability, focus on Industry businesses, expansion of spares & services and adoption of collaborative approach.

- Power sector will continue to remain major contributor in our top line with transportation and transmission emerging as next big business verticals. Strategies are in place to strengthen our presence in Nuclear, Renewable and Water segments.
- In recent years, BHEL has optimally invested for manufacturing capacity expansion. We are taking various initiatives to stream line our manufacturing value chain for full exploitation of strong manufacturing base.
- 'Engineering and Technology' is our strength. To uphold our reputation for excellence in our core capability, we will continue to upgrade existing products to contemporary levels and develop new products through continuous in-house efforts as well as through acquisition of new technologies.
- BHEL has recruited more than 20,000 highly talented and competent people at all levels during last five years. Recognizing people as primary source of our competitiveness, we are developing not only each person's competencies, but also their performance and potential in alignment with our ongoing business challenges.
- '6-Point Agenda' viz. Capability Enhancement, Accelerated Project Execution, Product Cost Competitiveness & Quality, Diversification, Engineering & Technology and People Development will continue to drive us for reaping an execution premium to put us far ahead of our peers.
- Notwithstanding the challenging business environment, we aspire to reach the level of \$20 billion by 2017 and \$30 billion by 2022.

### Conclusion

All these success stories are underpinned by a strong workforce of 49,390 people. Your company and its stakeholders benefit from their passion and their outstanding skills. My colleagues on Board and I would like to express our sincere thanks to all of our employees in India and abroad.

I would like to thank our esteemed customers, business associates and various Ministries of the Government of India particularly Department of Heavy Industries for their trust, understanding and encouragement.

I would also like to thank you, our shareholders, for your confidence in BHEL. 2011-12 was an extremely difficult year, but your company was able to repeat its stellar performance. BHEL's strong performance is also reflected in a final dividend of 184% as proposed by the Board, apart from interim dividend of 136% already paid, making a total of 320% for the year 2011-12.

In a tougher environment, we will do our utmost to systematically and prudently continue our profitable growth trajectory. 2012-13 will continue to be a challenging year for Indian industry including BHEL. Nevertheless, I am convinced that our industry positioning, coupled with our superior engineering skills, and strong manufacturing base, mean that BHEL has what it takes to continue outperforming its competitors.

At BHEL, what really matters to us most is that we can satisfy our customers, employees and other stakeholders all over the world; that we can drive forward all the technologies needed to make our equipments and services more energy efficient and environment friendly; that we provide sustainable business solutions to our customers; and, not least, that we can continue our broad commitment to education, environment and a responsible society. This is a core component of our Strategy 2017. Because, we are convinced that this is the only way that your company BHEL can grow sustainably and profitably. And because, this is an integral part of becoming the global engineering enterprise - in every respect.

I look forward for your continued support and encouragement. It would be our endeavor to continue the growth momentum in subsequent years to enhance value for our stakeholders.



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

New Delhi  
August 13, 2012

## Board of Directors as on 07.08.2012



**Shri B. Prasada Rao**  
Chairman & Managing Director



**Shri Vijay S. Madan**  
Additional Secretary &  
Financial Advisor



**Shri Ambuj Sharma**  
Joint Secretary



**Shri V.K. Jairath**  
Director



**Shri Trimbakdas S. Zanwar**  
Director



**Shri S. Ravi**  
Director



**Shri Atul Saraya**  
Director (Power)



**Shri O.P. Bhutani**  
Director (E,R&D)



**Shri M.K. Dube**  
Director (IS&P)



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



**Shri R. Krishnan**  
Director (HR)



**Shri I.P. Singh**  
Company Secretary

## Management Committee as on 18.07.2012



**Standing (Left to Right)**

: S.V.S. Narayana, Dr. S. Sekar, A.K. Ghosh, Rajiv Puri, S. Gopinath, K.C. Ramamurthy, S.C. Mittal,  
Dr. Sukul Lomash, Anil Ahuja, N.K. Bansal, Atul Sobti, K.S. Mathur, C.K. Srikhande, A.K. Dave,  
Umesh Mathur, Rajeev Hajela, U.N. Singh

**Sitting R-2 (Left to Right)**

: Vijay Kumar, A. Dasgupta, W.V.K. Krishna Shankar, S.S. Gupta, T.N. Veeraraghavan, B. Shankar,  
Jainender Kumar, Subodh Gupta, D. Ashok, P.K. Uppal, M. Rajiv Kumar, R.K. Wanchoo, U.K. Das,  
S. Gopalakrishnan

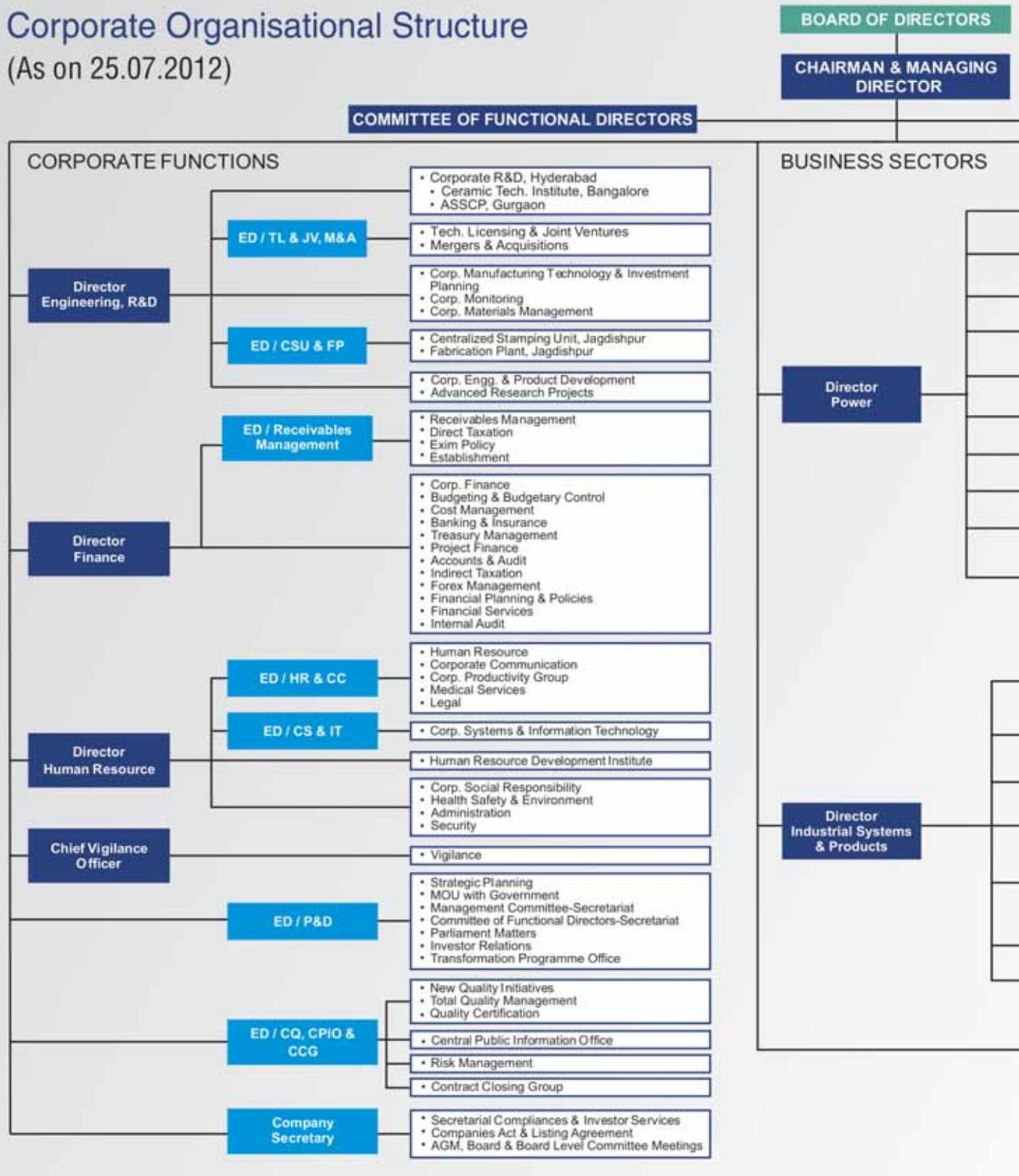
**Sitting R-1 (Left to Right)**

: A.V. Krishnan, R. Krishnan, M.K. Dube, Atul Saraya, B. Prasada Rao, O.P. Bhutani, P.K. Bajpai, V. Pandhi,  
S.M. Talukder

B. Prasada Rao	- Chairman & Managing Director	D. Ashok	- Ceramic Business
Atul Saraya	- Power Sector Business (Marketing, Project Engineering, E&C, Project Management, Technical Services, Spares & Services)	Subodh Gupta	- Captive Power Plant Business - Defence Business - Renewables - Industry Sector- Project Management
O.P. Bhutani	- Engineering, Research & Development - Corporate Engineering & Product Development - Corporate Research & Development - Advance Research Projects - Corporate Manufacturing Technology & Investment Planning - Corporate Monitoring - Corporate Materials Management - Technology Licensing & Joint Ventures and M&A - Centralised Stamping Unit and Fabrication Plant	Jainender Kumar	- Power Sector- Project Management
M.K. Dube	- Industrial Systems & Products Business (Captive Power Plants, Transmission, Transportation, Defence, Mechanicals, Electricals, Renewables, Project Management) - Ceramic Business - Component Fabrication Plant - Project Engineering & Systems Division - Regional Operations Division	B. Shankar	- Human Resource & Corporate Communication
P.K. Bajpai	- Corporate Finance - Budgeting & Control - Cost Management - Treasury Management - Accounts & Audit - Taxation - Forex Management - Internal Audit - Financial Services	T.N. Veeraraghavan	- Boiler Auxiliaries Plant
R. Krishnan	- Human Resource - Corporate Communications - Corporate Systems and Information Technology - CSR, Health, Safety & Environment	S.S. Gupta	- Heavy Electrical Plant - Electrical Machines Repair Plant
V. Pandhi	- Heavy Electrical Equipment Plant - Pollution Control Research Institute	W.V.K. Krishna Shankar	- Corporate Planning & Development - Member Secretary, Management Committee and Secretary Committee of Functional Directors
A.V. Krishnan	- High Pressure Boiler Plant - Seamless Steel Tube Plant - Industrial Valves Plant - Welding Research Institute	A. Dasgupta	- Corporate Systems and Information Technology
S. Gopalakrishnan	- Power Sector Marketing- Thermal & Gas	S.M. Talukder	- Officer on Special Duty- Corp. Office
U.K. Das	- Spares and Services Business - Heavy Equipment Repair Plant	Vijay Kumar	- Corporate Quality - Contract Closing - Central Public Information Officer
R.K. Wanchoo	- Heavy Power Equipment Plant	Rajeev Hajela	- Technology Licensing & Joint Ventures - Mergers & Acquisitions
M. Rajiv Kumar	- Power Sector- Eastern Region	Umesh Mathur	- Transmission Business
P.K. Uppal	- International Operations	A.K. Dave	- Transformer Plant
		U.N. Singh	- Industrial Systems Group
		C.K. Srikhande	- Power Sector- Northern Region
		K.S. Mathur	- Power Sector- Western Region
		Atul Sobti	- Project Engineering & Systems Division
		N.K. Bansal	- Power Sector- Technical Services
		Anil Ahuja	- Industrials Products Business (Elect. & Mech.) - Transportation Business
		Sukul Lomash	- Centralised Stamping Unit - Fabrication Plant
		S.C. Mittal	- Finance- Receivables Management
		K.C. Ramamurthy	- Electronics Division - Electronics Systems Division
		S. Gopinath	- Piping Centre - Power Plant Piping Unit, Thirumayam
		Rajiv Puri	- Project Engineering Management
		<b><u>Permanent Invitees</u></b>	
		A.K. Ghosh	- Power Sector- Southern Region
		Dr. S. Sekar	- Corporate Research & Development
		S.V.S. Narayana	- Central Foundry Forge Plant

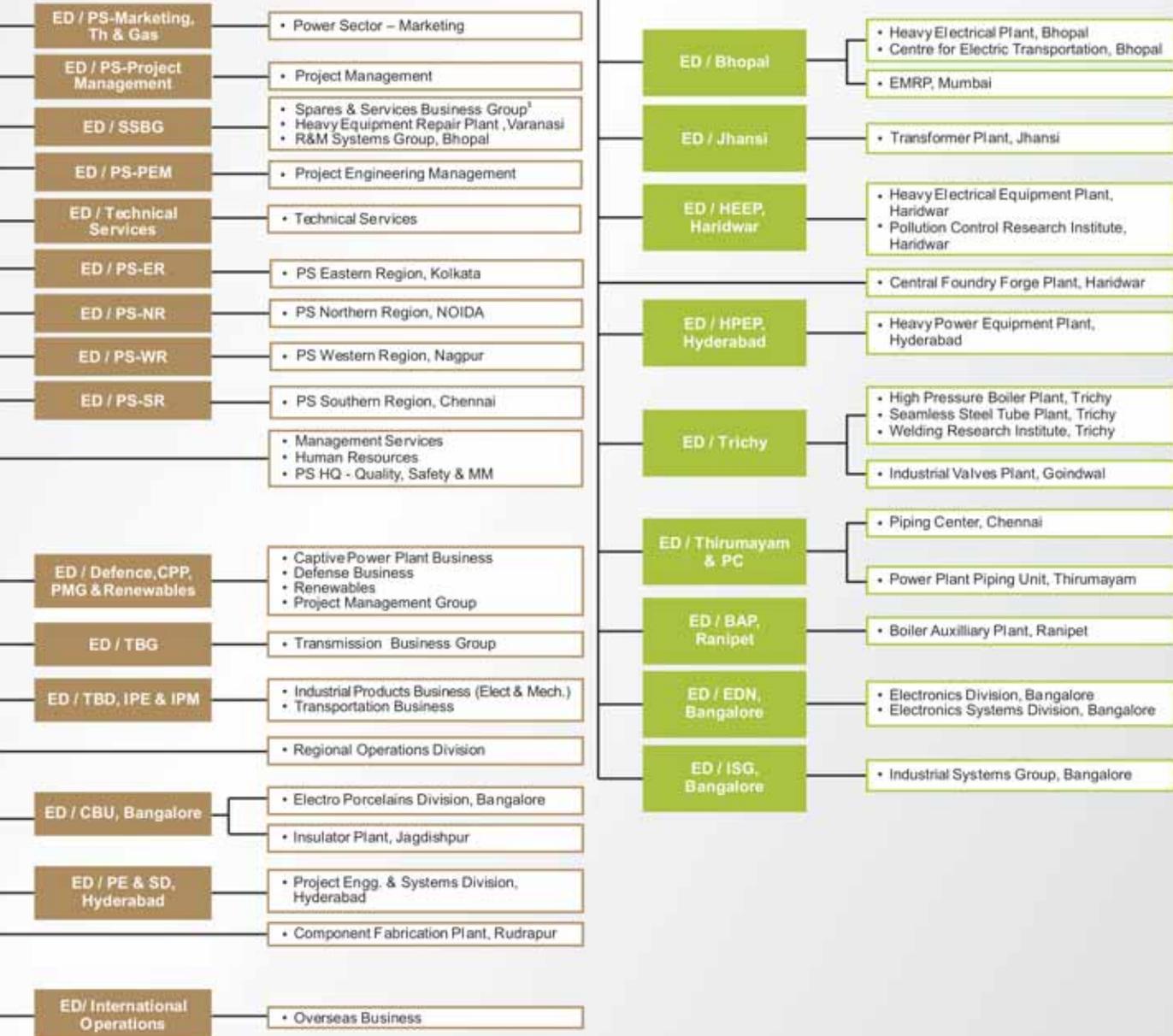
# Corporate Organisational Structure

(As on 25.07.2012)



MANAGEMENT COMMITTEE

OPERATIONS



\$ Matrix reporting to Director (IS&P) for Industry sector Business

## Corporate Profile

BHEL is an integrated power plant equipment manufacturer and one of the largest engineering and manufacturing companies in India in terms of turnover. Established in 1964, BHEL ushered in the indigenous Heavy Electrical Equipment industry in India - a dream that has been more than realized with a well-recognized track record of performance. The company has been earning profits continuously since 1971-72 and paying dividends since 1976-77. BHEL is 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, Renewable Energy, Oil & Gas and Defence. The company has 15 manufacturing divisions, two repair units, four regional offices, eight service centres, eight overseas offices and 15 regional centres and currently operates at more than 150 project sites across India and abroad. The company places strong emphasis on innovation and creative development of new technologies. The company has realized the capability to deliver 20,000 MW p.a. of power equipment, enabling to address growing demand for power generation equipment. Our research and development (R&D) efforts are aimed not only at improving the performance and efficiency of our existing products, but also at using state-of-the-art technologies and processes to develop new products. This enables us to have a strong customer orientation, to be sensitive to their needs and respond quickly to the changes in the market.

The high level of quality & reliability of our 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 our own R&D centres.

Most of our 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, where Quality Systems as per ISO-9000 have taken deep roots has made significant achievements in the CII Exim Award Scheme for Business Excellence by securing 'Commendation for Significant Achievements in TQM' for three of its manufacturing units and one power sector-region during 2011-12.

Continuing its tradition of bagging prestigious National/ International awards, the company has been honoured with several awards which included 'MoU Excellence Award 2009-10' as the Top Performing CPSE in 'Industrial Sector'; 'SCOPE Meritorious Award for R&D, Technology Development and Innovation'; 'NDTV Profit Business Leadership Award' for the second year in succession; 'Golden Peacock Award for Occupational Health & Safety 2011' & the 'Golden Peacock Award for Innovation Management 2011'; three Quality Circles won Gold Medals for their case studies at the International Quality Circle Conference (ICQCC – 2011) held in Yokohama, Japan; 8 Prime Minister's 'Shram Awards' including 2 'Shram Bhushan' and 5 'Vishwakarma Rashtriya Puraskars'

Haridwar & Trichy units and Power Sector Eastern region have recorded an improvement of 5.26%, 5.19%



600 MW Turbo-Generator being dispatched for North Chennai TPS



2x660 MW for Barh Supercritical Power Project  
under execution by BHEL



351 MW CCPP commissioned by BHEL for GSEGL, Hazira

& 7.14 % respectively in Customer Satisfaction Index as per Customer Satisfaction Survey conducted in 2011-12 over previous survey establishing company's sustained commitment towards quality. As a part of its thrust to ensure cost competitiveness, the company has successfully completed 32 case studies in respect of process improvement & cost reduction.

#### Power Generation:

In Power generation segment, BHEL is the largest manufacturer in India supplying wide range of products & systems for thermal, nuclear, gas and hydro-based utility and captive power plants. BHEL has the capability to execute power projects on turnkey/EPC basis from concept-to-commissioning. BHEL supplies steam turbines, generators, boilers and matching auxiliaries up to 800 MW ratings, including sets of 660/700/800 MW based on supercritical technology. BHEL has facilities to go up to 1000 MW unit size. To make efficient use of high ash content coal available in India, BHEL also supplies circulating fluidised bed combustion (CFBC) boilers for thermal plants. BHEL is the only Indian company capable of manufacturing large-size gas-based power plant equipment, comprising of advanced-class gas turbines up to 289 MW (ISO) rating for open and combined-cycle operations. BHEL engineers and manufactures custom-built hydro power equipments. Its range covers turbines of Francis, Pelton and Kaplan runners, pump turbines, bulb turbines and mini-micro hydro plants, with matching generators, for

different head-discharge combinations. With realization of enhanced capability, the company is well positioned to capitalise on growing demand for power plant equipment in the country.

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.

BHEL manufactured sets account for 59% of installed capacity of around 1,80,000 MW in utility sector across the country as of 31.03.2012 and these sets accounted for 69% of electricity generated during 2011-12. During the XI Plan period, BHEL has commissioned 25,385 MW of Utility sets, nearly double of that contributed during X Plan period. Significantly, the landmark achievement during 2011-12 has been commissioning within a span of just 24 hours of a cumulative capacity of 1,625 MW comprising of thermal and hydro units at various power stations across the country. Another significant achievement was the commissioning of 13 sets of 500 MW during the year against previous high of 8 sets.

#### Industries

BHEL is a leading manufacturer of a variety of Industrial Systems & Products to meet the demand of a number of industries, like metallurgical, mining, cement, paper, fertilizers, refineries & petro-chemicals etc besides Captive / Industrial utilities. BHEL has supplied systems

and individual products including a large number of co-generation Captive power plants, Centrifugal compressors, Drive Turbines, Industrial boilers and auxiliaries, Waste heat recovery boilers, Gas turbines, Pumps, Heat exchangers, Electrical machines, Valves, Heavy castings and forgings, Electrostatic precipitators, ID/FD fans, Seamless steel tubes etc. to a number of industries other than power utilities. BHEL has also emerged as a major supplier of controls and instrumentation systems, especially distributed digital control systems for various power plants and industries. The Industry business sector of the company is fully geared to execute EPC contracts for captive power plants from concept to commissioning.

### Transportation

Most of the trains of Indian Railways, whether electric or diesel powered, are equipped with BHEL's traction propulsion system and controls. The range includes traction motors, traction generators/alternators, transformers, substation equipment, vacuum circuit breakers, locomotive bogies, smoothening reactors, exciters, converters, inverters, choppers and associated control equipment, viz. master controllers, chopper controllers, brake and door equipment, electronic controls including software based controls extending to rolling stock and other transport applications. The systems supplied are both with the conventional DC and state-of-the-art AC drives. India's first underground

metro at Kolkata runs on drives and controls supplied by BHEL. Almost all the EMUs in service are equipped with electrics manufactured and supplied by BHEL. BHEL has proved once again its capabilities and technological excellence by successfully establishing itself as an indigenous manufacturer of energy efficient IGBT based propulsion system for AC drives, a landmark achievement in transportation sector. BHEL has also diversified into the area of track maintenance machines and coach building for Indian Railways and undertakes retrofitting and overhauling of rolling stock.

Loco manufacturing capacity at Jhansi unit is under augmentation to meet increased requirements of Indian Railways.

### Renewable Energy

In conformity with its concern for the environment, BHEL has been contributing to the national effort for developing and promoting renewable energy based products on a sustained basis. Starting from small applications like Solar Powered Street Lighting, Rural Water Pumping Systems, Railway signalling, Offshore Drilling Platforms, etc., BHEL has supplied and commissioned large size stand-alone as well as Grid-interactive Solar Power Plants. With an aim to perform a significant role in National Solar Mission's proposed target of 20,000 MW of grid connected solar power, BHEL signed an agreement with Abengoa, Spain, a leader in solar projects to provide EPC solutions in



*Electric Locomotive (25 kV AC, Type WAG 7)*



*Country's Largest Diesel Grid-Interactive Solar Power Plant of 760 kWp capacity, commissioned by BHEL at Lakshadweep*

Concentrated Solar Thermal Power (CSP) areas. The company is working jointly with IOCL and IIT-Rajasthan for development work of product and systems in the Concentrated Solar Power (CSP) area. A new record has been set by installing 15MWp Grid Interactive Solar Photo Voltaic (SPV) plants across the country. In the context of Jawaharlal Nehru National Solar Mission, BHEL is executing the orders for Renovation and Operation & Maintenance of SPV plants (aggregate 2.15MWp) at various Islands of Lakshadweep.

### Oil and Gas

BHEL possesses expertise to design, manufacture and service various types of onshore rigs to suit the Indian service conditions. The range of equipment covers onshore deep drilling rigs, super-deep drilling rigs, heli-rigs, work-over rigs, mobile rigs and desert rigs with matching draw works and hoisting equipment. BHEL now has the capability to manufacture conventional on shore deep drilling rigs up to a depth of 9,000 meters, mobile rigs to a depth of 3,000 meters and well servicing rigs to a well depth of 6,100 meters. The company is in the process of manufacturing environment friendly AC-technology based oil rings for on shore application.

BHEL is supplying onshore drilling rig equipment viz. Draw works, Rotary-table, Traveling block, Swivel, Mast and Sub structure, Mud systems and Rig electrics, Well heads & X-Mas tree valves upto 10,000 psi rating for onshore as well as offshore application to ONGC, Oil India Ltd. and Private Drilling Companies.

### Transmission

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



*400kV Substation set up by BHEL on turnkey basis at Durgapur*

BHEL has successfully designed, manufactured and commissioned India's highest voltage Power Transformer of 1200 kV 333 MVA rating at the 1200 kV National Experimental Substation of PGCIL. The Single Phase Interconnecting Transformer has been developed and manufactured with in-house engineering and manufacturing technology. BHEL is executing the world's first  $\pm 800$ KV 6,000 MW Ultra High Voltage Multi-Terminal DC Transmission link between North-East and Agra. The company has developed first 765 kV 80 MVAR single phase Shunt Reactor and emerged as manufacturer of largest Natural Air cooled Dry Type Cast Resin 3-phase, 50Hz Transformer of 15 MVA, 33/6.9 kV rating besides commissioning indigenously developed 36 kV and 145 kV Gas Insulated Substations (GIS). BHEL has the expertise and extensive on-the-job exposure for design and applications relating to Power System Studies and Feasibility Studies etc. The Company accepts full project responsibility for feasibility / system studies, execution and commissioning of Fixed Series Compensation/Controlled Shunt Reactor schemes.

### International Business

BHEL has, over the years, established its references in 75 countries across all inhabited continents of the world. These references encompass almost the entire range of BHEL products and services, covering Thermal, Hydro and Gas-based turnkey power projects,

Substation projects, Rehabilitation projects, besides a wide variety of products like Transformers, Compressors, Valves, Oil field equipment, Electrostatic Precipitators, Photovoltaic equipment, Insulators, Heat Exchangers, Switchgears, Castings and Forgings etc.

The company has been successful in meeting the requirements of international markets in terms of complexity of work as well as technology, quality and other requirements. BHEL has proved its capability to undertake projects on fast-track basis. Continued focus on After-Sales-Services led to orders for Spares & Services from Indonesia, Bhutan, Oman, Malaysia, Bangladesh, Vietnam, Srilanka, Saudi Arabia and UAE during 2011-12. Besides undertaking turnkey projects on its own, BHEL also possesses the requisite flexibility to interface and complement other international companies for large projects, and has also exhibited adaptability by manufacturing and supplying intermediate products. The company is firmly perched to expand its vista by taking a number of strategic business initiatives to fuel further growth in international business which includes exploration of opportunities in solar energy related projects, equipments and projects in Transmission & Distribution arena.

In International arena, in recent times, the prevailing environment of heightened uncertainties especially in the Euro zone, has also impacted the business prospects of BHEL. The widespread financial instability in Europe and political turmoil in Middle East & North

Africa (MENA) region has caused delays in financial closure & project financing, resulting in postponement of finalization of new projects. In spite of such situation, BHEL was able to strengthen its foot print in 21 countries across the globe during 2011-12. The company is poised to maintain its references in the overseas market encompassing almost the entire range of products and services, covering Thermal, Hydro and Gas-based turnkey power projects, Substation projects and Rehabilitation projects, besides a wide variety of products like Transformers, Motors, Compressors, Valves, Electrostatic Precipitators, Photovoltaic equipments, Insulators, Heat Exchangers and Switchgear etc.

### Technology Up-gradation, Research & Development

BHEL's products and systems are technology intensive and the company emphasizes on R&D/technology development in its endeavor to realize its strategic aspiration of becoming engineering conglomerate. Accordingly BHEL pursued the strategy of in-house product development by encouraging innovation in line with the "Decade of Innovations (2010-2020)" declared by Govt. of India. As a major step towards this, the company has updated its R&D policy. Significantly during 2011-12, BHEL invested ₹ 1,198.82 Crore on R&D efforts – 22% higher than the previous year. BHEL's efforts for encouraging innovation have resulted in raising BHEL's IPR capital tally to 1786 with highest ever IPRs (351 no.) filed during 2011-12. A growth of



HRSG Drum supplied by BHEL for Grodno Power Project, Belarus



HRSG Training Simulator developed by Corporate R&D



*UHV Test Laboratory set up at Corporate R&D*



*Plasma Nitriding System at Corporate R&D, Hyderabad*

26% over last year has been recorded in turnover of ₹ 9,832 Crore from in house developed products and services. BHEL has been ranked the Ninth Most Innovative Company in the world by the renowned US business magazine Forbes. Significantly, BHEL is the only Indian engineering company on the list, and is ranked much higher than similar multinational companies in the power equipment field.

In conformity with engineering and technology objective, the Corporate R&D Division at Hyderabad leads BHEL's research efforts using emerging technologies to offer state-of-the-art total engineering solutions. Research and product development centers at each of the manufacturing divisions play a complementary role. In order to facilitate advanced R&D activities in focused areas with state-of-the-art facilities and specialized manpower, BHEL has established 13 Centers of Excellence which include eight Centres of Excellence at Corporate R&D Hyderabad. In addition to the existing centres of Excellence for Simulators, Computational Fluid Dynamics, Permanent Magnet Machines and Robotics and Machine Dynamics, BHEL has established four new Centres of Excellence during the year in the areas of Advance Fabrication Technology, Coal Research Centre, Nano Technology application and UHV lab for GIS development. An MoU has been signed with Indian Institute of Science (IISc), Bangalore, covering a broad area of joint research opportunities to facilitate BHEL to engage in collaborative research. This

aims at accelerating the pace of development and demonstration of new products, systems and concepts. 'R&D Advisory Council' has been formed of eminent scientists and dignitaries from Govt. of India to advise BHEL on R&D strategies for growth and to enable it face the new challenges in the market.

In addition to Corporate R&D Division, BHEL has four specialized Institutes, viz., Welding Research Institute at Trichy, Ceramic Technological Institute at Bangalore, Hydro Lab at Bhopal and Pollution Control Research Institute at Haridwar.

#### **Human Resource Development Institute**

Guided by the HRD Mission statement "To promote and inculcate a value-based culture utilizing the fullest potential of Human Resources for achieving the BHEL Mission", the HRDI through a step by step strategic long term training process and several short term need based programmes based on comprehensive organisational research, enables the human resources to unearth and hone their potential.

In line with changing market requirements, the knowledge and skills of BHEL employees are continuously upgraded. In a major advancement, an integrated Human Resource Management system was implemented which aims at reaching out to the internal stakeholders on real time basis and redefining the role of HR functions as a strategic partner in business, through process standardization, optimization and

seamless enterprise integration. As a part of this process, competency mapping and assessment of behavioral competencies for select level has been completed in EDN, Bangalore & Jhansi and Power Sector Western region & Power Sector Eastern region during 2011-12.

During 2011-12, HRDI has prepared and implemented Learning modules for Boiler and Turbine for new entrants and trained 2000 workmen. Some of the Core programs conducted include Strategic need based programmes; Competency based programmes and Functional Programmes like Advanced Management Programmes, General Management Programmes, Strategic Management Programmes, Senior Management Programmes, Middle Management Programmes, Young Managers Programmes and self starter programs for budding managers. In a bid to enhance participation of Minorities, 24.2% of minorities were nominated for skill and competency development programs during the year.

In addition, the HRDI provides professional support to Corporate HR and HRDCs at Units/Divisions. HRDI is also accepting consulting assignments from other organisations in a selective manner.

### **Health, Safety and Environment Management**

BHEL's commitment towards environment is reflected in all its activities, products and services, providing safe and healthy working environment to all stakeholders. In conformity with its commitment towards environment conservation, the company has taken up a number of Environment Improvement Projects (EIPs). These projects helped in enriching the environment, conservation of precious resources like energy, water, fuel oil, coolant, lubricant, mitigating environmental pollution. As a part of major EIP projects during 2011-12, the company has planted 27,545 trees and successfully completed the Water harvesting project in EPD Bangalore unit for Slip house ball mill building. Further, in keeping with the commitment to use renewable power in units, the company has installed Solar Street lighting in and around ISG building in Bangalore; PV panel module on rooftop of PCB building

in EDN, Bangalore and Emergency Solar lighting at the main receiving stations at HPEP Hyderabad during 2011-12. In bid to ensure green supply chain, Study of Supply Chain Management was completed at Hyderabad unit. Energy audit was completed in Insulator Plant, Jagdishpur; EPD, Bangalore and HPEP Hyderabad units.

BHEL has been actively developing and acquiring clean technologies for power generation enabling its customers to minimize the impact of power generation on the environment. Reinforcing its commitment to optimum utilization of natural resources as well as its concern for the environment, BHEL has developed dynamic classifier system to improve combustion efficiency of boiler and reduction of NOx emission. The company has taken up Clean Development Mechanism (CDM) projects to reduce greenhouse gas emissions in a more focused and vigorous way. 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 100-140MW application has already been developed to harness waste heat. BHEL supplied Space Grade Solar Panels totalling to 221 sq. mtrs. in area are in use for various satellites of ISRO.

The company won the prestigious 'Golden Peacock Award for Occupational Health & Safety 2011' for significant achievements in the field of Occupational Health & Safety.

### **Corporate Social Responsibility**

BHEL has developed a CSR scheme and its Mission Statement on CSR is "Be a Committed Corporate Citizen, alive towards its Corporate Social Responsibility". BHEL has adopted a CSR Policy in line with the CSR Guidelines issued by Department of Public Enterprises.

Fostering the tradition of repaying the society at large



*BHEL-aided day care centre for cancer patients of Global Cancer Concern India in Gurgaon*

by actively participating in the welfare of local communities through numerous Corporate Social Responsibility initiatives, BHEL undertakes socio-economic and community development programmes to promote education, improvement of living conditions and hygiene in villages and communities located in the vicinity of its manufacturing plants and project sites spread across the country. Thrust is being given in eight areas- Self employment generation, Environment protection, Community development, Education, Health management & medical aid, Orphanages & Old-age Homes, Infrastructural development and Disaster/ Calamity Management. In addition, BHEL provides financial assistance to various NGOs/Trusts/Social Welfare Societies that are engaged in social activities throughout the country. Reaching out to the distressed victims in the earthquake-ravaged areas of Sikkim,

BHEL has made a humble contribution to help alleviate their suffering during 2011-12.

During 2011-12, as part of social commitment, 7,941 Act Apprentices were trained in the company. In addition, 8,419 students/trainees from various professional institutions underwent vocational training.

#### **Participation in the UN's Global Compact Programme:**

As the world's largest global corporate citizenship initiative, the Global Compact Program is the first and the foremost concern which is exhibiting and building the social legitimacy of business and markets. BHEL has continued to play a prominent part in the United Nation's Global Compact Programme on CSR by promoting the core values on human rights, labour standards, environment and anti-corruption and intends to advance these principles forming part of its strategy & culture within its sphere of influence. BHEL demonstrated its commitment through regular pooling of communication of progress (COP) on the UNGC website. BHEL periodically submits annual Communication of Progress on the relevant principle of global compact in respect of Environmental issues.

Company publicly advocates with its employees and other stakeholders and regularly incorporates its commitments towards Global compact programme through its Annual report, press conferences and other public documents.

## YEAR AT A GLANCE

(₹ in Crore)

	2011-12	2010-11*	2010-11	CHANGE (%)	
	(A)	(B)	(C)	(A/B)	(A/C)
Turnover	49510	41299	43337	19.9	14.2
Profit Before Tax	10302	8487	9005	21.4	14.4
Profit After Tax	7040	5665	6011	24.3	17.1
Retained Earnings	5219	3891	4237	34.1	23.2
Total Assets	66776	59260	59260	12.7	12.7
Net Worth	25373	20154	20154	25.9	25.9
Long Term Borrowings	123	102	102	20.6	20.6
Debt : Equity	0.01	0.01	0.01	-	-
Per Share (in ₹) :@					
- Net worth	103.67	82.34	82.34	25.9	25.9
- Earnings	28.76	23.15	24.56	24.3	17.1
Economic value added	4032	3447	3793	17.0	6.3
Employee (Nos)	49390	46748	46748	5.7	5.7

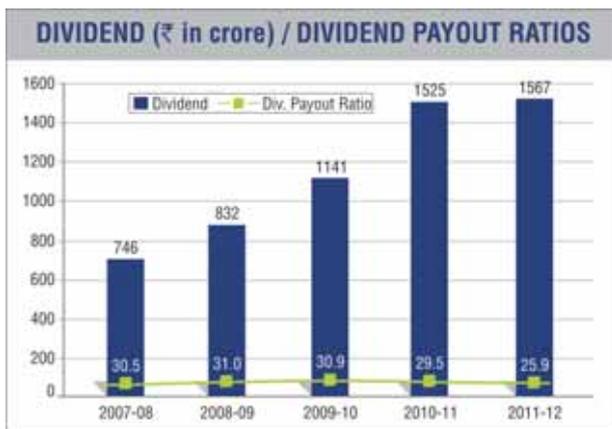
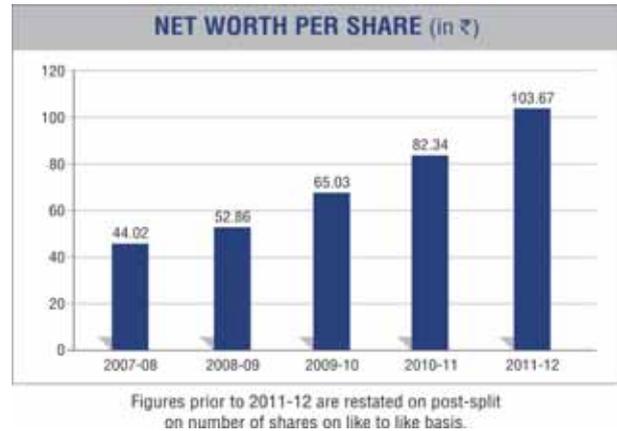
\* Excluding one time impact of change in policy related to provision for warranty obligations for earlier years.

@ Calculated on post split on number of shares for 2010-11 on like to like basis.

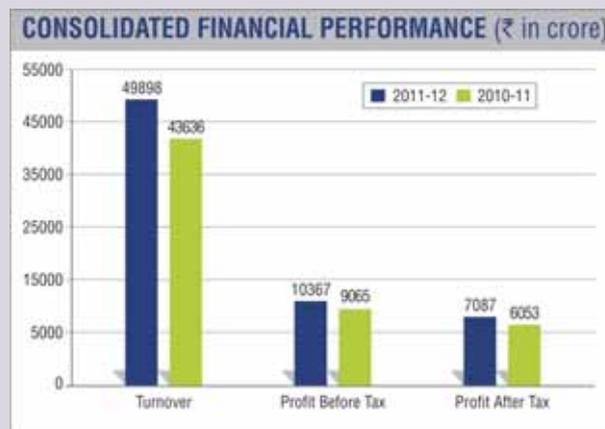
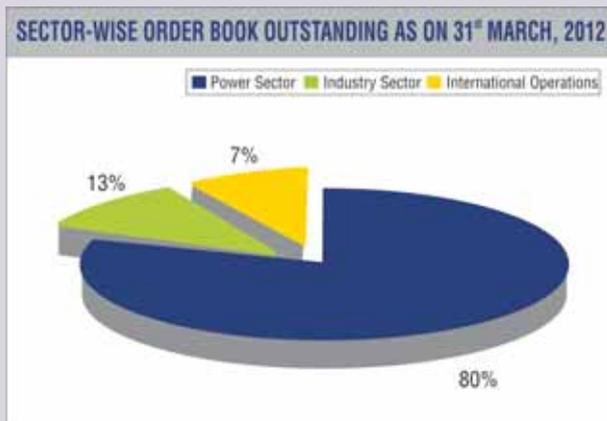
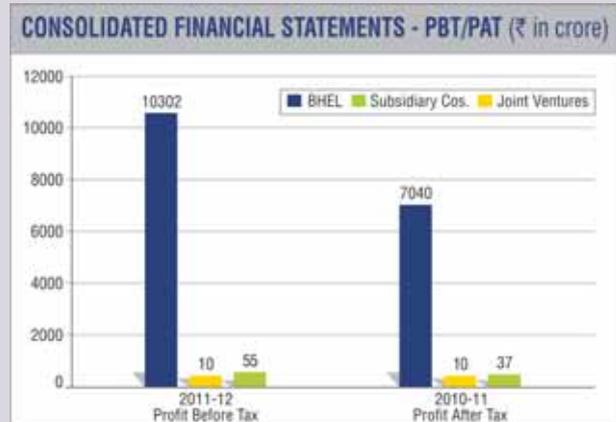


\* Excluding one time impact of change in policy of warranty obligation for earlier years

## Financial Charts



## Financial Charts



## Awards



The then President of India presenting the 'SCOPE Meritorious Award for Best Practices in HRM' to CMD, BHEL



CMD, BHEL receiving 'SCOPE MoU Award for Excellence & Outstanding Contribution to Public Sector Management 2009-10' from the Hon'ble Prime Minister of India



Hon'ble Union Minister for Commerce & Industry presenting the Intellectual Property Award 2011 to CMD, BHEL & Director (E, R&D)



CMD, BHEL receiving the NDTV Profit Business Leadership Award 2011 in the Engineering category from the then Union Minister of Finance

## DIRECTORS' REPORT

To the Members,

The Directors are delighted to present the 48<sup>th</sup> Annual Report on the business and operations of the Company and the statement of accounts for the year ended March 31, 2012.

### FINANCIAL PERFORMANCE

Figures (in ₹ crore except per share data)	Financial Year	
	2011-12	2010-11
<b>(a) Turnover (Gross)</b>	49510	43337
(b) Revenue from operations (Net)	47228	41566
(c) Other Operational Income	751	680
(d) Operating expenses	38092	33663
(e) Operating profit	9887	8583
(f) Add : Other income	1266	1021
<b>(g) Profit before depreciation, finance cost &amp; tax expense</b>	11153	9604
(h) Less: Depreciation	800	544
(i) Less: Finance costs	51	55
<b>(j) Profit before tax</b>	10302	9005
(k) Less: Tax expense	3262	2994
<b>(l) Profit after Tax</b>	7040	6011
(m) Add: Balance brought forward from the previous year	812	575
<b>(n) Profit available for appropriation</b>	7852	6586
i) Dividend (including interim dividend)	1567	1525
ii) Corporate Dividend tax (incl. on interim dividend)	254	249
iii) Amount transferred to General Reserve	5000	4000
<b>(o) Balance in Profit &amp; Loss</b>	1031	812
<b>(p) Earnings per Share (₹) @</b>	28.76	24.56
<b>(q) NAV per share (₹) @</b>	103.67	82.34
<b>(r) Economic Value Added (₹ crore)</b>	4032	3793

@ Calculated on post-split on number of shares for 2010-11 on like to like basis.

### FINANCIAL HIGHLIGHTS

During the year, the company witnessed growth in Turnover by 14.2% to ₹ 49510 crore from ₹43337 crore in the previous year. The Revenue from operations (Net) increased by 13.6% from ₹ 41566 crore in 2010-11 to ₹ 47228 crore in 2011-12. Profit before Tax for the year 2011-12 is placed at ₹ 10302 crore as against ₹ 9005 crore during 2010-11, a growth of 14.4% as compared to previous year. Profit after Tax is placed at ₹ 7040 crore as against ₹ 6011 crore during 2010-11, a growth of 17.1% over previous year.

Excluding impact of change in policy related to warranty obligation for earlier years in 2010-11, the turnover, PBT and PAT were ₹41299 crore, ₹ 8487 crore and ₹ 5665 crore respectively, an increase of 19.9%, 21.4% and 24.3% respectively in 2011-12 as compared to 2010-11.

The company has registered a significant growth in turnover, profit and other financial parameters during the year 2011-12.

During the year company has sub-divided existing equity shares of face value of ₹ 10/- into 5 equity shares of face value of ₹ 2/- each and the record date was fixed October 04, 2011.

Net worth of the company has gone up from ₹ 20154 crore to ₹25373 crore registering an increase of 25.9%. Net asset value (NAV) per share has been placed at ₹ 103.67 in 2011-12 as against ₹ 82.34 (post-split) in 2010-11.

The company had filed Draft Red Herring Prospectus (DRHP) dated 28.09.2011 with Securities and Exchange Board of India (SEBI) on 30.09.2011 for disinvestment of 5% of the paid up equity capital out of Government of India's shareholding. Consequent upon the receipt of 'no-objection' for withdrawal of DRHP for FPO, from Department of Heavy Industry/ Department of Disinvestment, the Board of Directors in its meeting held on April 03, 2012 has approved the withdrawal of DRHP filed by the company with SEBI.

### DIVIDEND

The Board has recommended a Final Dividend of 184% (₹ 3.68 per share), ₹ 900.72 crore, for the year 2011-12. An interim dividend of 136% (₹2.72 per share),



CMD, BHEL presenting the Interim Dividend cheque for FY 2011-12 to Hon'ble Union Minister of Heavy Industries & Public Enterprises

₹ 665.75 crore, on share capital of ₹ 489.52 crore, has already been paid for the year 2011-12. Thus the total dividend (exclusive of dividend tax) for the year 2011-12 is ₹ 1566.47 crore (₹ 6.40 per share) as against ₹ 1524.85 crore paid in the previous year.

Provision of ₹ 146.12 crore has been made for Corporate Dividend Tax on the Final dividend proposed. Corporate Dividend Tax of ₹ 108 crore has already been paid on the interim dividend.

#### ORDERS RECEIVED

Orders worth ₹ 22096 crore were received during the year as against ₹ 60507 crore in 2010-11. Sector-wise orders booked are as follows:

	(₹ in Crore)	
	2011-12	2010-11
Power Sector	14012	46393
Industry Sector*	7850	10375
International Operations	234	3739
Total Orders Booked	22096	60507
Order Book outstanding at the end of the year	135300	164145

\* excludes inter sectoral orders

The decrease in order book is mainly due to sharp slow down witnessed in the Indian power sector. The developers are facing numerous constraints like coal allocation, gas allocation, environment clearance, land acquisition, legal issues, financing and fund tie-ups etc.

As a result bidding process of many projects was delayed and many projects, including those for which the bids have been opened in last financial year, could not be concluded for one or more of the above issues. Further, the year 2011-12 witnessed unforeseen turmoil in various parts of the globe influencing BHEL's international business prospects.

#### RATING OF BHEL VIS-À-VIS MOU TARGETS

Performance of BHEL for the year 2010-11 has been rated as 'Excellent' in terms of MoU signed with the Government of India. BHEL has been awarded the MoU Composite score of '1.02'.

The MoU rating for 2011-12 is under finalisation by the Government of India. However, company's own assessment places performance of the company in 'Excellent' category for Financial Year 2011-12.

#### MANAGEMENT DISCUSSION AND ANALYSIS

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

#### BOARD OF DIRECTORS

##### Appointment

Shri Trimbakdas S. Zanwar has been re-appointed as Part-time Non-Official Director w.e.f. 11.10.2011.

Shri R. Krishnan has been appointed as an Additional Director w.e.f. 01.04.2012 to take charge of the office of Director (HR).

Shri Vijay Shankar Madan, IAS, Additional Secretary & Financial Advisor Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry has been appointed as Part-time Official Director w.e.f. 19.07.2012.

In accordance with Section 260 of the Companies Act, 1956 and Article 67(iv) of the Articles of Association of the Company, S/Shri Trimbakdas S. Zanwar, R. Krishnan and Vijay Shankar Madan shall hold their directorships upto the 48<sup>th</sup> Annual General Meeting of the Company and are eligible for appointment as Directors at the Meeting.

##### Cessation

Shri Trimbakdas S. Zanwar who was appointed as Part-time Non-Official Director w.e.f. 12.11.2010 had

resigned and ceased to be a Director of the Company w.e.f. 20.09.2011.

Shri Anil Sachdev, who was appointed as Director (HR) w.e.f. 01.09.2007 ceased to be a Director of the Company on attaining the age of superannuation on 31.03.2012.

Shri Saurabh Chandra, IAS, former Additional Secretary & Financial Advisor, Ministry of Commerce & Industry, consequent upon his appointment as Secretary, Department of Industrial Policy & Promotion has relinquished his position as Part-time Official Director w.e.f. 17.04.2012.

Shri Ashok Kumar Basu, Shri M.A. Pathan and Smt. Reva Nayyar who were appointed as Part-time Non-Official Directors w.e.f. 22.06.2009 ceased to be Directors of the Company on completion of their tenure on 21.06.2012.

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 Anil Sachdev, Saurabh Chandra, Ashok Kumar Basu, M.A. Pathan and Smt. Reva Nayyar during their tenure.

Further pursuant to Sections 255 and 256 of the Companies Act, 1956 and Article 67(i) of the Articles of Association of the Company, S/Shri V.K. Jairath, O.P. Bhutani and S. Ravi will retire by rotation at the Annual General Meeting and being eligible, offer themselves for re-appointment.

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

#### **OFFICIAL LANGUAGE IMPLEMENTATION**

The company continued its thrust on official language implementation in line with Govt. of India's policy. Other important activities undertaken during the year for the compliance of Official Language policy of Govt. of India are as under:



*Hindi workshop being conducted on Rajbhasha Diwas*

1. In order to remove hesitation among the employees, and give necessary impetus to work in Hindi, Hindi workshops and Hindi computer training programmes were organised in all the Units/Divisions including Corporate Office.
2. With a view to create favourable atmosphere for usage of Hindi in the Company, all the Units/ Divisions of the company, including Corporate Office, celebrated Hindi Divas on 14.09.2011 and organised various Hindi competitions during the celebration of Hindi Week/ Fortnight/Month in the month of September, 2011.
3. BHEL Hindi Coordinators Meet was held on 11<sup>th</sup> & 12<sup>th</sup> October, 2011 in Cochin, Kerala to discuss the various issues relating to the Official Language implementation.
4. Various Hindi competitions and programmes were organised by most of the Units/Divisions including Corporate Office for member organisations under the auspices of Town Official Language Implementation Committees during the year.
5. All national level functions e.g Republic Day, Independence Day, International Women's Day etc. were conducted in Hindi in Corporate Office and major Units of the Company.
6. All the major Units and some of the Divisions of the Company published 12 Hindi magazines namely, BHEL Chandan by EDN, BHEL Darpan by EPD, BHEL Kiran by Tiruchi, Surya Kiran by ISG, BHEL Yashasvi by RC Puram, Hyderabad, BHEL

Bharati by Bhopal, BHEL Ganga by Haridwar, Srijan by Jhansi, Shakti Punj by Power Sector (Hq), Abhivyakti by Power Sector-NR, Poorvabha by Power Sector-ER and Tarangini by Power Sector-WR during the year. Corporate Office also brought out issues of its half yearly Hindi Magazine "Arunima" during the year.

7. A Hindi Booklet 'Rajbhasha Digidarshika' was published consolidating the various provisions regarding Official Language and useful informations for the employees for Hindi work e.g. English-Hindi glossary and notings, Manak Vartani, bilingual addresses of the Units/Divisions, incentive schemes etc.
8. Many awards were received by the employees of major Units/divisions in various Hindi Competitions organised under the auspices of Town Official Language Implementation Committee.
9. Haridwar unit was awarded third prize by the Town Official Language Implementation Committee for active contribution in Official Language implementation. In addition, Town Official Language Implementation Committee, Haridwar constituted and being operated under the Chairmanship of our Haridwar Unit received second prize from Deptt. of Official Language, Ministry of Home Affairs.
10. Committee of Parliament on Official Language inspected our Industry Sector, Power Sector-SR, ROD-Hq. during the year and appreciated the efforts being made in implementing Official Language Policy of the Govt. of India, while taking a few assurances from us to enhance the use of Hindi in official work.
11. BHEL Units/Divisions were inspected by Corporate Rajbhasha Implementation Group for facilitating them to make progressive use of Hindi as per the Govt. policy.

#### **PARTICIPATION IN THE GLOBAL COMPACT OF THE UNITED NATIONS**

BHEL is an environment friendly company in all its activities, products & services, besides providing safe and healthy working environment to all its stakeholders

and has made UNGC programme as part of the Company's strategy, culture and day-to-day operations.

BHEL reiterates its commitment to United Nations Global Compact (UNGC) Programme and set core values enshrined in its principles on human rights, labour standards, and environment and anti corruption.

Company intends to advance GLOBAL COMPACT (GC) principles, as a responsible corporate citizen. BHEL has taken a lead role in promoting GC principles in other Indian organization through Global Compact Network (GCN) – an apex level nodal agency, formed by the leading Indian organizations. BHEL continued to remain in the forefront of all activities of the network as Secretary/GCN being BHEL nominee. Noteworthy activities of the year were participating in the national Convention and holding of monthly meetings of the Network through case studies/ organizational experience sharing, addressing the Global Compact principles in Indian context.

In recognition of BHEL's contribution in support of Global Compact programme and its outstanding Communication on Progress (COP), UNGC continued to place BHEL under 'Notable COP' category.

#### **VIGILANCE**

The Vigilance organisation of BHEL is headed by the Chief Vigilance Officer (CVO). Each Unit/Region of BHEL has a vigilance set up headed by a senior vigilance executive reporting to the CVO.

Preventive vigilance has been the thrust area of BHEL Vigilance throughout all the years and the same received focused attention during the year. A climate of preventive vigilance was generated to sensitize officials at all levels about the ill effects of corruption and malpractices.

Apart from the above, an attitudinal shift was made to inculcate greater seriousness in observance of rules / procedures / guidelines. Awareness amongst employees of the organization was generated by organizing training programmes. 83 such programmes were organized during the year 2011-12 in various Units, Regions and offices of BHEL. Interactive sessions were held with line executives representing different

functional areas, in order to create vigilance awareness and to enhance their knowledge of the Company's rules, procedures and policies.

With a view to making systems more effective and transparent, Vigilance had carried out regular surveillance checks and system studies during the year 2011-12. Many suggestions towards system improvement have been rendered. Some of the major areas where suggestions for improvement were given are:

- Customer approval of vendors
- Expanding vendor base in single vendor/ two vendor categories
- Guidelines for appointment of agents for export contracts

In addition, suitable recommendations were made for correction in certain provisions of the following procedures:

- Supplier Evaluation, Approval & Review Procedure
- Purchase Policy
- Reverse Auction Guidelines
- Criteria for financial loading of commercial offers, received during the tendering process
- Suspension of Business Dealings with suppliers / contractors

As per CVC directions, the Company has taken many initiatives to make available all relevant information on the web on real time basis. One of the major initiatives was to start pilot implementation of e-procurement in select Units of BHEL. In addition, periodic checks are undertaken to ensure that :

- Status of Purchase Orders, Works Contracts concluded every month, as per CVC format, is being uploaded by all Units.
- Procedure and forms related to Vendor registration are hosted on the Company web site.
- Status of vendor registration applications is hosted on the web and can be viewed by vendors.
- List of banned firms is uploaded on Company web site.

- E-payment of vendor bills is being implemented throughout the organization and principle of first-in, first-out is being followed as a rule in payment of vendor bills.
- Status of bill payment can be viewed by the vendors on-line.
- Indents are being raised on-line in most of the Units.
- Information relating to Rules/Procedures governing the issue of license, permissions, clearances etc., is available on the BHEL/Units websites.

## SECURITY

The Company's security mechanism is sufficient and geared up to provide security to each Plant / Unit. Whereas the security of most of the Plants of the Company is being managed by the CISF, in some smaller Plants, the Company has its own security. In other Plants, Corporate Office and Regional Offices, the security is being looked after by the private agencies like M/s EATS 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) have also carried out inspection 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 is being complied by Corporate Security Department alongwith quarterly reports on various security related issues as per the decision taken after meeting of HR & Security Heads on 20<sup>th</sup> March, 2012. Quarterly meetings have also been envisaged and likely to take place in the month of July 2012.

The Management, Security Staff and the employees of Company are sensitized to the security needs of Company.

## SUSTAINABILITY

Sustainability is an integral part of the company's strategy. BHEL is committed to be an Environment friendly company in all its areas of activities, products and service, providing safe and healthy working environment.

In line with the company's strategy, Environment Improvement Projects and Community Development Programmes are given special thrust. Some of the major EIPs executed in the past at BHEL plants and townships included tree plantation drives, installation of rain harvesting plants, efficient water and energy management, reduction in noise level, improvement in chemical storage and handling systems etc.

The Department of Public Enterprises (DPE) has issued guidelines on Sustainable Development on 23<sup>rd</sup> Sept. 2011. In conformance to the guidelines, a Board-Level Committee for Corporate Social Responsibility & Sustainable Development (BLC for CSR & SD), has been constituted. BHEL has defined its SD policy in keeping in view the scale & nature of activities, products & services.

The SD projects will have thrust on the projects in the fields of Rain water harvesting, afforestation, captive power generation based on Solar energy, use of renewable energy, energy efficiency & conservation and waste disposal.

All manufacturing Units/ Regions of the company are accredited to international standards viz. ISO-14001 certification for environmental management and OHSAS-18001 certification for occupational health and safety management systems.

## DIRECTORS' RESPONSIBILITY STATEMENT

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

- (i) that in the preparation of the annual accounts for the financial year ended 31<sup>st</sup> March, 2012 the applicable Accounting Standards have been followed along with proper explanation relating to material departures;
- (ii) that the Directors have selected such accounting policies and applied them consistently and made

judgments and estimates that were reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at the end of the financial year 2011-12 and of the profit of the company for that period;

- (iii) that the Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- (iv) that the Directors have prepared the annual accounts for the financial year ended 31<sup>st</sup> March, 2012 on a 'going concern' basis.

## CORPORATE GOVERNANCE

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

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

## OTHER DISCLOSURES

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

None of the employees have drawn remuneration in excess of the limits prescribed under section 217(2A) of the Companies Act, 1956 read with Companies (Particulars of employees) Rules, 1975 during the year 2011-12.

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

## EVENTS OCCURRING AFTER THE BALANCE SHEET DATE

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

## AUDITORS

The Auditors of your Company are appointed by the Comptroller and Auditor General of India. The names of auditors appointed for the year 2011-12 are printed separately in the Annual Report.

The detail of cost auditors appointed for the year 2011-12 and Cost Audit details are printed separately in the Annual Report.

The replies to the points referred to in the Auditors' Report and to the Comments of the Comptroller and Auditor General of India are given at **Annexure – VI**.

## ACKNOWLEDGEMENTS

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

The Board also gratefully acknowledges the support and guidance received from various Ministries of the Government of India, particularly the Department of Heavy Industry, in Company's operations and developmental plans. The Directors express their

grateful thanks also to the Comptroller and Auditor General of India, Chairman and Members of Audit Board, Statutory Auditors, Branch Auditors and Cost Auditors. The Company also wishes to place on record its appreciation for the continued co-operation received from all the Technology Collaborators and Suppliers and support provided by the Financial Institutions and bankers. Last but not the least the Board wishes to place on record its deep gratitude to all BHELites whose enthusiasm, team efforts, devotion and sense of belongingness has made this great company proud.

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

A handwritten signature in black ink, appearing to read 'RaoBP', is written over a horizontal line.

**B.Prasada Rao**

Chairman & Managing Director

Place : New Delhi

Dated : July 26, 2012

ANNEXURE – I TO THE DIRECTORS' REPORT

## Management Discussion and Analysis

### MANAGEMENT DISCUSSION AND ANALYSIS

#### A. FINANCIAL PERFORMANCE OF THE COMPANY

##### (i) Standalone Financial Results

#### BALANCE SHEET

##### I. Share Capital

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Authorised Share capital	2000	2000
Issued, subscribed & Paid up Share Capital	490	490

During the year Company has sub-divided existing Equity Shares of face value of ₹ 10/- into 5 Equity shares of face value of ₹ 2/- each. The Authorised Share Capital & paid up capital remains the same.

##### 2. Reserves & Surplus

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Capital Reserve	3	3
General Reserve	23849	18849
Surplus of Profit & Loss	1031	812
	24883	19664

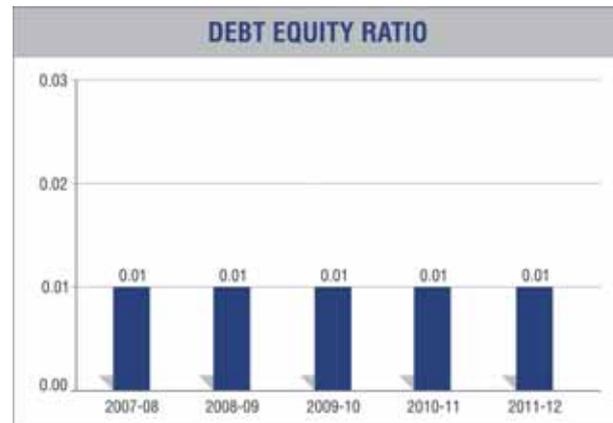
The Reserve & Surplus has increased by ₹ 5219 crore during 2011-12 after addition of Retained earnings. A sum of ₹ 5000 crore has been transferred to General Reserve out of profit for the year 2011-12.

##### 3. Long Term Borrowings

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Unsecured Loans	123	102

Unsecured Loans represent credit for assets taken on finance lease.



##### 4. Other Long Term / Current Liabilities

(Figures in ₹ Crore)

	F.Y. 2011-12			F.Y. 2010-11		
	Other Long Term Liabilities	Current Liabilities	Total	Other Long Term Liabilities	Current Liabilities	Total
Trade payables (Incl. Acceptances)	618	10271	10889	384	8096	8480
Deposits from customers & others	104	444	548	95	398	493
Advances Received from customers & others	6829	13152	19981	8663	11727	20390
Other payables/ liabilities	-	2220	2220	-	2044	2044
	7551	26087	33638	9142	22265	31407

The increase in other long term liabilities and current liabilities is by ₹ 2231 crore in 2011-12 mainly due to increase in trade payables by ₹ 2409 crore, other payables/ liabilities by ₹ 176 crore and deposits from customers & others by ₹ 55 crore partially offset by decrease in advances from customers and others by ₹ 409 crore. The increase in trade payables is in line with the increase in purchase of material & built up of higher inventory level, consequent to increase in volume of operations.

## 5. Provisions

(Figures in ₹ Crore)

	F.Y. 2011-12			F.Y. 2010-11		
	Long Term	Short Term	Total	Long Term	Short Term	Total
Provision for employee benefits	2076	401	2477	1992	902	2894
Provision for contractual obligation	2793	1057	3850	2339	644	2983
Provision for taxation (Net of Advance Tax/ TDS)	-	-	-	466	-	466
Proposed Dividend (Incl. Div. tax)	-	1047	1047	-	1018	1018
Other Provisions	136	131	267	127	109	236
	5005	2636	7641	4924	2673	7597

There is a increase in total provision by ₹ 44 crore in 2011-12 mainly due to increase in provision for contractual obligation by ₹ 867 crore and provision for dividend & others by ₹ 60 crore which is offset by decrease in provision for employee benefits by ₹ 417 crore and provision for tax (Net) by ₹ 466 crore.

## 6. Fixed Assets

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Gross Block	9707	8050
Less: Depreciation/ amortisation	5413	4649
Less: Lease Adjustment Account	( 3)	-
Net Block	4297	3401
Capital Work-in-Progress	1325	1723
Intangible assets under development	23	10
	5645	5134

Gross Block increased by ₹ 1657 crore, and Capital Work in progress including Intangible Assets under development decreased by ₹ 385 crore during the year. The net increase is due to capital expenditure incurred on ongoing capacity augmentation programmes at various manufacturing units and erection and commissioning facilities at the project sites.

## 7. Non Current Investments

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Long Term Trade Investments	462	439

Long term trade investments have increased by ₹ 23 crore mainly on account of equity participation in Joint Venture Companies.

## 8. Deferred Tax Assets (Net)

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Deferred Tax Assets (Net)	1546	2164

Deferred Tax assets (Net) have decreased by ₹ 618 crore mainly due to decrease in provisions.

## 9. Loans & Advances

(Figures in ₹ Crore)

	F.Y. 2011-12			F.Y. 2010-11		
	Long Term	Short Term	Total	Long Term	Short Term	Total
Loans & Advances	900	2112	3012	883	2383	3266

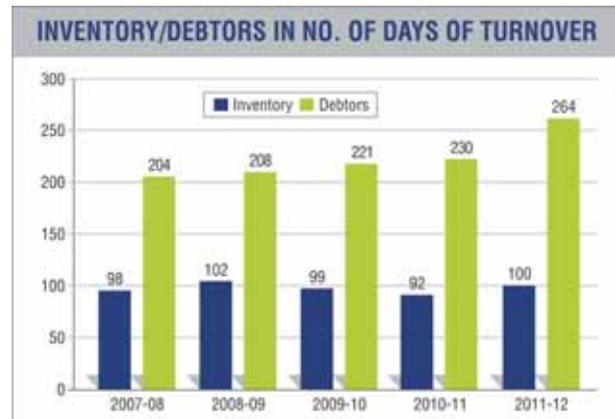
Loans & advances have decreased by ₹ 254 crore mainly due to decrease in advances for purchases and others.

## 10. Inventories

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Inventories	13549	10963

Inventory increased by ₹ 2586 crore over previous year in tune with the increase in volume of operations. In number of days of turnover it increased from 92 days in 2010-11 to 100 days in 2011-12.



## 11. Receivables

(Figures in ₹ Crore)

	F.Y. 2011-12			F.Y. 2010-11		
	Long Term	Trade Receivables	Total	Long Term	Trade Receivables	Total
Trade Receivables (Net)	9404	26336	35740	7251	20104	27355

Receivables increased by ₹ 8405 crore mainly due to increase in volume of operations and increase in deferred debts. In number of days of turnover it increased from 230 days in 2010-11 to 264 days in 2011-12.

## 12. Cash and Cash Equivalents

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Cash & cash equivalents	6672	9630

The cash and cash equivalents at the year end are placed at ₹ 6672 crore as against ₹ 9630 crore in 2010-11.

## 13. Other Current Assets

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Other Current Assets	151	310

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

## STATEMENT OF PROFIT & LOSS

### 14. Revenue from Operations

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Gross Turnover	49510	43337
Less : Excise Duty	1847	1436
Less : Service Tax	435	335
Revenue from operations (Net)	47228	41566

Revenue from operations (Net) increased by 13.62% during the year, Power segment and Industry segment contributed 76% and 24% respectively for the total revenue of the company.

### 15. Other Operational Income

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Export Incentive	12	43
Scrap Sales	308	272
Others	431	365
	751	680

Other operational income increased by ₹ 71 crore mainly due to increase in scrap sales in line with increase in volume of operations.

### 16. Other Income

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Exchange variation (net)	99	100
Interest Income	814	627
Other income	353	294
	1266	1021

Other income increased by ₹ 245 crore during the year mainly due to increase in interest income etc.

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

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Cost of consumption of raw material & components	24549	19418
Consumption of stores & spares	564	470
Erection & Engineering Expenses	3795	3321
	28908	23209

The increase in Consumption of Material, Erection & Engineering Expenses by ₹ 5699 crore or 24.56% is mainly on account of increase in Turnover / volume of operation. As percentage of net turnover after adjustment of accretion/decretion to WIP & FG, it increased from

55.96% (58.86 % after adjustment of impact of warranty policy change) in 2010-11 to 60.49% in 2011-12.

### 18. Employee Benefits Expenses

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Employees Benefits Expenses	5466	5397

Employees remuneration & benefits increased by ₹ 69 crore from ₹ 5397 crore in 2010-11 to ₹ 5466 crore in 2011-12.

### 19. Finance Costs

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Interest and other borrowing costs	51	55

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

### 20. Other Expenses of manufacturing, Administration, Selling & Distribution

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Other expenses of Manufacturing, Administration, Selling & Distribution	3223	2536

The increase in other Expenses of manufacturing, Administration, Selling & Distribution is ₹ 687 Crore as compared to 2010-11 in line with the increased level of operations of the company and also due to increase in freight rates etc.

### 21. Provisions (Net)

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Provisions (Net)	1403	2715

The decrease in Provisions (Net) by ₹ 1312 crore as compared to previous year is mainly on account of decrease in provision for Contractual Obligations by ₹ 1222 crore, due to one time change in policy impact of ₹ 1520 crore in 2010-11.

### 22. Depreciation

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Depreciation	800	544

The increase in depreciation by ₹ 256 crore is on account of increase in gross block.

### 23. Tax Expense

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Income Tax-Current Year	3277	3712
-Earlier Years	(632)	(82)
Deferred tax charge/ (credit)	617	(636)
Tax Expenses (Net)	3262	2994

The increase in tax expense (Net) is in line with the growth in profit for the year.

### 24. Profit after Tax

(Figures in ₹ Crore)

	F.Y. 2011-12	F.Y. 2010-11
Profit after Tax	7040	6011

The Net profit for the year rose by ₹ 1029 crore or 17.12%.

### 25. Dividend

The company has paid an interim dividend of 136% (₹ 2.72 per share), ₹ 665.75 crore, on share capital of ₹ 489.52 crore during the year 2011-12. The Board has also recommended a Final dividend of 184% (₹ 3.68 per share) i.e. ₹ 900.72 crore.

The total dividend (exclusive of dividend tax) for the year 2011-12 is ₹ 1566.47 crore (₹ 6.40 per share) as against ₹ 1524.85 crore in the previous year.

Provision of ₹ 146.12 crore has been made for corporate dividend tax on the final dividend proposed. Corporate dividend tax of ₹ 108 crore has already been paid on the interim dividend.

## 26. Transfer to General Reserve

₹ 5000 crore has been transferred to General Reserve for the year 2011-12 as against ₹ 4000 crore in the previous year.

### (ii) Financial Review of Subsidiary Companies

#### a) Bharat Heavy Plate and Vessels Ltd. (BHPV)

Bharat Heavy Plate and Vessels Ltd. (BHPV) is 100% subsidiary co. of BHEL taken over on 10.05.2008. In 2011-12 BHPV recorded a profit of ₹ 10.44 crore on a turnover of ₹ 155.80 crore.

The financial highlights of BHPV are as under:

₹ in Crore		
	F.Y. 2011-12	F.Y. 2010-11
BHEL's Investment in Equity	at ₹ 1/-	at ₹ 1/-
Advance against issue of shares	34.00	34.00
Turnover	155.80	136.98
Profit after Tax	10.44	8.78

#### b) 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 2011-12, BHEL EML recorded a loss of ₹ 0.38 crore on a turnover of ₹ 21.14 crore.

### (iii) Financial Review of Joint Venture Companies

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

BGGTS is a Joint Venture Company of BHEL & GE USA, formed to take up repair & servicing of GE designed Gas Turbines. The Financial highlights of the Company are as under:

in ₹ Crore		
Particulars	F.Y. 2011-12	F.Y. 2010-11
BHEL's Investment in Equity	2.38	2.38
Turnover	513.28	418.52
Profit after tax	60.76	57.36
Net Worth	114.48	91.34

During the year BGGTS has paid interim dividend at 480% and proposed final dividend at 200% on the Equity share capital of ₹ 4.76 crore.

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

A Joint Venture between BHEL & NTPC incorporated on 28<sup>th</sup> April, 2008 for carrying out EPC activities in the Power Sector. The Financial highlights are as under:

in ₹ Crore		
Particulars	F.Y. 2011-12	F.Y. 2010-11
BHEL's Investment in Equity	25.00	25.00
Turnover	145.55	106.49
Profit after tax	13.06	9.26

#### c) Udangudi Power Corporation Ltd.

A Joint Venture between BHEL & TNEB, incorporated on 26<sup>th</sup> December, 2008, to build, own and operate a 1600 MW (2x800 MW) Super Critical Thermal Power Plant at Udangudi.

in ₹ Crore		
Particulars	F.Y. 2011-12*	F.Y. 2010-11
BHEL's Investment in Equity	32.50	32.50
Net Block	29.09	29.14
Capital Work in Progress	41.75	32.51

\* Based on provisional figures

#### d) Raichur Power Corporation Ltd.

BHEL has promoted a joint venture company with Karnataka Power Corporation Limited (KPCL) for setting up Supercritical Thermal Power Plant at Karnataka on build, own and operate basis. The Joint Venture was incorporated on 15.04.2009 under the name of "Raichur Power Corporation Ltd".

Particulars	₹ Crore	
	F.Y. 2011-12*	F.Y. 2010-11
BHEL's Investment in Equity	331.52	331.52
Net Block	0.41	0.04
Capital Work in Progress (Including advances for capital expenditure)	1473.87	852.35

\* Based on provisional figures

#### e) Dada Dhuniwale Khandwa Power Limited

BHEL has promoted a joint venture company with Madhya Pradesh Power Generating Company Ltd (MPPGCL) for setting up of a 2x800MW Supercritical Thermal Power Plant at Khandwa, Madhya Pradesh on build, own and operate basis. The Joint Venture was incorporated on 25.02.2010 under the name of "Dada Dhuniwale Khandwa Power Ltd".

Particulars	₹ Crore	
	F.Y. 2011-12*	F.Y. 2010-11
BHEL's Investment in Equity	22.50	2.50
Net Block	0.03	0.02
Capital Work in Progress	0.73	0.23

\* Based on provisional figures

#### f) Latur Power Company Ltd.

BHEL has promoted a Joint venture company with Maharashtra State Power Generation Company Ltd (MAHAGENCO) for setting up a 2x660 MW Thermal power plant or 1500 MW gas based Combined Cycle Power Plant (CCPP) in Latur, Maharashtra. The Joint Venture Company was incorporated on 06.04.2011 under the name of "Latur Power Company Ltd". The present paid up equity of the JVC is ₹ 5 crore, subscribed to equally by both the partners.

#### g) Barak Power Pvt. Ltd.

A Joint Venture between BHEL & PTC, incorporated on 1<sup>st</sup> Sept, 2008. The Joint Venture has been wound up w.e.f. 11.10.2011 and the investment has been written off during the year.

#### h) Power Plant Performance Improvement Ltd.

A Joint Venture between BHEL and Siemens and is under liquidation.

#### (iv) 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 :

(Figures in ₹ Crore)

	2011-12	2010-11	%age increase over 2010-11
<b>Statement of Profit &amp; Loss</b>			
Turnover	49898	43636	14.35
Profit Before Tax	10367	9065	14.36
Profit After Tax	7087	6053	17.08
<b>Balance Sheet</b>			
<b>Sources of Funds</b>			
Shareholders fund	25403	20155	26.04
Minority Interest	5	-	
Non current liabilities	12867	14205	-9.42
Current liabilities	29155	25257	15.43
<b>Total</b>	<b>67430</b>	<b>59617</b>	<b>13.11</b>
<b>Application of Funds</b>			
Net Block (incl. CWIP)	6282	5366	17.07
Non Current Investments	6	11	-45.45
Deferred Tax Assets (Net)	1549	2165	-28.45
Other Non current assets	10503	8487	23.75
Current Assets	49090	43588	12.62
<b>Total</b>	<b>67430</b>	<b>59617</b>	<b>13.11</b>

## Power Sector



*2x525 MW Right Bank Maithon Project commissioned by BHEL*

## B. PERFORMANCE OF BUSINESS SEGMENTS

### POWER SECTOR

From one of the most rapidly growing sector till last year, the Indian Power Sector is witnessing slowdown during the year. The developers are facing numerous constraints like Coal allocation, Gas allocation, Environment clearance, Land acquisition, Legal issues, Financial closure etc which are affecting the on-going projects as well as the new projects.

As a result, bidding process of many projects was delayed and many projects, including those for which the bids had been opened in the last financial year, could not be concluded for one or more of the above issues.

In the Power Sector business segment, BHEL continued to demonstrate its competitiveness by bagging most of the Power Plant & associated equipment orders placed during the year, in the country. Orders worth ₹ 14,012 Crore for supply and installation of main equipment as well as spares and services were secured during the year.

#### Major achievements during the year

- Order received for the first ever 300 MW rating set with Forced Recirculation Boiler from Abhijeet Projects for 1x300 MW Vizag.
- New Customer added: Singareni Collieries Company Ltd. (SCCL).

#### Significant orders received in the Power sector include:

##### Thermal:

##### Sub-Critical Orders:

Orders aggregating to 1,500 MW were received during the year, which include-

- 2x600 MW Singareni Collieries Company Ltd. (SCCL)/ Adilabad (Main Plant Package including Switchyard )
- 1x300 MW Abhijeet Power Projects / Vizag (Boiler Turbine Generator package)

#### Super-Critical Orders

Orders aggregating to 1,320 MW were received during the year. In addition, orders for Boiler package, Coal Handling Plant(CHP) package and Ash Handling Plant(AHP) package for supercritical plants were also received. These include-

- 2x660 MW DB Power Limited / Singrauli STPP (BTG including Switchyard)
- 2x660 MW NTPC / Mauda Steam Generator (SG) package (against Bulk tender)
- 2x800 MW RPCL / Yeramarus CHP & AHP package

#### SPARES & SERVICES BUSINESS GROUP (SSBG)

SSBG provides a single window facility to the customer for Post warranty Services viz Supply of Spares, Overhauling, Repairs and Renovation & Modernisation (R&M). SSBG booked orders worth ₹ 1,842 Crore for Spares, ₹ 408 Crore for Services(including R&M) totaling to ₹ 2,250 Crore during the year.

#### COMMISSIONING:

BHEL crossed landmark of one lakh MW contribution towards country's installed capacity. BHEL has added so far 1,06,202 MW towards country's total installed capacity.

Overall, 9270 MW capacity was commissioned/ synchronized by BHEL during the year both in the Domestic and International arena.

- BHEL commissioned 41 sets totaling 8997.8 MW



Director (Power), BHEL and Group MD, Abhijeet Group exchanging contract documents for setting up 300 MW TPP in Andhra Pradesh



2x500 MW TPS commissioned by BHEL for DVC, Durgapur

during the year within the country and abroad (including utility, industrial and overseas sets).

- In addition to commissioning of utility projects, BHEL has synchronized 272 MW [Chutak-1, 2(2X11 MW) and Parichha -5 (250 MW)], awaiting clearance from utilities for capacity addition.

Utility sets commissioned during the year were-

- Kothagudam(Stg VI)U-1(500 MW), Simhadri U-4 (500 MW) in Andhra Pradesh.
- Lakwa WHRP (37 MW) in Assam.
- Pragati STG U-1 (250 MW) in Delhi.
- Hazira CCPP Extn GT &ST (351 MW) in Gujarat.
- Jhajjar U-2 (500 MW) in Haryana.
- Koderma U-1 (500 MW), Maithon RBC U-1,2 (2X525 MW) in Jharkhand.
- Bellary U-2 (500 MW) in Karnataka.
- Bhusawal U-4,5 (2X500 MW), Khaperkheda Expn-1 (500 MW) in Maharashtra.
- Neyveli (Stg II) U-1 (250 MW), Vallur U-1 (500 MW) in Tamilnadu.
- Harduaganj U-8 in Uttar Pradesh.
- Koteswar HEP U-3,4 (2X100 MW) in Utrakhland.
- Durgapur U-1,2 (2X500 MW), Santaldih U-6 (250 MW) in West Bengal.

Overseas sets commissioned by BHEL during the year include Devighat U-4,5 (2X5 MW), Oman U-1,2 (2X126 MW), Taiwan (63 MW).

#### **ERECTION & COMMISSIONING HIGHLIGHTS**

- During the XI Plan period BHEL commissioned 25,385 MW of Utility sets which is nearly double of 13,613 MW achieved in X Plan period.

- Highest ever 8410 MW utility projects commissioned/ synchronized during a year.
- All time high 8138 MW capacity added for utilities during a year: 29 % up from the previous year.

#### **First Time achievements:**

- BHEL commissioned 1xFr-9 FA Gas Turbine-based Combined Cycle Power Plant (CCPP-351 MW) of GSEGL at Hazira, Gujarat followed by 2xFr-9 FA CCPP of PPCL at Pragati-III (750MW-Module I) Delhi.
- BHEL has commissioned its first unit of 525 MW rating with commissioning of 2X525 MW at Maithon. This new Rating set has been introduced to cater to country's specific market requirement.
- BHEL has also achieved capacity addition of its first 250 MW set with CFBC boiler at Neyveli. This is the highest rating unit with CFBC boiler commissioned in the country.
- During the year, 13 sets of 500/525 MW ratings were commissioned, surpassing the previous best of 8 sets.
- BHEL commissioned 3625 MW in a single month.
- Full load operations of NTPC Simhadri Unit 4 achieved within 6 hrs of synchronization indicating BHEL's equipment reliability and commissioning prowess.
- For THDC India Ltd, 100% targeted capacity addition was achieved during the XI plan despite flooding at Koteswar power station of THDC.
- Significantly, thermal and hydro units with a cumulative capacity of 1625 MW were commissioned at various power stations across the country in a span of just 24 hours.



2x100 MW (Units 3&4) Hydro Sets for THDC, Koteswar



1500 MW Pragati Combined Cycle Power Project, Bawana



490 MW (Unit 5) of NCTPP Dadri commissioned by BHEL - winner of GOI's National Award for Early Completion



Vindhyachal STPS equipped with BHEL sets - winner of Gold Meritorious Award 2010-11 for performance

### PERFORMANCE OF BHEL UTILITY SETS

- BHEL Thermal sets (coal based) generated 459706 MUs as against 435216 MUs last year, showing an increase of 5.63 % over previous year and contributing 75 % of the country's generation from thermal utility sets (612880 MUs).
- BHEL coal based sets registered PLF of 75.5 % against National Average of 73.3%.
- During the year, generation from BHEL supplied 195/200/210/250/500/525 MW coal based sets which form the backbone of country's power generation went to 428540 MUs with PLF of 78.9 % and OA of 89%. 70 % of total electric energy generated by Coal sets in the country was contributed by these sets.
- Sixteen stations equipped with BHEL equipments recorded a PLF of above 90% Viz. Dahanu (100.9), Budge Budge (99.9), Sipat (98.5), Raigarh (97.3), Amarkantak Ext -210 (93.5), Ramagundam (93.4), Vijaywada-500 (93.3), Mettur (93.0), Simhadri (92.7), Bhatinda-LM (91.5), Kota (91.4), CESC (90.9), Vijaywada (90.5), Bhilai (90.4), Vindhyachal (90.2), Rihand Stage II (90.2).
- 198 BHEL supplied coal based sets achieved PLF of over 70%. Of these, 61 sets registered PLF of over 90% and 82 sets achieved PLF between 80% - 90%.
- BHEL Coal Sets registered the Operating Availability (O.A.) of 86%
- 149 Thermal Sets of BHEL make achieved O.A. higher than or equal to 90%.
- 189 BHEL supplied coal based sets clocked uninterrupted operation for more than 90 days during the year out of which:

- 106 sets ran once continuously for more than 90 days during the year.
- 56 sets ran twice continuously for more than 90 days.
- 25 sets continuously ran for more than 200 days.
- 2 sets ran thrice continuously for more than 90 days.

### Meritorious Awards

A number of power stations with BHEL supplied sets, received meritorious award this year under "National Meritorious Award Scheme for Power Sector" instituted by Govt. of India for meritorious performance under different categories.

#### ● Performance for 2009-10 :

9 of 12 power stations which have received awards for performance are equipped in part or completely with BHEL make sets. Stations that have received the awards for performance are:

**Gold:** Dadri#5 TPS [BHEL], Dahanu TPS [BHEL], Baspa (hydro) [Non BHEL].

**Silver:** Ramagundam STPS [BHEL / Non BHEL], Vindhyachal STPS [BHEL / Non BHEL], Budge Budge TPS [Non BHEL], Gerusoppa (hydro) [BHEL].

**Bronze:** Korba STPS [BHEL], Torangallu TPS [BHEL / Non BHEL], Rihand STPS [BHEL / Non BHEL], Bhira (hydro) [Non BHEL].

**Consolation:** Kothagudam STPS [BHEL].

#### ● Performance for 2010-11 :

11 of 15 power stations which have received awards

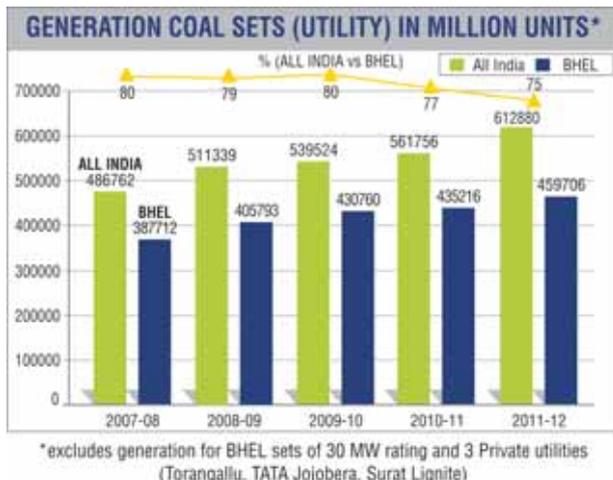


1x600 MW Avantha TPP set up by BHEL, appreciated by KWPC for maintaining high quality standards during construction

for performance are equipped in part or completely with BHEL make sets. Stations that have received the awards for performance are:

**Gold:** Vindhyachal STPS [BHEL / Non BHEL], Udupi TPS#1 [Non BHEL], RAPS (nuclear) [BHEL / Non BHEL], Nathpa Jhakri (hydro) [BHEL / Non BHEL].

**Silver:** Ramagundam STPS [BHEL / Non BHEL], Torangallu TPS [BHEL / Non BHEL], Mundra#5 [Non BHEL], Neyveli TPS(Ext-I) [Non BHEL], Baspa(hydro) [Non BHEL].



**Bronze:** Dahanu TPS [BHEL], Rihand STPS [BHEL / Non BHEL], Trombay CCPP [BHEL / Non BHEL], Pong Power House (hydro) [BHEL].

**Consolation:** Korba (East) [BHEL], Tarapur APS (nuclear) [BHEL / Non BHEL].

### SERVICES

BHEL continued its endeavor to render efficient customer service aimed at facilitating uninterrupted power supply and keeping power plants in good running condition. During the year, Power Sector overhauled 150 utility/captive sets (including Non BHEL sets).

### Major services orders executed are-

- First ever capital overhauling of biggest BHEL make Nuclear TG in operation at Tarapur Atomic Power Station (TAPS) unit-4 (540 MW) was completed in time with all the precautions, safety measures & procedures at TAPS.
- Rehabilitation of Devighat HEP, Nepal (3X5 MW) completed successfully within 247 Days against the planned schedule of 9 months (around 270 days).
- Overhauling of JPL RAIGARH Unit-3/250 MW (LP Turbine, Generator, Bearing Inspection & valves etc) completed in 8 days from barring gear to barring gear against 15 days.
- UPRVUNL Rihand HEP Unit-5 (50 MW) synchronized successfully on 02.05.2011 and touched 55 MW output mark (10% over its original rating).

### CUSTOMER APPRECIATION

Appreciations received from many reputed customers (like Maithon power Limited, Andhra Pradesh Power generation corporation Limited (APGENCO), Korba West Power Company Ltd., Bokaro Power supply company Pvt limited, Kerala State Electricity Board, MSPGCL, Abhijeet Projects Ltd, UJVN Ltd. etc.) for excellent support given by BHEL.

## Industry Sector



*153 MW Captive Power Plant commissioned by BHEL at GGS Refinery, Bhatinda*

## INDUSTRY SECTOR

In Industry Sector, BHEL secured orders worth ₹ 8782 Crore in Captive Power, Rail Transportation, Power Transmission, Oil & Gas, Renewable Energies and other Industrial Segments.

Major orders received during the year / other business highlights – Industry segment-wise include:

### Captive Power Plants

- Secured first ever order for GTG with Chiller from M/s Kribhco Ltd. for their Hazira complex. Use of Chiller has resulted in enhanced power output. Order won against stiff competition.
- First ever order for CPP Group for CFBC Boiler designed to operate on 100% coal middlings. The order for 67.5MW BTG with 280TPH CFBC Boiler was secured from M/s Tecpro Systems Ltd for Power Plant being set up by M/s Kohinoor Power, Kolkata.
- Grasim Cellulosic Division reposed their confidence in BHEL by placing order for 3x32MW and 1x20MW STGs for their Export Oriented Unit at Vilayat and Grasilene Division at Harihar, respectively.
- Reliance Industries also reposed their confidence in BHEL by placing order for 2 nos. Fr6B GTGs for Dahej Plant against stiff competition.

### Renewables

- Orders for two Grid Interactive Solar PV Power plants of 5 MW each from Karnataka Power Corporation and Indian Oil Corporation for their projects at Mandya and Phalodi respectively.

### Other business highlights in this segment include:

- BHEL has been contributing to the national effort for developing and promoting renewable energy



Karnataka's Single Largest Grid-Connected Solar Power Plant of 5 MW capacity commissioned by BHEL

based products on a sustained basis. During the year, the company set a new record in its Solar Photovoltaic (PV) business, by commissioning 15 MWp of Solar Power Plants in various parts of the country. This includes 5 MWp IOCL Phalodi, 3 MWp KPCL Raichur, 2 MWp India Bulls Power Ltd Bareilly, 4MWp India Bulls Power Ltd, Katol, and 1.18 MWp in Lakshadweep. These projects are based on Crystalline Silicon Photovoltaic (cSi PV) technology which is well proven and has the longest operational experience across the world.

- An MoU has been signed with IOCL and IIT-Rajasthan for joint development work in the Solar area. Products and systems developed under this joint effort will be tested and demonstrated at the Solar Field being created at IIT-Rajasthan's upcoming campus at Jodhpur.

### Defence Business

- The 1st Aux Control System (ACS) after successful Factory Acceptance Test (FAT) at AVIO Italy has been delivered to MDL for installation at Naval Ship (P15A), thereby successfully launching the product.

### Rail Transportation

- Received single largest order for 85 sets 25kV AC EMU (Conv.) from ICF, Chennai and for 870 sets of Wheel and Axle assembly from Railway Board.

### Other business highlights in this segment include:

- IGBT based Traction Power Converter, Auxiliary Converter and Vehicle Control Unit for use on electric locomotives have been developed by BHEL. A 25kV AC 6000 HP Electric loco fitted with BHEL make IGBT based Traction Converter/Inverter, Auxiliary Converter is in successful commercial



6000 hp Electric Locomotive of CLW equipped with BHEL's IGBT-based traction & auxiliary converters

operation in Secundrabad section of IR and has clocked 60000 km.

- A new Traction Alternator type TA6801AZ developed for IR for use in HHP DEMU. New alternator is 12% smaller and 20% lighter in weight resulting in cost effectiveness, better efficiency of the coach together with ease of maintenance.

#### Industrial Products - Mechanical

- Rate contract for supply of Well Head & X-mas Trees finalized with M/s ONGC. This is the 3rd consecutive placement of rate contract by ONGC on BHEL, indicating the confidence ONGC has reposed in BHEL.
- Order received from ONGC for supply of 6 nos. state-of-the-art AC drilling rigs after a gap of 18 years. Rigs with AC drive are the latest trend worldwide due to more efficient rig operation on account of higher power factor of AC motors.
- Compressor orders received from Refinery sector (IOCL Mathura), Petro-chemical Sector (GAIL, Vijaypur & GAIL Pata) & Fertiliser sector (CO<sub>2</sub> Compressor Revamp from NFL Panipat/Bhatinda).

#### Industrial Products – Electrical

- Record orders for motors from CHP/AHP suppliers for 217 motors and 15 nos. 980 – 6500KW motors from Manikgarh Cement.
- 9 new customers added in the industrial motors business.

#### Transmission System - Substation / Switchyard

- Orders from POWERGRID for 765/400 kV substation at Raichur, 400/220 kV Aurangabad Substation & 400 kV Wardha substation Extn package against stiff competition. 765/400 kV substation order has paved way for BHEL's entry into 765 kV substation segment.

Other business highlights in this segment include:

- As part of its endeavour to offer the most contemporary products & technologies to customers, BHEL has successfully designed, manufactured and commissioned India's highest voltage Power Transformer of 1200 kV 333 MVA rating at the 1200 kV National Experimental Substation of PGCIL. The Single Phase Interconnecting Transformer has been developed and manufactured with in-house engineering and manufacturing technology.



Commercialization of indigenously developed 400 kV, 315 MVA (3 Phase), Phase Shifting Transformer

- Have engineered the underground 400 kV cable network using highest size of EHV cable - 400 kV, 2500 sq mm - ever used in India to replace the 400 kV overhead transmission line for PPCL for Bamnauli Project which is in advanced stage of implementation.
- The first 765 kV 80 MVA single phase Shunt Reactor developed with in-house technology has been tested successfully as per IEC standard.

#### Transmission Products

- Significant order of 14 nos. 285 MVA, 400 kV generator transformers for KAPP and RAPP nuclear power plants of NPCIL.
- Customer reposes faith in BHEL- Secured full order for 28nos. 100 MVA, 220/ 66 kV and 12 nos. 160 MVA, 220/ 66 kV power transformers from PSTCL (Punjab).
- Secured large orders of 19 nos. 160 MVA, 220 / 132 kV auto transformers and 32 nos. 40 MVA, 132 kV transformers from MPPTCL against JICA (Japan) funded tenders.

#### Other business highlights in this segment include:

- BHEL Jhansi develops capability to supply 400 kV power and instrument transformers.
- Successfully tested and supplied highest rating dry type transformer in the country. 15 MVA, 36 kV dry type transformers for Reliance Sasan through Bluestar has been developed for the first time in the country by Jhansi plant.
- BHEL was awarded the 'EXIM Achievement Award' in the Import Category by the Tamil Chamber of Commerce.

## International Business



*2xFrame 9E GTG Units commissioned by BHEL at PDO Amal in Oman*

## INTERNATIONAL BUSINESS

- The year 2011-12 witnessed unforeseen turmoil in various parts of the globe affecting BHEL's international business prospects. The widespread financial instability in Europe and political volatility in Middle East & North Africa (MENA) region has caused delays in financial closure & project financing resulting in postponement of finalization of new projects. These recent political and civil unrest in the Middle East & North Africa (MENA) and increasing security concerns have adversely affected the business prospects in our traditional markets.
- In spite of such difficult and uncertain trends, BHEL has made persistent efforts in maintaining its volume of international business. Though certain large orders expected to be finalized during the year were delayed, concerted efforts have helped us maintain our footprints by securing orders from 21 countries across the world.
- The year marked significant steps towards globalization with successful forays in new markets and new product areas, apart from firmly establishing the company's presence in existing markets.

### MAJOR ACHIEVEMENTS DURING 2011-12:

During the year BHEL secured following prestigious orders:

- Single largest export order for transformers - secured the single largest export order (in terms of financial value) for transformers from Punatsangchhu Hydro Project Authority-I, Bhutan.
- Entry into new country – Ukraine - BHEL successfully made its maiden entry into Ukraine by securing an order for 27 MW Steam Turbine Generator package from Ukraine. BHEL has secured order for steam turbine from a European country after a gap of 15 years.
- Repeat order for motors from Kenya - Reaffirming confidence of existing customers, BHEL secured repeat orders for motors from Mombasa Cement Ltd., Kenya for supply of 2500 KW and 1400 KW Slip Ring Induction motors.
- New product in existing market – Wellheads from Georgia - For the first time, an order for wellheads has been secured from the CIS market by securing maiden export order of wellheads from Georgia.
- Letter of Intents received from for 6x170 MW Punatsangchhu-II & 4x180 MW Mangdechhu Hydroelectric projects from Bhutan.
- Footprints strengthened in 21 countries across the globe securing 68 orders - Orders for other products including revival of 15 MW STG from Indonesia, transformers from Iraq, motors from Bangladesh,



Contract signing between BHEL & PHPA-II for Electro-Mechanical package of 6x170 MW Punatsangchhu-II HEP, Bhutan



Deputy Minister, Ministry of Industry & Trade of The Czech Republic presenting EEPC All India Award for Excellence in Exports to BHEL

Yemen and Nigeria and soot blowers from UAE have also been secured.

- Continued focus on after sales services led to orders for spares and services from different parts of the world including Australia, Bangladesh, Bhutan, Georgia, Indonesia, Iraq, Kazakhstan, Malaysia, Malta, Oman, Saudi Arabia, Sri Lanka, UAE, United States, Vietnam and Yemen.

#### **EXECUTION OF MAJOR OVERSEAS ORDERS:**

In the year 2011-12, BHEL successfully commissioned 325 MW of power plant capacity in overseas markets.

The major projects executed during the year are:

- Oman – 2x126 MW (2xFr-9E) Amal Power Project for Petroleum Development of Oman.
- Nepal – Two units of 3x5 MW Devighat Hydro power plant commissioned and project handed over to Nepal Electricity Authority.
- Taiwan - 63 MW Bihai Hydro Electric Plant commissioned. BHEL proved its technical competence by achieving significantly higher

efficiency compared to guaranteed figures.

- Kabul – 220/110/20KV Chimtala Substation project successfully commissioned.

BHEL is currently executing 24 nos. contracts spread over 19 countries across the world–Afghanistan, Belarus, Bhutan, Ethiopia, Indonesia, New Caledonia, Oman, Rwanda, Sudan Syria and Vietnam to name a few.

#### **CUSTOMER APPRECIATION**

- Afghanistan –220/110kV Kabul Sub Station Project - Appreciation received from customer for successful completion of all works in record time in challenging conditions.
- Nepal – Certificate of appreciation awarded by Nepal Electricity Authority for successful completion of the 3 x 5 MW Devighat Hydroelectric project.
- Bhutan – Appreciation received from Druk Green Power Corporation Limited for restoration of Unit-1 of Chhukha Hydroelectric plant (in just nineteen days) and replacement of critical components of Unit-1 & 2 of Tala Hydroelectric plant.



*4x125 MW Kosti TPS in Sudan under execution by BHEL*



*230 kV Baghabari Substation in Bangladesh, set up by BHEL on turnkey basis*

## Capital Investment



*30,000 psi Hydro Test Bench for Oil Field Equipment  
at BHEL, Tiruchirappalli*



*Plasma Coating System at HPEP, Hyderabad*



*Bogie Machining Centre for AC Locomotives  
at BHEL, Jhansi*



*Special Purpose Fir Tree Groove Milling Machine at  
HEEP, Haridwar*

### C. CAPITAL INVESTMENT

- BHEL made a total capital investment of ₹ 1122 Crore during 2011-12 towards augmentation of manufacturing capacity and modernization of facilities in manufacturing units and at power project sites. This includes capital investment of ₹ 840 Crore towards capacity augmentation in manufacturing units and power sector regions.
- Focused attention was given on rebuilding and retrofitting of existing facilities to enhance their life, accuracy and productivity through an additional investment of ₹ 76 Crore during 2011-12.
- BHEL achieved capability for delivering 20,000MW power plant equipments per annum. This, amongst others, included Augmentation of Control Equipment to 7000 cubicles/year at EDN, Banglore, Boiler Auxiliaries at BAP, Ranipet, Assembly Bays for Gas Turbine at Hyderabad, Boiler Shop at Trichy and New Blade Shop at HEEP, Haridwar.
- “Power Plant Piping Unit (PPPU)” at Thirumayam, Tamilnadu with annual production capacity of 80,000 MT high pressure piping started Commercial Production during the year.
- About 70 major state-of-the-art machining facilities/ process plants were commissioned during the year 2011-12 across BHEL units under various ongoing Capacity Augmentation Schemes which includes 51 nos. state-of-the-art CNC machines. The focus was on capacity expansion with multi tasking facilities to improve productivity and introduction of

automated processes. Some of the unique facilities commissioned during the year included 8000T Press for Boiler Drums, 20 Torch Panel Welding Station, CNC Gantry Drilling & Milling Machine, Bogie Machining Centre, Fan Testing Station for upto 1000MW rating etc.

With above, BHEL has total 557 nos. CNC machines which include large size Lathes, Horizontal Borers, Vertical Borers, Machining Centres, Flame Cutting Machines, 5-axis Machining Centres, Incremental Pipe Bending Machines, Special Purpose Machines etc.

### D. JOINT VENTURES

#### I) BHEL-GE Gas Turbine Services Ltd. (BGGTS):

The Joint Venture Company, BHEL-GE Gas Turbine Services Ltd. (BGGTS), has been promoted by BHEL with GE, USA for repair & servicing of GE designed Gas Turbines has completed fourteen full financial years of operation.

BGGTS achieved a sales turnover of ₹ 513.28 crore during the year 2011-12 with a profit after tax of ₹ 60.76 crore. Orders for ₹ 1047.36 crore approx were booked by BGGTS during the year including an order of ₹ 452 crore approx received from NTPC for renovation of GT package at Kawas. BGGTS successfully completed gas turbine servicing & supply of spares to various customers in both Public and Private sectors. For the year 2011-12, BGGTS has declared a dividend of 680% thereby maintaining its consistent record of improved performance.



8000 T Press at HPBP, Tiruchirappalli



Fan Testing Station at BAP, Ranipet

## **II) Powerplant Performance Improvement Limited (PPIL):**

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

PPIL is in the process of settlement of outstanding issues and collection of withheld payments for pending contracts. 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.

## **III) NTPC BHEL Power Projects Private Limited (NBPPL):**

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 JV Company can also take up manufacture and supply of equipments, for power plants and other infrastructure projects, which are not subject to any limitation or restriction under any ongoing collaboration agreement of promoter companies. BHEL's Board has approved to enhance BHEL's contribution in the equity from the initial ₹ 5 lakhs to ₹ 100 crore which will be done in tranches as per funds requirements of the JVC. The paid up capital of the JVC is presently ₹ 50 crore, with BHEL and NTPC each having subscribed ₹ 25 crore. The JVC has acquired land in Mannavaram, AP and is in the process of implementing Phase-I of the investment already approved. The JVC is also executing orders for Balance of Plant equipment assigned to it. For the financial year 2011-12, the JVC achieved a turnover of ₹ 145.55 crore and PAT of ₹ 13.06 crore approx. NBPPL has entered into a technical collaboration agreement with M/s DMW, USA for manufacture and supply of Coal Handling Plants.

## **IV) Barak Power Private Limited (BPPL):**

BHEL had promoted a joint venture company with PTC India Ltd. for setting up of 2x125MW CFBC based power plant in Silchar, Assam. The JVC was incorporated on 1<sup>st</sup> September, 2008 under the name of Barak Power Private Limited with an authorized and paid up capital

of ₹ 10 lakh subscribed to equally by BHEL and PTC. Due to non availability of local coal, the power plant has not been found to be viable. Promoters enhanced their contribution from ₹ 5 lakhs to ₹ 8.5 lakhs each to settle the outstanding obligation and wind up the JVC. As intimated by Registrar of Companies, the JVC has been wound up on 11.10.2011.

## **V) Udangudi Power Corporation Limited (UPCL):**

BHEL has promoted a joint venture company with Tamilnadu Electricity Board for setting up of a 2x800MW Supercritical Thermal Power Plant at Udangudi, Tuticorin, Tamilnadu on build, own and operate basis. The JVC was incorporated on 26.12.2008 under the name of "Udangudi Power Corporation Ltd". The initial authorized and paid up equity of the JVC was ₹ 10 crore subscribed to equally by TNEB and BHEL. As per the Joint Venture Agreement, the equity structure is to be subsequently diluted to bring in Financial Institution/Banks who would hold 48% of equity and TNEB & BHEL would hold 26% each. The State Govt had allotted land for the JVC project for which the payment has been made to Govt. of Tamilnadu with equal equity contribution by both promoters. At present the paid up equity capital of JVC is ₹ 65 crore, with BHEL and TNEB each having subscribed ₹ 32.5 crore. The JVC has been awaiting grant of coal linkage and MOEF clearance before proceeding with finalizing main plant equipment order on BHEL. In March 2012, Govt. of Tamilnadu has indicated that they would like to pursue this project as a state project rather than as a JV project.

## **VI) Raichur Power Corporation Limited (RPCL):**

BHEL has promoted a joint venture company with Karnataka Power Corporation Limited (KPCL) for setting up of a 2x800MW Supercritical Thermal Power Plant at Yeramarus, Raichur, Karnataka and 1x800MW Supercritical Thermal Power Plant at Edlapur, Raichur, Karnataka on build, own and operate basis. The Joint Venture Agreement with KPCL was signed on 12.01.2009 and the JVC was incorporated on 15.04.2009 under the name of "Raichur Power Corporation Limited". The initial authorized and paid up equity of the JVC was ₹ 10 crore subscribed to equally by KPCL and BHEL. Pursuant to financial closure in November 2011 and induction of IFCI as the

third equity partner, a change in equity structure has been agreed and ultimately KPCL would hold 50%, BHEL 26% and IFCI 24%. The JVC has received MOEF clearance for the 2x800MW Yeramarus power project and the order for supply and E&C of main plant equipment for the 2x800MW Yeramarus project has been placed on BHEL for a value of approx. ₹ 6300 crore. The LOA for 1x800MW Edlapur project valuing ₹ 3100 crore has also been settled and Notice to Proceed would be issued after MOEF clearance. At present the total paid up equity capital of JVC is approx ₹ 728 crore, with BHEL holding ₹ 331.5 crore, KPCL holding ₹ 346.5 crore and IFCI holding ₹ 50 crore.

#### **VII) 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 Joint Venture Agreement with MPPGCL was signed on 28.01.2010 and the JVC was incorporated on 25.02.2010 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. A change in equity structure has been approved with BHEL holding 26%, MPPGCL-10%, PSUs/PSU-FIs/PSU bank-16% and balance 48% by a partner. The process of selection of 48% partner has been initiated. At present the paid up equity capital is ₹ 45 crore, with BHEL and MPPGCL each having subscribed to ₹ 22.5 crore, to enable JVC to meet land acquisition expenses. The JVC has been awaiting grant of coal linkage and MOEF clearance before proceeding with finalizing main plant equipment order on BHEL.

#### **VIII) Latur Power Company Limited (LPCL):**

BHEL has promoted a Joint venture company with Maharashtra State Power Generation Company Ltd (MAHAGENCO) for setting up a 2x660 MW Thermal power plant or 1500 MW gas based Combined Cycle Power Plant (CCPP) in Latur, Maharashtra. The Joint Venture Agreement with MAHAGENCO was signed on 11.11.2010 and the JVC was incorporated on 06.04.2011 under the name of "Latur Power Company

Ltd". The present paid up equity of the JVC is ₹ 5 crore, subscribed to equally by both the partners. The equity structure would be diluted subsequently to bring in Financial Institution/Banks etc, so that MAHAGENCO and BHEL hold 26% equity each. The JVC is reviewing the viability of various options to set up a coal based or gas based project keeping in view the constraints of availability of sufficient water and fuel for the project.

#### **E. R&D AND TECHNOLOGICAL ACHIEVEMENTS**

BHEL places strong emphasis on innovation and creative development. The research and developmental efforts of the company are thus aimed not only at improving the performance and efficiency of the existing products, but also developing new products using state-of-art technologies and processes, relevant to the needs of the country to remain current both in terms of technology & features vis-à-vis global benchmarks.

Accordingly, BHEL pursued two pronged strategy namely; aggressive in-house efforts and encouraging innovation which is in line with the "Decade of Innovations (2010-2020)" declared by Govt. of India. As a result, R&D spend of the company has registered 22% growth over last financial year (from ₹ 982 Crore to ₹ 1198.82 Crore and associated growth of 15% in turnover from In-house developed products and services clocking turnover of ₹ 9832 Crore, which is approx 20% of the total turnover of the company.

BHEL's efforts for encouraging innovation have resulted in raising BHEL's IPR capital tally to 1786 as on date with highest ever IP ₹ (351 nos) filed this year.



*1200 kV, 333 MVA Ultra High Voltage Auto Transformer designed & manufactured by BHEL*

Some significant developments carried out during the year are as follows:

- As part of its endeavour to offer the most contemporary products & technologies to customers, BHEL has successfully designed, manufactured and commissioned India's highest voltage Power Transformer of 1200 kV 333 MVA rating at the 1200 kV National Experimental Substation of PGCIL. The Single Phase Interconnecting Transformer has been developed and manufactured with in-house engineering and manufacturing technology.
- First 400/220/33kV 500 MVA Auto Transformer manufactured by BHEL for POWERGRID has been tested successfully.
- The first 765 kV 80 MVA single phase Shunt Reactor developed with in-house technology has been tested successfully as per IEC standard.
- BHEL has introduced new rating 300 MW thermal sets, with an improvement of 3% in heat rate over the existing 270 MW rating, leading to more efficient and environment-friendly power generation. BHEL has already won its first order for this rating for Visakhapatnam TPP from the Abhijeet Group through competitive bidding.
- BHEL has developed India's largest 15 MVA, 33/6.9 kV, 3 phase, 50 Hz, Natural Air cooled Dry Type Cast Resin Transformer. The new transformer offers advantages over conventional oil filled transformers in respect being free from the risk of fire and being maintenance-free. The transformer will be used for supplying power to huge dredgers employed for open cast coal mining for continuous extraction of coal for Ultra Mega Super Thermal Power Project.
- For the nation's first Prototype Fast Breeder Reactor based power plant, new systems have been engineered for the first time to cater to specific needs of safe and reliable operation of the plant, such as OGDHR [Operation Grade Decay Heat Removal System], SGTSDC [Steam Generator Tube Side Depressurisation Circuit], etc. In-house capabilities have been utilised to complete mechanical, electrical and C&I design for various regimes of operation and to ensure reliable and safe operation of these critical subsystems.
- An indigenous design & manufacturing capability has been established for Main steam stop valve for 660 MW supercritical power plant applications. A cost-effective, new design variant of Swing Check Non return Valve has also been developed to take care of sudden pressure surge during valve opening required for water storage down comer lines of 660 MW Supercritical Boilers and economizer inlet line of 600 MW Projects.
- Continually striving to improve the economies of solar PV systems, BHEL has developed an optimized printing process for solar cells for achieving higher aspect ratio (Grid line height / Grid line width) resulting in an all-time high solar cell conversion efficiency of 18% along with enhanced PV module output from 227 W to 240 W. BHEL has also developed a new LASER based isolation technique adopted for removal of junction at edges of crystalline silicon solar cells leading to enhancement of yield to 99% and gain in efficiency.
- As a reliable partner in ISRO's space program, BHEL achieved a major landmark with the successful deployment of its Space Grade Solar Panels on the GSAT-8 satellite. Launched from French Guyana, the satellite is ISRO's heaviest satellite, weighing in at about 3100 Kg at lift-off. The four Solar Panels supplied by BHEL for GSAT-8, have an area of over 5 sq. mtrs. each, totalling to around 21 sq. mtrs. and comprise multi-junction Solar Cells in series and parallel combinations, with a total power capacity of 4.5 kW. BHEL has supplied 51 Space Grade Solar Panels totalling to 221 sq. mtrs. in area for various satellites of ISRO, which are deployed on INSAT 3A, INSAT 3E, GSAT 2, GSAT 3, GSAT 4, IRSP 5 and EDUSAT satellites, now in orbit.
- In its efforts at automating fabrication processes, BHEL has automated the welding process for 'Manufacture of Bifurcate Components' used in re-

heater coils and low temperature super heater coils (LTSH) of fossil boilers. The automated process has enhanced productivity and lowered defect rate.

- With an endeavour to remain contemporary in technology, BHEL has implemented state-of-the-art IEC61850 protocol on C&I platform to address compatibility at control panel as well as Human Machine Interface sides that allows seamless integration of various third party IED's (Intelligent Electronic Device) in Hydro Power Plants.
- For the benefit of its customers in terms of improved product life, a cost-effective new variety of 'Ceramic Liners for Coal Nozzle Tips' having better thermal shock resistance, has been developed for the first time in India. These liners have enhanced the life of nozzle tips and shall also be deployed in 660/ 800 MW supercritical power plants.
- BHEL established 4 new Centres of Excellence, during the year 2011-12 in the areas of (i) Advance Fabrication Technology, (ii) Coal Research Centre, (iii) Nano Technology application (iv) UHV lab for GIS development.

With this, BHEL has established 13 Centres of Excellence focussing on development of new products, processes, analytical tools for improvements in design, enhancing efficiency and life cycle in existing products, meeting the company's and national requirement of developing new products systems for both industrial and strategic applications.



*Centre for Nano Technology established by BHEL*

## F. QUALITY PERFORMANCE HIGHLIGHTS

1. Continuing its tradition of achieving excellence, three Units of BHEL (Hyderabad, PSER & EDN) have been awarded "Commendation for Significant Achievement" and BHEL-Ranipet received award for "Commendation for Strong Commitment to Excel" in 2011-12 under CII EXIM Bank Award Scheme for Business Excellence as per the globally recognized model of European Foundation for Quality Management (EFQM).
2. Customer Satisfaction Survey conducted in 2011-12 at Haridwar & Trichy units and at Power Sector Eastern region has recorded an improvement in Customer Satisfaction Index by 5.26%, 5.19% & 7.14% respectively over previous survey establishing company's sustained commitment towards quality.
3. As a part of its thrust to ensure cost competitiveness, the company has successfully completed 32 case studies in respect of process improvement & cost reduction.
4. Three Quality circles of BHEL won gold awards for their case studies presentation in International Quality Circle Conference (ICQCC – 2011) held at Yokohama, Japan.

## G. HUMAN RESOURCE MANAGEMENT

### 1) Industrial Relations

1. Thrust on participative culture continued during the year and the Industrial Relations in various Units and Service Divisions of the Company remained harmonious and cordial. Consequentially, mandays lost reported during the year 2011-12 was negligible.
2. Two meetings of the apex level bipartite forum, namely "The Joint Committee for BHEL" were held during the year. Elections for reconstitution of the Joint Committee were conducted in all the units, wherever due, in two phases on 10<sup>th</sup> May, 2011 and 26<sup>th</sup> May, 2011. The Joint Committee was reconstituted with a total strength of 48 members on 31.05.2011. Meetings were also held with the representatives of Executives and Supervisors wherein both Company and employee interest related issues were discussed.

3. A two day Special Session of the Joint Committee was organized at Jaipur on 26<sup>th</sup> and 27<sup>th</sup> August, 2011 wherein the status of implementation of the recommendations emerging out of the earlier workshops was followed up. Presentations were also made by all the units on the progress made in the implementation of three shift operations so as to reduce the overtime expenditure and the impediments in increasing the productivity of the workforce were discussed threadbare.
4. 60 meetings of the Plant Councils and 240 meetings of the Shop councils were held during the year in various units of the Company wherein issues like cost reduction, meeting the production targets and customer commitments, sequential delivery, product quality, etc. were deliberated at length to improve the overall performance.

## 2) Awards won by BHEL, Units & employees

Continuing its tradition of winning prestigious national/international awards, the organisation and its employees won several awards during the year 2011-12. Notable among these included:

- SCOPE Meritorious Award for R&D, Technology Development and Innovation'. The award was presented by the Hon'ble President of India, Smt. Pratibha Devisingh Patil to CMD, BHEL.
- 'MoU Excellence Award 2009-10' as the Top Performing CPSE in 'Industrial Sector'. The award was presented by the Hon'ble Prime Minister of India, Dr. Manmohan Singh to CMD, BHEL.
- BHEL became the only PSU to be unanimously selected for the 'NDTV Profit Business Leadership Award' for the second year in succession. The award for 2011 was conferred to BHEL in the industry vertical of 'Engineering'.
- BHEL was conferred the maximum number of 4 'ICWAI National Awards for Excellence in Cost Management', among public and private sector companies for 2010-11. BHEL was awarded the recognition for the seventh successive year.
- 'Essar Steel Infrastructure Excellence Award 2011' was awarded to BHEL by CNBC TV18.
- 3 'National Safety Award' to BHEL's Hyderabad and Trichy units for outstanding achievements in terms of longest accident free period and lowest accident frequency rate at their works.
- Under the Rolta Corporate Awards 2010 of Dun & Bradstreet, BHEL was selected as the top Indian company under the 'Engineering / Capital Goods' sector.
- The 'Intellectual Property Award 2011' was conferred on BHEL by CII.
- BHEL also won the 'Golden Peacock Award for Occupational Health & Safety 2011' and the 'Golden Peacock Award for Innovation Management 2011' in the Manufacturing Sector category.
- BHEL was awarded the 'EXIM Achievement Award' in the Import Category by the Tamil Chamber of Commerce.
- Other awards include 'Dainik Bhaskar India Pride Gold Award 2011' for excellence in Central and State Public Sector Enterprises in the category of Heavy industries; 'Gentle Giant' award from the Dalal Street Investment Journal and 'Enertia Award 2011' under the category Technology & Innovation for Conventional Energy (Thermal, Nuclear, etc.).
- For its outstanding export performance, BHEL has won the Engineering Export Promotion Council (EEPC)'s Top Export Award for the twenty second year in succession.
- BHEL has been ranked the Ninth Most Innovative Company in the world by the renowned US business magazine Forbes. Significantly, BHEL is the only Indian engineering company on the list, and is ranked much higher than similar multinational companies in the power equipment field.
- BHEL was recognised as the 'Best Engineering Company to Work For' in the Engineering & Automotive category by Business Today magazine.
- Continuing its winning streak in the CII Exim Award Scheme for Business Excellence as per the globally

recognised model of European Foundation for Quality Management, three units of BHEL namely HPEP Hyderabad, EDN Bangalore and Power Sector Eastern Region won the 'Commendation for Significant Achievements in TQM'. In addition, its BAP Ranipet Unit, was awarded 'Commendation for Strong Commitment to Excel'.

- 3 Quality Circles won Gold Medals for their case studies at the International Quality Circle Conference (ICQCC – 2011) held in Yokohama, Japan.
- 8 Prime Minister's 'Shram Awards' including 2 'Shram Bhushan' and 5 'Vishwakarma Rashtriya Puraskars'.
- The following awards in individual category conferred on CMD, BHEL:
  - 'SCOPE Excellence Award 2009-10' in individual leadership category (Maharatna & Navratna PSEs) by the Hon'ble Prime Minister of India, Dr. Manmohan Singh.
  - 'Eminent Engineering Personality of India Award' from the Institution of Engineers (India) at the Indian Engineering Congress.
  - 'Forbes India Leadership Award 2011' in the 'Best CEO Public Sector' category.
  - 'Sivananda Eminent Citizen Award- 2011' of the Sanatana Dharma Charitable Trust by H.E. Sh. E.S.L. Narasimhan, Hon'ble Governor of Andhra Pradesh.

- '9th Wärtsilä Mantosh Sondhi Award' by Mr. Björn Rosengren, President and CEO, Wärtsilä Corporation for outstanding contribution to the energy sector in India.

### 3) Human Resource Development

#### ● NEW INITIATIVES

- HRDI organized the following three training programmes for senior management:
    - 15 GMs of BHEL underwent training (2 weeks at IIM-A followed by 1 week at AIM, Manila) along with 15GMs of NTPC
    - Five GMs attended Global Leadership Programme which had module of one week in India and 2 weeks abroad
    - Four AGMs attended 2 week training programme conducted by IIM-A at Bhutan
  - Survey on Generation Y - HRDI conducted BHEL youth survey to understand what factors enable the Generation Y (those born after 1980) employees of BHEL to contribute optimally to the organization. 1079 responses were received from GEN-Y employees across BHEL and analysed on the following three dimensions:
    - Work
    - Relationship
    - Compensation
- Findings of the survey will pave the way to new



Hon'ble Prime Minister of India with Shram Award winners from BHEL



Hon'ble Prime Minister of India presenting 'SCOPE Excellence Award in Individual Category' to CMD, BHEL

initiatives that will help in assimilating the GEN-Y into BHEL culture.

- Training Plan for Board Members has been approved.
- Five year Strategic Plan Document envisioning HRD activities has been approved by the management.

#### ● TRAINING

- Total number of employees exposed to different types of training during the year 2011 - 12 is 31758, giving 15.10 training man days per employee. In addition to employees, 7941 Act Apprentices were trained in different units giving 1445298 man days
- Customer Training has been a regular activity at BHEL and during the year, 1916 customers were trained viz. IOCL, GAIL, HINCO, CFCL, GNFC, TOYO, GSEG, GPPC, ESSAR, ONGC, KSK, SRIRAM, SAIL, MRPL, BPCL etc. giving 143873 man days
- Rising to the social commitment, 8419 Vocational Trainees from different professional institutions were also trained giving 301296 man days.

#### ● MENTORING

- During the year 2011-12, workshops were conducted at Bhopal, Hyderabad, Trichy, Vindhyachal and Hardwar to train 519 mentors and mentees.

#### 4) Manpower strength

The manpower strength of the Company as on 31.03.2012 was 49,390.

#### 5) Status on Presidential Directives

##### Directives for reservation policy for reserved category persons

Presidential Directives on reservation policy issued by Central Govt. from time to time pertains to provision of 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.

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

The company has been following the Presidential Directives and guidelines issued by the Government of India from time to time regarding reservation for SCs, STs OBCs and PH. During the year 2011-12, various Community Development activities focused on Socio-Economic development of SCs, STs and Backward classes have been carried out in the communities and villages in and around BHEL Units and in locations where company has presence under BHEL Scheme of Corporate Social Responsibility.

#### II. Representation of SC/ST employees:

The overall representation of SC/ST/OBC employees in total manpower was 19.75%, 5.72% and 22.22% for SCs, STs and OBCs respectively as on 01.01.2012.

However, the percentages in direct recruitment during the year are 18.71% for SCs, 6.81% for STs and 35.16% for OBCs. This does not include offers issued, but joined after 01.01.2012, which takes care of the required percentage of reservation.

The Annual Statement in the prescribed format showing the representation of SCs, STs and OBCs as on 01.01.2012 and number of appointments made during the preceding calendar year, as furnished to the Government, is given at Annexure -A.

### III. Manpower strength of Physically Challenged employees as on 01.01.2012

As on 01.01.2012, we have a total of 823 Physically Challenged employees in BHEL. The group wise manpower strength of Physically Challenged employees in the Company as on 01.01.2012 is given at Annexure - B.

## H. CORPORATE SOCIAL RESPONSIBILITY & SUSTAINABILITY DEVELOPMENT

### (a) Health, Safety & Environment Highlights

BHEL continued with its commitment towards conservation of the environment. The Company successfully completed various Environment Improvement Projects (EIPs) during the year 2011-12. These projects helped in enriching the environment, conservation of precious natural resources like energy, water, fuel oil, coolant and mitigating the environmental pollution. Major EIPs cumulatively completed in and around units/ regions and sites, include: (i) Rain Water Harvesting Plants; (ii) Tree Plantations; and (iii) development of Green Coverage.

Other key EIP initiatives undertaken were in the areas of Water Conservation Projects, Energy Saving Systems utilizing efficient technologies, Installation/ Improvement in fumes extraction system, Installation of Paint Booth, Noise Level Reduction System, Chemical Storage & Handling System, Resource Conservation (Lubricant/ metal/Coolant), and Utilization of Non-Conventional Energy Sources.

Besides the above activities, BHEL conducted Training and awareness Programmes on Environment, Health & Safety and Skill Development programmes for employees including contractors' workers etc.

Sustainable Environment Management / Development Policy:

BHEL has formulated its Sustainable Development Policy as an integral part of the Company's strategy. A Budget of ₹ 50 Lakhs plus

0.1% of Profit After Tax (PAT) for the previous year exceeding ₹ 100 Crore is earmarked for Sustainable Development projects and activities. For the year 2011-12, an amount of ₹ 6.41 crore is provided towards sustainability development expenditure.

All manufacturing units/regions of the company are accredited to international standards of environment management systems, viz. ISO-14001 certification for environmental management and OHSAS-18001 certification for occupational health and safety management.

BHEL is an environment friendly company in all its activities, products & services, besides providing safe and healthy working environment to all its stakeholders and has made UNGC programme as part of the Company's strategy, culture and day-to-day operations.

BHEL reiterates its commitment to United Nations Global Compact (UNGC) Programme and set core values enshrined in its principles on human rights, labour standards, and environment and anti-corruption.

Company intends to advance GLOBAL COMPACT (GC) principles, as a responsible corporate citizen. BHEL has taken a lead role in promoting GC principles in other Indian organization through Global Compact Network (GCN) – an apex level nodal agency, formed by the leading Indian organizations. BHEL continued to remain in the forefront in all activities of the network as Secretary/GCN being BHEL nominee. Noteworthy activities of the year were participating in the national Convention and holding of monthly meetings of the Network through case studies/ organizational experience sharing, addressing the Global Compact principles in Indian context.

In recognition of BHEL's contribution in support of Global Compact programme and its outstanding Communication on Progress (COP), UNGC continued to place BHEL under 'Notable COP' category.

## (b) Corporate Social Responsibility Highlights

BHEL scheme on Corporate Social Responsibility (CSR) has evolved over the years and has been endorsed by the top management as a policy statement on the underlying principle that the Company is a committed Corporate Citizen fully alive to the need of building synergy between business and CSR as an integral part of its business strategy.

As an integral part of the society, BHEL is moving forward by achieving the objectives of its social responsibility. In the year gone by, the Company supported innumerable social initiatives across the country by undertaking projects in diversified areas like Health, Environment Enrichment, Hygiene, Education, Community Development, Self-Empowerment etc., supporting projects of Afforestation, Water Conservation, providing Potable Water accessories, besides conducting Health Camps around the Units/Project sites for Diagnostic and Medicine distribution for common ailments. For the year 2011-12, an amount of ₹ 30.05 crore (0.5% of PAT of 2010-11) is earmarked for CSR projects.

### Community Development:

- (i) The Company successfully improved the sewage system at Haridwar, to supplement the requirement of Ganga Pollution Control Unit, Uttarakhand Peyjal Nigam, Haridwar.
- (ii) Six Reverse Osmosis plant units are installed at Bellary, Hubli, Puri, Varanasi, Gandhinagar and Vadodra to provide safe and pure water in the base kitchens for mid-day meal kitchens managed by Akshaya Patra.

### Self-empowerment:

Taking the focus on Community development beyond the basic needs of health and education, BHEL organizes various programmes for talent upgradation of social and economically backward students for their empowerment in order to make them self-reliant. It supported one such programme for Apparel training of students belonging to below-

poverty-line families in Chhindwara district, Maharashtra. Organized a Cutting and tailoring training programme through NGOs for ladies in Jhansi to provide livelihood opportunities and empowerment of women.

### Health & Hygiene:

Adopting a multi-disciplinary approach towards CSR in which health and medical care, hygiene, sanitation, provision of pure drinking water and education take the top most priority, BHEL initiated projects titled 'Vision to all' in (i) Guntur district of Andhra Pradesh to carry out cataract operations for five hundred patients; and (ii) another unique project, for carrying out 300 orbit surgeries for eye-patients from Andhra Pradesh, Orissa and Chattisgarh commenced at Sankar foundation Eye Hospital in Vishakhapatnam (AP).

BHEL has been organizing free health check-up camps for workers at its different sites/ regions as preventive measures for various ailments.

BHEL provided five food delivery vans in the Guwahati Region in Assam to supplement the mid-day meal programme under the "Sarva Shiksha Abhiyaan" by the Government of India. This is in order to provide hygienic and hot food to school children.

### Education:

The Company is promoting various Scholarship Programmes for students to enable them pursue higher education. Under these programmes, financial assistance is provided to wards of widows in adopted schools and villages by units. Supporting need based Construction of hostels, classrooms, toilets etc. in educational institutes.

### Disaster Management:

BHEL has compassionately responded to the beck and call of the victims devastated by the earthquake in Sikkim by initiating efforts for the refurbishment of four government schools which were damaged by the earthquake.

### Talent upgradation/Skill development:

To meet nation's requirement of skilled manpower,

BHEL has adopted various ITIs under the Government of India PPP scheme (Government ITI, Latur by Hyderabad Unit, Government ITI Bajpur by Rudrapur Unit, Government Women ITI, Khandwa & ITI, Khaknar by Bhopal Unit, Government ITI, Peramvalur by Tiruchy Unit - Under approval by state Technical Board), Government ITI, SIDCUL, Haridwar by Haridwar Unit - Under approval by state Technical Board).

As part of its CSR initiative regarding talent upgradation/skill development, BHEL, in association with CIL, DVC & SSSDA has set up Kabiguru Industrial Training Centre (KGITC) at Bolpur, Santiniketan (West Bengal) to provide high quality technical education and to give a filip to the economic development needs of the area.

Phase-I of the Institute is ready. All the four trades, i.e. Fitter, Welder, Plumber and Dress-making have been affiliated under NCVT. The Institute has also acquired Income Tax exemption status under Section 80G. The classes for Fitter trade with 42 students (including 02 girls) are in progress since Aug 2010. For the remaining 03 trades – Welder, Plumber and Dress-making, admissions are in progress for the sessions to commence shortly.

### CSR Training & Development

Believing firmly in the training needs of its employees and staff, the Company trained 12 CSR officials from different units/regions of BHEL for a better understanding and implementation of the CSR guidelines issued by the Department of Public Enterprises (DPE). BHEL also organized the 2<sup>nd</sup> CSR Conclave for Central Region CPSEs in Bhopal in association with the National CSR Hub, TISS, Mumbai.

As far as promoting CSR activities in BHEL are concerned, the Company has notified Expression of Interest (EOI) on its web page www.bhel.com as “Expression of Interest (EOI) for Corporate Social Responsibility (CSR) Projects.” As a precedent of the previous year, a non-lapsable CSR fund equal to half percent of PAT of previous year is earmarked towards CSR Activities.

(c) As an organisation committed to people development through motivational measures, BHEL is introducing Child Care Leave for female employees, in addition to the existing Maternity Leave and Creche facilities at factories.

### I. RIGHT TO INFORMATION ACT, 2005

- BHEL is a front-runner in implementing the Right to Information (RTI) Act, 2005 in letter and in spirit. A Central Public Information Officer (CPIO) and a Central Assistant Public Officer (CAPIO) at the company level and 15 CPIOs for each of the major administrative units are functioning as part of Right to Information Group.
- Proactive disclosures were made in line with Section 4 (1) (b) of the Act through BHEL website. Suitable guidelines have been placed on RTI web page on BHEL web site for convenience of the applicants, seeking information. Guidelines have been issued to administrative units to ensure compliance to the mandatory requirements of the Act.
- BHEL received 1297 RTI applications during the year 2011-2012, while 159 appeals were filed before the First Appellate Authority. All these applications and appeals were disposed off as per the provisions of the Act.
- BHEL as an active member of Steering Committee on RTI constituted by Standing Conference of Public Enterprise (SCOPE) participated in Symposium on “Right to Information Act, 2005 for Central Public Sector Enterprises” held on 29<sup>th</sup> & 30<sup>th</sup> of July 2011 at Bengaluru.
- An interactive programme for updating the recent developments in the field of Right to Information was organized for the existing CPIOs and the CPIOs who had taken the charge recently wherein alongwith other speakers, Ms. Sushma Singh, Hon'ble Information Commissioner from Central Information Commission addressed the participants.

## J. INTERNAL CONTROL SYSTEM

- The company has Internal Audit Cells located at major manufacturing units and regional offices of the company which carry out audit as per annual audit programme approved by Director (Finance)/ Board Level Audit Committee. The Internal Audit department checks the adequacy and effectiveness of internal control system through regular audits, system reviews and monitors compliance of various policies and procedures. The Company has in-house Internal Audit Department commensurate with its size of operations. Functioning of Internal Audit and adequacy of internal control system is reviewed by Board Level Audit Committees which is supported by Unit Level Audit Committees.
- The company has well placed proper and adequate systems of internal control and documented procedures covering all financial and operating functions. Adequate internal control measures are in the form of various codes, manuals and procedures issued by the management covering all critical and important activities viz. Purchase, Material, Stores, Works, Finance, and Personnel etc. These codes, manuals and procedures are updated from time to time and are subject to strict compliance which is monitored by Internal Audit. The Company continues its efforts to align all its processes and controls with global best practices.

## K. MERGERS & ACQUISITIONS

BHEL is actively pursuing acquisition opportunities in Europe & USA in the areas of core technologies in energy sector including renewables and other potential areas like transportation & transmission to achieve its objectives like access to technology, access to global markets, securing global supply sources, diversifying into related & new business areas etc. to facilitate in achieving top line and bottom line growth targets as envisaged in Strategic Plan 2017.

In this pursuit, BHEL is consistently evaluating its technology profile, product mix and exploring new

potential markets for suitable target opportunities in close co-ordination with its empanelled International M&A Advisors.

Bharat Heavy Plate & Vessels, Visakhapatnam (BHPV) a wholly owned subsidiary of BHEL has achieved net profit of ₹ 10.44 Crore in FY 2011-12. Modernisation Scheme at an expense of ₹ 231 Crore is being implemented at BHPV to establish it as a hub for Industrial Boilers.

The Board of BHEL has recommended the merger of BHPV with BHEL & a detailed Scheme of Amalgamation has been submitted to the Government of India.

## L. OPPORTUNITIES AND THREATS

### World

The global economy which had gone through crisis during 2008-09, after showing prospects of recovery in 2010, has recently become more uneven with confidence falling sharply, and downside risks are growing following barrage of shocks like devastating tsunami in Japan, unrest in some oil producing countries coupled with turbulence in euro zone. Although some of the advanced economies like US and Germany have shown the prospects of expansion at sluggish pace of 2% growth (as per WEO), the situation in emerging market economies have become more uncertain. Less policy tightening can provide an environment for better growth in emerging economies.

Demographics and economic expansion drive energy demand. Pace of the global economic recovery holds the key to energy prospects for the next several years, but it will be governments' responses to the twin challenges of climate change and energy security that will shape the future of energy in the longer term. A review of World Energy by BP maintains that the energy efficiency will improve globally at a rate of 2.0% per annum vs 1.2% per annum over past 20 years on the back of accelerated growth in low and medium income countries. As per BP energy outlook 2030, energy used to generate electricity remains the fastest growing sector accounting for 57% of projected

growth in primary energy consumption to 2030 against 54% recorded during 1990-2010.

In recent years, world has seen notable steps forward by international political fraternity in policy making, with the negotiation on important international agreements on climate change, reform of inefficient fossil-fuel subsidies and development and deployment of low-carbon technologies which has potential to transform the global energy systems.

As per World Energy Outlook 2011, world primary energy demand is expected to increase by 33% between 2010 and 2035 with global population likely to increase by 1.7 Billion people and the world economy likely to grow at annual average rate of 3.5%. Demand for all forms of energy is projected to rise at an annual average rate of around 1 percent a year during 2011-2035. The fastest growing major source of energy will be natural gas although Coal would remain a dominant fuel till 2025 and then decline with shift to a less carbon intensive energies led by OECD and China. Despite increase in share of natural gas in energy mix, the share of fossil fuels in global primary consumption is expected to fall slightly from 81% in 2010 to 75% in 2035. Global investment in energy supply infrastructure is expected to be around \$38 Trillion over 2011-2035 opening up vista of opportunities from exploration of primary energy to generation of electricity. By 2035, China would account for 22% of world demand, up from 17% today followed by India with 18% share in the rise.

Renewable energy sources will have to play a central role in moving the world onto a more secure, reliable and sustainable energy path. The share of non-hydro renewable in Power Generation is expected to increase from 3% in 2009 to 15% in 2035 with China and EU driving this expansion providing half of the growth. The potential is unquestionably large, but the pace of realization hinges critically on the strength of government support to stimulate technological advances to make renewables cost competitive in comparison to other energy sources.

Arising from the challenges of availability,

accessibility, and accountability, energy sector needs policy innovations and technology innovations for harnessing more electricity from various sources including renewable.

### **India**

GDP growth of 6.5% during 2011-12 against 8.4% recorded a year back due to stubbornly high inflation, high level of deficits, rapidly devaluing rupee bloating imports coupled with uncertainty surrounding reform process and dampened exports has been the cause of concern for the health of the economy and employment.

Sectoral indicators are also disappointing as Agriculture & Manufacturing posted a subdued growth while Mining contracted. The only watershed has been electricity, gas and water supply which increased by 7.9% in Financial Year 2012 compared to a 3% growth a year back. Indian rupee breached all time low of 57-level against dollar due to number of macro-economic factors like flight of foreign investment, large current account deficit, growing import bills and speculative trading based on negative sentiments. Industrial growth, as per IIP data released by CSO, registered contraction of 3.2% during March'2012 due to underperformance in mining, manufacturing and Capital Goods. The Capital Goods sector has registered subdued performance all through the year 2011-12 pummeled by bleak investment climate due to high interest rate and uncertainty in finalization of projects.

### **Power Sector**

Government of India is strongly committed to build an efficient and rapidly growing electricity sector with large-scale private and foreign investment with state-of-the art technology. Various policy and regulatory reforms like Electricity Act. 2003 demonstrate this resolve. As a result, the sector has been growing quite remarkably over the last two plan periods. 12th Plan throws huge opportunities for growth with envisaged investment of around USD 300 billion in heavy electrical industry. During 11<sup>th</sup> Plan, the country witnessed highest ever capacity

addition of 54,964 MW which is virtually double that added during the 10th Plan. Still, country's power sector is characterized, with some pockets as notable exceptions, by a sharp demand-supply imbalance, frequent power cuts, and inadequate coverage. The peak load deficit during 2011-12 was in the range of 10.8%. It is acknowledged that the deficit in power availability is a significant impediment to the sustained development of the economy. In this context, bridging the gap in demand and supply has become critical and consequently, large capacity additions are being undertaken in different segments of the sector-Generation, Transmission and Distribution. During 12<sup>th</sup> and 13<sup>th</sup> Plan periods, Government of India plans to add around 100 GW each to the power generation capacity of the nation with the matching additions in T&D segments. Therefore tremendous opportunities for growth exist for all stakeholders. Taking forward the growth story the Country has been adding manufacturing capacities with huge investments in power equipment sector. New players from India, China and developed nations are constantly striving to exploit these opportunities emanating from Indian markets.

Indian power sector is also responding to the challenges of climate change by introducing energy efficient, climate friendly and less fuel consuming technologies like higher rating thermal sets with Supercritical parameters, UHV Transmission systems etc. Development of IGCC and Advanced Ultra Supercritical technology is also being pursued aggressively.

The performance of the heavy electrical and power equipment industry is closely linked to finalization of power projects. However, 2011-12 witnessed a state of uncertainty in this sector due to postponement of investment decisions, lack of clarity on availability of coal, land issues, non availability of Gas and burgeoning cost of raw materials driven by rupee depreciation. Other challenges like skill deficit, constrained availability of critical raw materials, infrastructure constraints and lack of level playing field in respect of tariff benefits to project

imports are the critical issues calling for urgent attention to give a boost to domestic production of Power & Heavy electrical equipments. Capacity imbalances particularly in Balance of Plant areas have emerged as one of the main impediments for realizing the capacity addition targets of the sector. The woes of land acquisition, delay in regulatory clearances, erratic fuel supplies, lack of adequate infrastructure and deteriorating financial position of state utilities are risks to sustain required growth momentum of the sector.

Implementation of tariff measures to take care of the disadvantages suffered by the domestic industry had been under consideration of the Government for some time. Recently, the Cabinet has approved the imposition of custom duty on power equipment for all power projects and the same is expected to be notified soon. This will partly offset the disadvantage faced by BHEL with respect to foreign competitors.

### **Industry Sector**

With depressing growth of economy and stagnated industrial production, the progress of Industry sector remains a veritable cause of concern.

During 2011-12, the industrial sector exhibited signs of slowdown as the IIP growth remained by and large flat with intermittent spikes mainly on account of sharp deceleration in capital and intermediate goods, mining and manufacturing which could be attributed to the slump in investment, vagaries associated with availability and accessibility of coal, land issues and high inflation throughout the year.

The recent trend of bleak performance of Industry due to unimpressive sentiments is unlikely to continue on the back of strong fundamentals of economy of the country. The demand is expected to revive over mid to longer term on the back of the need for Energy and infrastructure development to sustain the country's economic growth. Robustness in urban and rural consumption supported by appropriate policy measures would be instrumental in economy to bounce back.



SMT Assembly Line at EDN, Bangalore



Evaporator for 500 MWe PFBR Project

### M. POSITIONING FOR THE FUTURE

- Strategic Plan 2012-17, adopted by the company attempts to steer the company with a vision of becoming a global engineering enterprise. It comprises expanding our offerings in the power sector by building EPC capability, focus on industry businesses, expansion of spares & services and adoption of a collaborative approach.
- In spite of the current stagnation in Power Sector, we believe that the power sector will continue to remain a major contributor to our top line with transportation and transmission emerging as the next big business verticals. We will continue to strengthen our presence in the Nuclear, Renewable and Water segments.
- We will continue to sustain our focus on innovation to develop strong capabilities in product development and engineering. To uphold our reputation for excellence in our core capability of 'Engineering & Technology', we will continue to upgrade existing products and systems to contemporary levels and develop new products through continuous in-house efforts as well as through acquisition of new technologies.
- In recent years, BHEL has expanded its manufacturing capacity. We are taking various initiatives to streamline our manufacturing value chain for full exploitation of a strong manufacturing base.
- BHEL has recruited more than 20,000 highly talented and competent people at all levels during

last five years. Human Resource focus would be on developing each person's competencies, their performance and potential in alignment with business plans. Leadership development, competency mapping, performance linked pay, career planning and succession planning initiatives are in various stages of implementation.

- 6-Point Agenda' viz. Capability Enhancement, Accelerated Project Execution, Product Cost Competitiveness & Quality, Diversification, Engineering & Technology and People Development will continue to drive us for reaping an execution premium to put us ahead of our peers.
- Notwithstanding the uncertainties in the business environment and rising intensity of competition, we aspire to reach a turnover level of US\$20 billion dollar by 2017.

### N. RISKS AND CONCERNS

The recovery from global economic recession is still shrouded with uncertainty. The global financial condition continues to remain uneven as there is downside risk due to Euro-zone crisis and Political turmoil in certain parts of the world like MENA region. Most affected is investment, which contracted reflecting dampening business sentiments coupled with slow pace of execution of projects in the country. Uncertainty about demand conditions given sluggish global economic recovery and its likely contagion effect, regulatory issues regarding environmental clearances and land acquisition as well as sector specific issues like

availability of coal besides high cost of capital have stagnated the growth in the economy of our country.

The Indian power sector has over the years caught attention of the world because of high power capacity additions program planned in the country. This has resulted in a number of international players/suppliers of power equipment increasing their focus on the growing Indian market by joining hands with domestic companies, setting up manufacturing facilities or augmenting their existing capabilities. Domestic power developers/utilities are facing shortage of coal due to supply constraint as supply of coal is not matching with demand. The situation is further aggravated by poor logistics affecting delivery.

A combination of global competition and open access in the domestic market is putting pressure on the margins as new players are likely to move towards gaining market share by bidding aggressively. This could escalate the competitive intensity for BHEL in the long-term. The margins could also be impacted by unforeseen rise in raw material prices, especially steel and copper, due to depreciating currency. In international business, Country's exports of capital goods face impediments mainly in terms of non-tariff restrictions leading to competitive disadvantage.

There are mounting worries over energy security and climate change in the global context. Concern is on the rise about environment pollution in the emerging economies. India has an overall strategic imperative

to balance the goals of sustainable energy use, enhanced competitiveness and maintenance of the security of the energy supply. The Indian market is moving steadily towards adaptation of new technologies, like super-critical technology and its assimilation which can lead to initial technical hitches. The domestic power sector has other concerns like limited number and capacity/capability of balance of plant vendors in the country as well as competent/qualified construction contractors for taking up large size power projects and handling of increased construction load, shortage of skilled manpower with sub-contractors, contractual issues between project authorities/ developers, contractors and their sub-contractors etc.

In most of the business areas in which BHEL operates, the growth prospects are dependent on policy decisions at the national and international levels as also on the prevailing business trends.

For and on behalf of the Board of Directors of

**BHARAT HEAVY ELECTRICALS LTD.**

A handwritten signature in black ink, appearing to read 'RaoBP', is written over a horizontal line.

**B.Prasada Rao**

Chairman & Managing Director

Place : New Delhi

Dated : July 26, 2012

## ANNEXURE – A

### Annual Statement Showing the Representation of SCs, STs and OBCs as on 31.12.2011 and No. of appointments made during the preceding calendar year

Groups	Representation of SCs/STs/OBCs (As on 01.01.2012)				No. of appointments made during the calendar year									
					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
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Group A	14370	2264	890	2369	1311	201	96	363						
Group B	10313	1736	258	811	0	0	0	0						
Group C	21644	5001	1542	6996	3233	646	214	1238						
Group D(Exc. SW)	1082	261	31	384	9	5	0	0						
Group D (SW)	137	130	1	3	0	0	0	0						
<b>Total</b>	<b>47546</b>	<b>9392</b>	<b>2722</b>	<b>10563</b>	<b>4553</b>	<b>852</b>	<b>310</b>	<b>1601</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

\*\* In BHEL there is no appointment at induction level by promotion

## ANNEXURE – B

### REPRESENTATION OF THE PERSONS WITH DISABILITIES

Groups	Number of Employees (representation ) (As on 01.01.2012)				DIRECT RECRUITMENT (During the calendar year 2011)								PROMOTION*							
					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	14370	2	9	148	0	0	1	1311	1	0	24									
Group B	10313	7	7	108	0	0	0	0	0	0	0									
Group C	21644	33	35	459	35	39	22	3233	2	5	93									
Group D	1219	1	4	10	0	0	0	9	0	0	0									
<b>Total</b>	<b>47546</b>	<b>43</b>	<b>55</b>	<b>725</b>	<b>35</b>	<b>39</b>	<b>23</b>	<b>4553</b>	<b>3</b>	<b>5</b>	<b>117</b>									

**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, career based 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.

## Brief Resume of Directors Proposed for Appointment and Re-appointment as per Listing Agreement [Clause 49 IV (G) (I)]

### PART-TIME OFFICIAL DIRECTOR

#### SHRI VIJAY S. MADAN

**Shri Vijay S. Madan**, aged 55 years was inducted as Part-time Official Director on the Board of BHEL w.e.f. 19<sup>th</sup> July, 2012. Shri Madan belongs to the Indian Administrative Service and is presently posted as the Additional Secretary and Financial Advisor in the Department of Industrial Policy and Promotion, Ministry of Commerce and Industry. He holds additional charge of the posts of AS & FA to the Ministries of Heavy Industries, MSME and Department of Public Enterprises.

After completing his education (MBBS) from the University of Delhi, Shri Madan joined the IAS in 1981 and worked in positions of increasing responsibility in the Government, both at Central and State levels. He was involved in the establishment of India's first Joint Venture Hospital project (Indraprastha Apollo Hospitals) in 1989, during the pre-liberalization era, when the concept of corporate hospitals was still in its nascent stage. As the founder Project Administrator of an ambulance service (CATS), he was responsible for establishment of the Institution as well as commissioning of its pilot project with 25 ambulances manned by multi-skilled personnel.

Shri Madan possesses experience of International Civil Service, having worked as Chief of Economic Policy (2001-02) in the Air Transport Bureau of the International Civil Aviation Organization (ICAO), a specialized agency of the United Nations. He earlier served as the Representative of India to the Council of ICAO (1996-99).

Interspersed with his two assignments at ICAO, he served twice in the Government of Goa, as Secretary and Commissioner in-charge of Finance, Industries, Power etc., and subsequently as Development Commissioner and Secretary to the Government, responsible for the departments relating to power, higher/ technical education, airports and information

technology. During this period, Shri Madan was responsible for the incorporation of Goa Education Development Corporation (GEDC) as a Statutory Corporation, to establish educational estates in the State of Goa, and served as its first Executive Chairman.

As the Secretary-cum-Commissioner Transport (2005-06) under the Government of NCT of Delhi, Shri Madan was instrumental in establishing a Special Purpose Vehicle under the name of Delhi Integrated Multi-modal Transit Systems (DIMTS) and served as its first Managing Director. He held additional charge of Secretary Tourism and Public Relations during the period.

Prior to his current assignment, Shri Madan worked in the Ministry of Culture where he held the positions of Additional Director General of Archaeological Survey of India (March 2007 to April 2009), Director General, National Museum (additional charge basis), and Joint Secretary (November 2008 to June 2012).

Shri Madan does not hold any share of BHEL.

### PART-TIME NON-OFFICIAL DIRECTORS

#### SHRI V.K. JAIRATH

**Shri V.K. Jairath**, aged 53 years, was inducted as a Part-time Non-official Director on the Board of BHEL w.e.f. 12<sup>th</sup> November 2009. He is a former IAS officer of 1982 Batch and holds a degree of Bachelor of Arts and Bachelors in Law from Punjab University, Chandigarh. He also holds Post Graduate degree in Economics from the University of Manchester, U.K. He was selected by the Rockefeller Foundation (USA) as leader in Environment and Development.

Shri Jairath has over 30 years of experience in public administration, rural development, poverty alleviation, infrastructure, finance, industry, urban development, environmental management and the private sector occupying various important positions in the Government of India and the State Government of Maharashtra. He served as Principal Secretary

(Industries), Government of Maharashtra between February, 2005 and March, 2008 and was instrumental in formulating policies on industrial investment and infrastructure development. He has also been actively associated with Infrastructure initiatives for Power Generation and Distribution, both in public and private sector.

He has worked as ex-officio Director on the Board of Directors of State Industrial and Investment Corporation of Maharashtra (SICOM), Mahanagar Gas Ltd., Manganese Ore India Ltd., United Western Bank, Sangli Bank Ltd., Maharashtra Industrial Development Corporation (MIDC), Maharashtra Airport Development Company and Maharashtra Maritime Board. During his tenure as Managing Director of SICOM, he headed a team of 150 professionals and initiated a major restructuring exercise leading to a turnaround in the performance of the Company.

Presently, Shri Jairath is an Independent Director on the Board of Tata Motors Ltd. and a Part-time Member of Securities & Exchange Board of India. He is also the member of the Investors' Grievance & Ethics and Compliance and Audit Committee in Tata Motors Ltd.

Shri Jairath does not hold any share in BHEL.

### SHRI S. RAVI

**Shri S. Ravi**, aged 53 years was inducted as Part-time Non-official Director on the Board of BHEL w.e.f. 10<sup>th</sup> March, 2011. He is a Fellow Member of the Institute of Chartered Accountants of India and holds a Masters Degree in Commerce.

His experience includes holding a number of positions on the Board of Banks, Financial Institutions and Asset Management Companies in the financial sector. As the Promoting and Managing Partner of Ravi Rajan & Co., Chartered Accountants, he supervises the entire gamut of audit and accounting activities of the firm and offers Financial and Management Consultancy in specialized areas comprising of Business Valuations, Brand Valuation, Mergers and Acquisitions, Rehabilitation, Restructuring and Turnaround Strategies. He is also Managing Partner of RRCA & Associates.

He has a rich experience in Banking Sector which includes tenure as director of UCO Bank (appointed by

Govt. of India). As the Shareholder's Director of Dena Bank during 2000-02, he was member in the Audit Committee, Asset-liability and Risk Management Committee and Board's Committee for monitoring NPAs. He was also Chairman of Board's Financial Review Committee. He also served on the Board of Corporation Bank and Union Bank of India. His experience in the banking and finance sector also includes serving as director on the Boards of IFCI, CANBANK Fund and Principal Trustee Company Private Limited. He was also a member of Technical Expert's Committee of Punjab & Sind Bank and Working Group formed by Reserve Bank of India for preparation of the Draft Government Securities Regulations within the framework of the Government Securities Bill, 2004. Presently, he is an Additional Director on the Board of IDBI Bank Limited and SBI – SG Global Securities Services Pvt. Ltd.

Shri S. Ravi also holds Directorship on the Boards of Mahindra UGINE Steel Co. Ltd., IDBI Capital Markets Services Ltd., UTI Trustee Company Pvt. Ltd., LIC Housing Finance Ltd., Religare Housing Development Finance Corporation Limited, GMR Chennai Outer Ring Road Pvt. Ltd., SME Rating Agency of India Limited, Canbank Venture Capital Fund Ltd. and S. Ravi Financial Management Services Pvt. Ltd. He is also Member of the Board of Governors, Management Development Institute. Besides these, he is also member of the working group, constituted by Ministry of Heavy Industries & Public Enterprises, for suggesting possible modalities for creation of an institutional structure to be located in Department of Public Enterprises (DPE) on Corporate Social Responsibilities matters and member of Professional Development Committee of the Institute of Chartered Accountants of India (ICAI).

He is Chairman of the Audit Committees of IDBI Capital Markets Services Ltd, LIC Housing Finance Ltd. and Religare Housing Development Finance Corporation Ltd. and Member of the Audit Committees of Mahindra UGINE Steel Co. Limited and SME Rating Agency of India Limited. He is also Member of the Investor Grievance Committees of Mahindra UGINE Steel Co. Limited and LIC Housing Finance Ltd.

Shri S. Ravi does not hold any share in BHEL.



## SHRI TRIMBAKDas S. ZANWAR

**Shri Trimbakdas S. Zanwar**, aged 58 years, was inducted as Part-time Non-official Director on the Board of BHEL on 11<sup>th</sup> October, 2011. Shri Zanwar holds a degree in Law. He has diverse experience in various fields including social, political and education. He has been a member of various committees appointed by the State Government from time to time. At present he is the President of the Rajya Saksharata Parishad (State Literacy Council - State Minister Status) and Member of the Marathwada State Council of Education and Agricultural Research, Executive Council of the Marathwada Agricultural University, Parbhani and the Latur District Planning and Development Committee. Shri Zanwar is currently a Director on the Board of Shree Saibaba Sugars Limited.

Shri Trimbakdas S. Zanwar does not hold any share in BHEL.

## FUNCTIONAL DIRECTORS

### SHRI O.P. BHUTANI

**Shri O.P. Bhutani**, aged 59 years, was inducted as Director (Engineering, Research & Development) w.e.f. 24<sup>th</sup> December, 2009. He is a Mechanical Engineering Graduate from Delhi College of Engineering and an MBA from Delhi University. He has also undergone management training at Oxford University, UK.

After joining BHEL as an Engineer Trainee in 1976, Shri Bhutani has had a distinguished career of over 36 years, spanning a wide range of functions, including Marketing & Business Development; Project Execution; Construction Management; Product Design & Engineering; Operations and Planning & Strategic Management.

At various levels in the International Operations Division, and especially as the Head of the Business Sector since 2007, he has played a key role in placing BHEL on the world map, with overseas references in over seventy countries in all the six continents and a nearly twenty-fold increase in overseas business during the last decade. During this period, there was a major impetus towards execution of large projects with delivery orientation and focused approach, supported by strategic tie-ups, which has been instrumental in establishing BHEL's presence in several new markets.

He also spearheaded BHEL's global 'Strategic Plan 2012', to transform BHEL into a global player. Earlier, he served as the Head of Oman Operations of BHEL. As Project Manager of prestigious power project at Oman he brought laurels to company from the customer which resulted in repeat orders and established Oman as a key market for the company.

During his tenure as Head of the Transportation and Defence businesses of BHEL's Industry Sector, Shri Bhutani initiated and facilitated strategic steps to fill the technology gaps in three phase electrics for rolling stock and diversification into maintenance vehicles for Indian Railways, as well as new products for the defence sector.

In the Engg. and R&D function, Shri Bhutani has set challenging and time bound medium and long term technological goals for each of BHEL's products to enable them to maintain the leading position in the country and provided the necessary resources to achieve these goals. With his conviction that the energy sector must be sensitive to the environmental concerns of society, he has placed a strong emphasis on the development and deployment of clean technologies such as Ultra Supercritical, Integrated Gasification Combined Cycle and Renewable Energies and improvement of energy efficiency in all products across the board.

To give impetus to the R&D efforts in the company for developing state-of-art products and technologies, Shri O.P. Bhutani has been responsible for formulating a comprehensive R&D Policy for the company, which has also been approved by the Board of Directors for implementation. This R&D Policy lays due emphasis on innovation, creativity and collaborative research with other national and international R&D institutions and academia. Necessary empowerment has been duly envisaged in the policy to be provided to the R&D project team to identify and engage the technically best expert and institution. New incentives and award schemes have also been incorporated to motivate the R&D achievers. A number of new initiatives have been taken by Shri Bhutani which include implementation of "Product Lifecycle Management (PLM)" and "Knowledge Based Engineering (KBE)" to shorten the engineering cycle time across the entire product spectrum of the company, identification and initiation of "Mission Mode Projects"

as part of “Strategic Plan 2012-17” and the “Technology Plans” of the company.

As Director (Engg., R&D), in addition to the Engineering and R&D functions, he also has responsibility for the Corporate Monitoring, Capital Investment Planning and Materials Management functions. Since his taking over as Director, he has been focusing on the capability building of the company both in terms of infrastructure & processes to overcome the competition being faced from the new entrants/established players in the manufacturing of Power equipment.

Shri Bhutani has represented BHEL at several fora, including Energy Security Committee of Govt. of India, Trade Committee of CII, several working groups and Inter-Governmental Joint Commissions, high power Govt. Delegations and trade bodies of India and has acted as a catalyst for a string of national level policy changes for growth of project exports.

Shri Bhutani is Part-time Chairman of Latur Power Company Ltd. and Part-time Director on the Board of Udangudi Power Corporation Ltd. He is also Chairman of the Audit Committee in Udangudi Power Corporation Ltd.

Shri Bhutani does not hold any share in BHEL.

### SHRI R. KRISHNAN

**Shri R. Krishnan**, aged 57 years, assumed charge as Director (Human Resource) of BHEL, the Navratna Public Sector engineering and manufacturing enterprise on 1<sup>st</sup> April 2012.

An Electrical and Electronics Engineer from REC, Trichy (now NIT) and a Post Graduate in Design & Production of Heavy Electrical Equipment from MACT, Bhopal (presently MANIT, Bhopal), Mr. Krishnan joined BHEL as an Engineer Trainee in 1977. He has 35 years of diversified and versatile professional experience through working in major segments of BHEL.

Prior his appointment as Director(HR), Mr. Krishnan was heading the company’s Heavy Power Equipment Plant, Hyderabad as Executive Director. Under his leadership, the company’s Hyderabad plant achieved many milestones including the doubling of Physical Turnover in almost all products in a span of just two years, introduction of AC-AC Technology for E-2000 Oil Rigs,

new technology of Frame 9FA Gas Turbines and Pumps for supercritical applications and the award of ‘Commendation for Significant Achievement’ in the CII-EXIM – Business Model for two years in succession. Mr. Krishnan also established the Multi-Modal Transport System for despatch of Gas Turbines to various sites, including one through Bangladesh; introduced Techno-Commercial MoU concept in the Unit – the first product being Pulverisers and guided the process of Value Stream Mapping (Lean Manufacturing) in Products such as BFP-DT, HP Heaters, Pumps & Pulverisers.

Under his stewardship, Hyderabad Unit won the CMD Trophy for “IMPRESS” (Maximum Suggestions Award). Mr. Krishnan was also heading the HR function of Hyderabad Unit, in addition to Unit Head’s responsibility. Shri Krishnan has a rich and varied experience in Industrial Relations issues and has always maintained cordial & harmonious Industrial Relations scenario in the Unit.

Earlier, he headed the Corporate Research & Development division of BHEL at Hyderabad as General Manager (Incharge) and officiating Executive Director.

As General Manager, BHEL, Bhopal, Mr. Krishnan was responsible for Planning, Development and Quality. He was involved in Long Range Planning, Operation Planning and Strategic Planning, apart from Quality functions of all the products manufactured by BHEL Bhopal. In addition, as General Manager, he was Incharge for Electrical Machines Product, covering Commercial, Material Management, Engineering, Production and Sales-After-Service for manufacturing of Motors upto 25 MW range. He was also responsible for Design and Production of Hydro Generators up to 200 MW and was Incharge of Transportation products like Motors and Alternators for AC / DC, Diesel, AC EMU and DEMU applications of Indian Railways. Mr. Krishnan was also given additional responsibility of BHEL’s Electrical Machines Repair Plant (EMRP), Mumbai.

A Fellow of the Institution of Engineers and a Chartered Engineer, Mr. Krishnan is also Director of Latur Power Company Ltd. (Joint Venture between BHEL & Mahagenco).

Shri Krishnan does not hold any share in BHEL.

## Corporate Governance

### 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.

### 2. Board of Directors

#### i. Composition & Category of Directors

Pursuant to Section 617 of the Companies Act, 1956, BHEL is a 'Government Company' as 67.72% of the total paid-up share capital of the Company is held by the President of India.

The 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 follows:

Particulars	Board Structure	Actual Strength as on 31.03.2012
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	6
<b>TOTAL</b>	<b>16</b>	<b>14</b>

As on 31<sup>st</sup> March, 2012, there exists two vacancies of Independent Directors on the Board of Directors of the company. 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 2011-12 and the last AGM**

Director's Name S/Shri	No. of Board Meetings		Last AGM (held on 20.09.2011)
	Held	Attended	
<b>EXECUTIVE DIRECTORS</b>			
<b>B. Prasada Rao @</b> Chairman & Managing Director	11	11	Yes
<b>Anil Sachdev</b> Director (HR) (superannuated on 31.03.2012)	11	9	Yes
<b>Atul Saraya</b> Director (Power)	11	11	Yes
<b>O.P. Bhutani #</b> Director (E,R&D)	11	10	No
<b>M.K. Dube</b> Director (IS&P) (w.e.f 25.06.2011)	8	8	Yes
<b>P.K. Bajpai</b> Director (Finance) (w.e.f 01.07.2011)	8	8	Yes
<b>PART - TIME OFFICIAL DIRECTORS - GOVT. NOMINEES</b>			
<b>Saurabh Chandra</b> Additional Secretary & Financial Adviser, Ministry of Commerce & Industry	11	8	Yes
<b>Ambuj Sharma</b> Joint Secretary, Department of Heavy Industry	11	11	Yes
<b>PART - TIME NON - OFFICIAL (INDEPENDENT) DIRECTORS</b>			
<b>Ashok Kumar Basu</b>	11	8	No
<b>M.A. Pathan</b>	11	8	Yes
<b>Smt. Reva Nayyar</b>	11	10	Yes
<b>V.K. Jairath</b>	11	6	No
<b>S. Ravi</b>	11	11	Yes
<b>Trimbakdas S. Zanwar*</b> (upto 19.09.2011) (re-appointed w.e.f 11.10.2011)	9	9	---

@ holding additional charge of Director (IS&P) upto 24.06.2011

# holding additional charge of Director (Finance) upto 10.06.2011

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

iii. Number of other Boards or Board Committees\* in which Director of BHEL is a member or Chairman as on 31<sup>st</sup> March, 2012

Director's Name S/Shri	Details of Directorships in other Companies	Details of Committee Memberships and Committee Chairmanship
B. Prasada Rao Chairman & Managing Director	Bharat Heavy Plate & Vessels Ltd.	-NIL-
Anil Sachdev Director(HR) (tenure upto 31.03.2012)	Raichur Power Corporation Ltd.	-NIL-
Atul Saraya Director (Power)	1. NTPC-BHEL Power Projects Pvt. Ltd. 2. Udangudi Power Corporation Ltd. 3. Raichur Power Corporation Ltd. 4. Dada Dhuniwale Khandwa Power Ltd.	-NIL-
O.P. Bhutani Director (E,R&D)	1. Udangudi Power Corporation Ltd. 2. Latur Power Company Ltd.	<b>Audit Committee:</b> Udangudi Power Corporation Ltd. (Chairman)
M.K. Dube Director (IS&P)	-NIL-	-NIL-
P.K. Bajpai Director (Finance)	Latur Power Company Ltd.	<b>Audit Committee:</b> Latur Power Company Ltd. (Chairman)
Saurabh Chandra Part-time Official Director	1. HMT Ltd. 2. Heavy Engineering Corporation Ltd. (HEC)	-NIL-
Ambuj Sharma Part-time Official Director	-NIL-	-NIL-
Ashok Kumar Basu Part-time Non-official Director	1. Tata Metaliks Ltd. 2. The Tinsplate Co. of India Ltd. 3. The Tata Power Co. Ltd. 4. Visa Power Ltd. 5. Visa Resources India Ltd. 6. JSW Bengal Steel Ltd. 7. Carter Engineering Pvt. Ltd.	<b>Audit Committee:</b> 1. Tata Metaliks Ltd. (Member) 2. The Tinsplate Co. of India Ltd. (Member) 3. Visa Power Ltd. (Member) 4. Visa Resources India Ltd. (Member) 5. JSW Bengal Steel Ltd. (Member)

		<b>Shareholders'/Investors' Grievance Committee:</b> 1. Tata Metaliks Ltd. (Member) 2. The Tinsplate Co. of India Ltd. (Chairman)
M. A. Pathan Part-time Non-official Director	1. IOT Engineering & Projects Ltd. 2. Nagarjuna Oil Corporation Ltd. 3. Jabal Elliot Company Ltd.	-NIL-
Smt. Reva Nayyar Part-time Non-official Director	Essel Social Welfare Foundation	-NIL-
V.K. Jairath Part-time Non-official Director	Tata Motors Ltd.	<b>Audit Committee:</b> 1. Tata Motors Ltd. (Member)
		<b>Shareholders'/Investors' Grievance Committee</b> 1. Tata Motors Ltd. (Member)
Trimbakdas S. Zanwar Part-time Non-official Director	Shree Saibaba Sugars Ltd.	-NIL-
S. Ravi Part-time Non-official Director	1. Mahindra UGINE Steel Co. Ltd. 2. IDBI Capital Markets Services Ltd. 3. UTI Trustee Company Pvt. Ltd. 4. LIC Housing Finance Ltd. 5. S Ravi Financial Management Services Pvt. Ltd. 6. Union Bank of India 7. Religare Housing Development Finance Corporation Ltd. 8. GMR Chennai Outer Ring Road Pvt. Ltd. 9. Canbank Venture Capital Fund Ltd. 10. SME Rating Agency of India Ltd.	<b>Audit Committee:</b> 1. Mahindra UGINE Steel Co. Ltd. (Member) 2. IDBI Capital Markets Services Ltd. (Chairman) 3. LIC Housing Finance Ltd. (Chairman) 4. Religare Housing Development Finance Corporation Ltd. (Chairman) 5. SME Rating Agency of India Ltd. (Member)
		<b>Shareholders'/Investors' Grievance Committee</b> 1. Mahindra UGINE Steel Co. Ltd. (Member) 2. LIC Housing Finance Ltd. (Member)

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

No Director of the Company holds office at the same time as Director in more than fifteen (15) companies. No Director of the company is a member in more than ten (10) Committees or is a Chairman of more than 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 and 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 eleven times on the following dates:

(i) 04 <sup>th</sup> April, 2011	(ii) 7 <sup>th</sup> & 8 <sup>th</sup> May, 2011
(iii) 23 <sup>th</sup> May, 2011	(iv) 1 <sup>st</sup> July, 2011
(v) 26 <sup>th</sup> July, 2011	(vi) 20 <sup>th</sup> September, 2011
(vii) 28 <sup>th</sup> September, 2011	(viii) 14 <sup>th</sup> & 15 <sup>th</sup> November, 2011
(ix) 7 <sup>th</sup> December, 2011	(x) 27 <sup>th</sup> January, 2012
(xi) 2 <sup>nd</sup> March, 2012	

#### v. Board's Responsibilities

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

#### vi. Role of Independent Directors

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

The Board has established various Committees such as the Audit Committee, Shareholders' / Investors' Grievance Committee, Remuneration Committee, Project Review Committee, Committee on Mergers & Acquisitions, Remuneration Committee on PRP, HR Committee and CSR & SD Committee having adequate representation of Independent Directors.

In terms of Clause 49 of the Listing Agreement, the Audit Committee, Shareholders' / Investors' Grievance Committee and the Remuneration Committee are chaired by an Independent Director and the said Committees' functions are within the defined terms of reference. Further, in line with the requirements of DPE Guidelines on Corporate Governance for CPSEs, the company has constituted a Remuneration Committee on Performance Related Pay headed by an Independent Director. Consequent upon the adoption of the DPE Guidelines on Corporate Social Responsibility for CPSEs as 'CSR Policy', the Board constituted the "Board Level Apex Committee for Corporate Social Responsibility" for proper and periodic monitoring of CSR activities. Further, in terms of DPE Guidelines on Sustainable Development, the Board of Directors mandated that the Committee will also oversee Sustainable Development activities. Accordingly, the said Committee has been re-designated as "Board Level Committee for Corporate Social Responsibility (CSR) & Sustainable Development (SD)". The minutes of Committee meetings are circulated and discussed in the Board meetings.

#### vii. Information placed before the Board of Directors:

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

- Annual operating plans and budgets and any updates.
- Capital budgets and any updates.
- Quarterly results for the company and its operating divisions or business segments.

- Minutes of meetings of Audit Committee and other Committees of the Board.
- Minutes of Board Meetings of unlisted subsidiary companies.
- Statement of all significant transactions and arrangements entered into by unlisted subsidiary companies.
- The information on recruitment and remuneration of senior officers just below the Board level.
- Details of any Joint Venture or R&D project or technical collaboration agreement requiring approval of Board of Directors.
- Significant labour problems and their proposed solutions. Any significant development in Human Resources / Industrial Relations front like signing of wage agreement, implementation of Voluntary Retirement Scheme etc.
- Sale of material, nature of investments, subsidiaries, assets which is not in normal course of business.
- Action Taken Report on matters desired by the Board.
- Disclosure of Interest by Directors about directorships and Committee positions occupied by them in other companies.
- Quarterly report on Compliance of various laws.
- Information relating to major legal disputes.
- Status of Arbitration cases.
- Short term Investment of surplus funds.
- Any contract(s) in which Director(s) are deemed to be interested.
- Status of shareholders' grievances on quarterly basis.
- Information/status in respect of Power & Industry Sectors and International Operations Division on quarterly basis.
- Significant Capital Investment proposals.

- Changes in significant accounting policies and practices and reasons for the same.
- Detailed presentation on performance of various units/functions.
- Any other information required to be presented to the Board either for information or approval.

#### **viii. Selection of New Directors**

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

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

#### **ix. Membership term & Retirement policy**

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

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

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

#### x. Code of Conduct

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

The Code encompasses:

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

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

#### xi. Charter of the Board of Directors

For the purpose of clearly defining the roles and responsibilities of the Board and individual Directors, the Board has laid down a Charter of the Board of Directors. The Charter also articulates our Corporate Governance objectives and approach.

#### xii . CEO/CFO certification

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

### 3. Audit Committee

#### i. Brief description of terms of reference:

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

1. Oversight of the company's financial reporting process and the disclosure of its financial information to ensure that the financial statement is correct, sufficient and credible.

2. Recommending to the Board, the appointment, re-appointment and, if required, the replacement or removal of the Statutory Auditor and the fixation of audit fees.
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 before submission to the Board for approval, with particular reference to:
  - a. Matters required to be included in the Directors' Responsibility Statement to be included in the Board's report in terms of clause (2AA) of section 217 of the Companies Act, 1956.
  - b. Changes, if any, in accounting policies and practices and reasons for the same.
  - c. Major accounting entries involving estimates based on the exercise of judgment by management.
  - d. Significant adjustments made in the financial statements arising out of audit findings.
  - e. Compliance with listing and other legal requirements relating to financial statements.
  - f. Disclosure of any related party transactions.
  - g. Qualifications in the draft audit report.
5. Reviewing, with the management, the quarterly financial statements before submission to the Board for approval.
6. (i) Reviewing, with the management, performance of statutory and internal auditors, adequacy of the internal control systems.
  - (ii) To ensure compliance of internal control systems.

7. Reviewing the adequacy of internal audit function, if any, including the structure of the internal audit department, staffing and seniority of the official heading the department, reporting structure coverage and frequency of internal audit.
8. Discussion with internal auditors any significant findings and follow up there on.
9. 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.
10. (i) Discussion with Statutory Auditors / Internal Auditors periodically about internal control systems.  
(ii) Discussion with Statutory Auditors before the audit commences, about the nature and scope of audit as well as post-audit discussion to ascertain any area of concern including observations of the Auditors.
11. To look into the reasons for substantial defaults in the payment to the depositors, debenture holders, shareholders (in case of non payment of declared dividends) and creditors.
12. To review the functioning of the Whistle Blower Mechanism, in case the same is existing.
13. To review the Audit Paras referred to BLAC by the Internal Audit / Board and / or Govt. of India and to provide its suggestions / guidance / comments on the issues referred to it.
14. Carrying out any other function as is mentioned in the terms of reference of the Audit Committee.

**ii. Composition of Committee, name of members & Chairman and Attendance :**

The Audit Committee comprises of a majority of Independent Directors as mandated by the Listing Agreement. Further, the Committee is chaired by an

Independent Director. The member directors comprise of professionals of repute and standing with background in commerce, finance, administration and governance, both national and international.

The Audit Committee was last reconstituted on 4<sup>th</sup> April, 2011. 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
<b>S. Ravi</b> (Part-time Non-official Director) Chairman (w.e.f 16.05.2011)	Chairman	10	10
	Member	1	1
<b>Ambuj Sharma</b> (Part-time official Director)	Member (w.e.f. 04.04.2011)	10	10
<b>M.A. Pathan</b> (Part-time Non-official Director) (Chairman up to 15.05.2011)	Chairman	1	0
	Member	10	9
<b>Smt. Reva Nayyar</b> (Part-time Non-official Director)	Member	11	11

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

**iii. MEETINGS OF AUDIT COMMITTEE DURING 2011-12**

The Audit Committee met eleven times on 4<sup>th</sup> April, 2011, 16<sup>th</sup> May, 2011, 23<sup>rd</sup> May, 2011, 10<sup>th</sup> June, 2011, 1<sup>st</sup> July, 2011, 26<sup>th</sup> July, 2011, 28<sup>th</sup> September, 2011, 14<sup>th</sup> November, 2011, 5<sup>th</sup> December, 2011, 27<sup>th</sup> January, 2012 and 2<sup>nd</sup> March, 2012 during the year 2011-12.

**4. Remuneration Committee**

**i. Remuneration policy**

BHEL being a Public Sector Undertaking, the appointment and remuneration of CMD / Functional Directors are decided by the Govt. of India. The part-time non-executive directors are not paid any remuneration except sitting fees for attending meetings

of the Board or Committee thereof. Moreover, the terms of appointment of CMD / Directors, as approved by the President of India, provide for fixation of certain perks and benefits like leased accommodation, payment of HRA, furnished accommodation, productivity linked incentive, etc., as per rules of BHEL. As such, the Board had constituted a Remuneration Committee in its meeting held on 7<sup>th</sup> December, 2005 with the following terms of reference in line with Clause 49 of the Listing Agreement.

**ii. Terms of reference**

- a. Oversight of the company's policy on specific remuneration packages, perquisites for Whole-time Directors including pension rights and any compensation payment, which are not fixed by the President of India.
- b. Approve certain perquisites for Whole-time Directors which are within the powers of Board. Review of the elements of remuneration package of individual directors summarized under major groups, such as incentives / benefits, bonus, stock options, pension etc.
- c. 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.
- d. Approval of fixed component and performance linked incentives based on the performance criteria.
- e. Finalization of the criteria of making payments to Non Executive Directors.

- f. Recommendation of fees / compensation / stock options, if any, to be paid / granted, to non-executive directors, including independent directors, to the Board of Directors / Shareholders.
- g. Carrying out any other function related to the terms of reference of the Remuneration Committee.

**iii. Composition, names of members & Chairman**

The Remuneration Committee was last reconstituted on 23<sup>rd</sup> May, 2011. The details of names of members and Chairman of the Remuneration Committee are as under:

<b>Name of the Director S/Shri</b>	<b>Position</b>
<b>Ashok Kumar Basu</b> (Part-time Non-official Director)	Chairman
<b>Smt. Reva Nayyar</b> (Part-time Non-official Director)	Member
<b>S. Ravi</b> (Part-time Non-official Director)	Member
Director (Finance)	Member
Director (HR)	Member

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

**iv. Meetings and Attendance**

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

v. Details of remuneration of Functional Directors during the year 2011-12 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	2157726	966730	1996560	5121016	—
2.	Anil Sachdev	4736411	960657	1532482	7229550*	Relieved pursuant to superannuation on on 31.03.2012
3.	Atul Saraya	1852008	797772	1363500	4013280	Liable to retire by rotation
4.	O.P. Bhutani	2120588	696434	1363500	4180522	Liable to retire by rotation
5.	M.K. Dube (w.e.f 25.06.2011)	1496320	399362	624076	2519758	Liable to retire by rotation
6.	P.K. Bajpai (w.e.f. 01.07.2011)	1599844	268764	621454	2490062	Liable to retire by rotation

\* Includes Leaves Encashment, Payment on Superannuation.

vi. Details of payments made to Independent Directors during the year 2011-12 are given below:-

(in ₹)

Name of the Independent Directors S/Shri	Sitting Fees		Total
	Board Meeting	Committee Meeting	
Ashok Kumar Basu	1,60,000/-	45,000/-	2,05,000/-
M.A. Pathan	1,60,000/-	3,00,000/-	4,60,000/-
Smt. Reva Nayyar	2,00,000/-	3,30,000/-	5,30,000/-
V.K. Jairath	1,20,000/-	1,50,000/-	2,70,000/-
S. Ravi	2,20,000/-	3,30,000/-	5,50,000/-
Trimbakdas S. Zanwar	1,80,000/-	75,000/-	2,55,000/-

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

## vii. Equity Shares held by Directors

Except as stated hereunder, none of the Directors hold any Equity Shares in BHEL (as on 31<sup>st</sup> March, 2012):

Name of the Director	No. of shares held
Shri B. Prasada Rao	2000
Shri Atul Saraya	1000
Shri M.K. Dube	100

The Company has not issued any stock options during the year 2011-12.

## 5. Shareholders' Committees

### 5.1 Share Transfer Committee

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

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

### Meetings during 2011-12

The Share Transfer Committee met 24 times during the year. The minutes of the Share Transfer Committee meetings are periodically placed before the Board of Directors.

### 5.2 Shareholders'/Investors' Grievance Committee (SIGC)

#### i. Terms of Reference

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

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

The Shareholders'/Investors' Grievance Committee was last reconstituted on 22<sup>nd</sup> July, 2009. 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
Smt. Reva Nayyar (Part-time Non-official Director)	Chairperson	4	4
Director (Finance)	Member	4	4
Director (HR)	Member	4	2

Company Secretary shall act as its Secretary. He is the Compliance Officer in terms of Clause 47 of the Listing Agreement with the Stock Exchanges.

### iii. Meetings during 2011-12

The Committee met four times on 23<sup>rd</sup> May, 2011, 9<sup>th</sup> August, 2011, 19<sup>th</sup> October, 2011 and 27<sup>th</sup> January, 2012 during the year under review. The details of the attendance of each member is given in the above table.

#### Detail of shareholders' complaints

As reported by Karvy Computershare Private Limited (RTA) to SEBI, 887 complaints were received from the shareholders during the year under review and all complaints were redressed up to 31<sup>st</sup> March, 2012. No complaint was pending at the end of the period under report.

### 6. HR Committee

The Board constituted 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.

#### Composition, names of members & Chairperson and Attendance

The HR Committee was last reconstituted on 23<sup>rd</sup> May, 2011. 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
<b>Smt. Reva Nayyar</b> (Part-time Non-official Director)	Chairperson	1	1
<b>Ambuj Sharma</b> (Part-time official Director)	Member (w.e.f. 23.05.2011)	1	1
<b>M.A. Pathan</b> (Part-time Non-official Director)	Member	1	1
Director (HR)	Member	1	1
Director (Finance)	Member	1	1

Company Secretary shall act as its Secretary.

#### Meetings during 2011-12

The HR Committee met once on 25<sup>th</sup> May, 2011 during the year 2011-12.

### 7. Committee on Mergers & Acquisitions

#### i. Terms of Reference

The Board constituted Committee on Mergers & Acquisitions on 25<sup>th</sup> January, 2007 specifically to look into the following matters:

- a. To examine the feasibility of the proposals relating to mergers, acquisitions and takeover of entities in terms of powers granted by Government of India to Navratna PSUs and make necessary recommendations to the Board.
- b. To examine the synergy and strategic fit between BHEL and the M&A opportunity and decide on recommendations at various stages of Due Diligence.

- c. To take a view on the valuation of the target, bidding strategies, term sheets, mode of financing and finalise recommendations on crucial issues pertaining to definitive documents like Shareholders' and Share Purchase Agreements etc.
- d. To provide guidance on post M&A issues of management restructuring, relationship with parent company and other related issues.

#### ii. Composition, names of members and Chairman

The M&A Committee was last reconstituted on 26<sup>th</sup> March, 2011. 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
<b>Ambuj Sharma</b> (Part-time official Director)	Chairman	2	2
<b>V.K. Jairath</b> (Part-time Non-official Director)	Member	2	2
<b>S. Ravi</b> (Part-time Non-official Director)	Member	2	2
Director (Power)	Member	2	2
Director (E,R&D)	Member	2	2
Director (IS & P)	Member	2	2
Director (Finance)	Member	2	2

Head of M&A Dept. shall be the permanent invitee and the Company Secretary shall provide secretarial support to the Committee.

#### iii. Meetings and Attendance

The Committee met two times on 27<sup>th</sup> January, 2012 and 1<sup>st</sup> March, 2012 during the year under review. The details of the attendance of each member are given in the above table.

### 8. Project Review Committee

#### i. Terms of Reference

The Board constituted Project Review Committee on 25<sup>th</sup> January, 2007 with the following terms of reference:

- a. The Project Review Committee shall have at least four meetings in a year.
- b. The quorum for the meetings shall be three members.
- c. The Project Review Committee shall review the status of projects costing ₹ 100 Crore and above, orders won/lost and major customer complaints in respect of Power & Industry Sectors and International Operations Division, on quarterly basis.
- d. The Project Review Committee may invite such of the executives, as it considers appropriate to be present at the meetings of the Committee.
- e. The Project Review Committee shall make necessary recommendations, wherever required, to the Board relating to projects in respect of Power Sector, Industry Sector and International Operations and also on related issues.

#### ii. Composition, names of members and Chairman

The Committee was last reconstituted on 23<sup>rd</sup> July, 2010. 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
<b>M.A. Pathan</b> (Part-time Non-official Director)	Chairman	4	4
<b>Ashok Kumar Basu</b> (Part-time Non-official Director)	Member	4	3
<b>V.K. Jairath</b> (Part-time Non-official Director)	Member	4	3
Director (Power)	Member	4	4
Director (IS&P)	Member	4	3

Joint Secretary/ Additional Secretary, Department of Heavy Industry on BHEL Board shall be the permanent invitee and Head of International Operations of BHEL shall be invited as and when required. Company Secretary of the Company shall act as Secretary to the Committee.

### iii. Meetings and Attendance

The Committee met four times on 23<sup>rd</sup> May, 2011, 21<sup>st</sup> September, 2011, 7<sup>th</sup> December, 2011 and 1<sup>st</sup> March, 2012 during the year under review. The detail of the attendance of each member is given in the above table.

## 9. Remuneration Committee on Performance Related Pay

In line with the DPE guidelines issued vide Office Memorandum no. 2 (70)/08-DPE (WC) dated 26.11.2008, Board constituted the Remuneration Committee on Performance Related Pay on 23<sup>rd</sup> April, 2009 to decide the bonus/ variable pay pool and policy for its distribution across the executives and non-unionised supervisors.

### i. Composition, names of members and Chairperson & Attendance

The Committee was last reconstituted on 23<sup>rd</sup> May, 2011. 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
<b>Smt. Reva Nayyar</b> (Part-time Non-official Director)	Chairperson	1	1
<b>S. Ravi</b> (Part-time Non-official Director)	Member (w.e.f. 23.05.2011)	1	1
<b>V.K. Jairath</b> (Part-time Non-official Director)	Member	1	—

Director (HR) will be the permanent invitee.

### ii. Meetings and Attendance

The Committee met once during the year on 19<sup>th</sup> October, 2011. The detail of the attendance of each member is given in the above table.

## 10. Board Level Committee for Corporate Social Responsibility & Sustainable Development

In line with 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. Further, in

terms of DPE Guidelines on Sustainable Development, the Board of Directors mandated that the Committee will also oversee Sustainable development activities. Accordingly, the said Committee be re-designated as “Board Level Committee for Corporate Social Responsibility (CSR) & Sustainable Development (SD)”.

#### Meetings, Attendance, Composition, names of members and Chairperson

The Committee met five times during the year on 23<sup>rd</sup> May, 2011, 18<sup>th</sup> August, 2011, 2<sup>nd</sup> December, 2011, 27<sup>th</sup> January, 2012 and 1<sup>st</sup> March, 2012.

The Committee was last reconstituted on 14<sup>th</sup> November, 2011. The details of the names of members, Chairperson of Board Level Committee for CSR & SD and attendance of each member are as under:

Name of the Director S/Shri	Position	No. of Meetings held during their tenure	No. of Meetings attended
<b>Smt. Reva Nayyar</b> (Part-time Non-official Director)	Chairperson	5	5
<b>V.K. Jairath</b> (Part-time Non-official Director)	Member	5	5
<b>Trimbakdas S. Zanwar</b> ( Part-time Non-official Director)	Member	5	5
Director (HR)	Member	5	5
Director (Finance)	Member	5	5

ED (HR & CC)/GM I/c (HSE & CSR) shall be the permanent invitee. Company Secretary of the Company shall act as Secretary to the Committee.

#### 11. General Meetings

##### i. Location and time of last three AGMs:

Year	Location	Date	Time
<b>FY 2008- 09 (45<sup>th</sup> AGM)</b>	FICCI Auditorium, Barakhamba Road (Tansen Marg) New Delhi-110 001	17 <sup>th</sup> September, 2009	10.00 a.m.
<b>FY 2009- 10(46<sup>th</sup> AGM)</b>	-do-	17 <sup>th</sup> September, 2010	10.00 a.m.
<b>FY 2010-11(47<sup>th</sup> AGM)</b>	Talkatora Indoor Stadium, Talkatora Garden, New Delhi-110001	20 <sup>th</sup> September, 2011	10.00 a.m.

##### ii. Details of Special resolutions passed in previous three AGMs

During the year, a Special Resolution in respect of Amendment in the Articles of Association (for sub-division of equity shares of ₹ 10/- each into 5 equity shares of ₹ 2/- each) was passed in the Annual General Meeting held on 20.09.2011.

##### 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.

## **12. 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. 19 of Note 31 - Other Notes on Financial Statements in the Annual Report.

### **ii. Non-compliances / penalties & strictures imposed on the company with respect to capital markets in 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**

BHEL has not yet established a Whistle Blower Policy for the employees. Nonetheless, no personnel has been denied access to the audit committee.

### **iv. Details of compliance with the requirements of DPE Guidelines on Corporate Governance and compliance with mandatory requirements and adoption of the non-mandatory requirements of Clause 49**

The requirements of the DPE Guidelines on Corporate Governance for CPSEs have been duly complied with by the company. Further, all mandatory requirements as indicated in Clause 49 of the Listing Agreement have also been duly complied with by the company. Details of the same have been given at appropriate places in this report.

In addition to compliance with mandatory requirements, BHEL has also been following some of the non-mandatory requirements as given in Clause 49. The Company has already set up a Remuneration Committee to approve specific aspects of the remuneration of directors. The company is already in the regime of unqualified financial statements. Other non-mandatory requirements would be gradually complied with on need basis by the company.

No expenditure has been debited in books of accounts which is not for the purpose of the 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**

The Company had received a directive pursuant to Article 116 of the Articles of Association of BHEL, from the President of India on 30.04.2009, regarding revision of scales of pay in respect of executives and non-unionized supervisors. The same has been implemented.

### **vi. Risk Management**

In pursuance to comply with Clause 49(IV) (C) of the Listing Agreement and Clause 7.3 of the DPE Guidelines on Corporate Governance for CPSEs, the Risk Management Charter & Policy (RMCP), laying down procedures to inform Board members about the risk assessment and minimization, has been approved by the Board of Directors on 14<sup>th</sup> November, 2011. RMCP provides the overall framework for Risk Management (RM) process of the company. The RM process includes Risk Identification, Risk assessment, Risk evaluation, categorisation, Risks treatment plan for mitigation of risks and escalation/ reporting of risks to Board as per defined process and periodicity and RM governance structure. RMCP also includes mechanism for review of risks and its periodicity.

### **vii. Auditor's certificate on Corporate Governance**

Auditor's certificate on Corporate Governance is enclosed.

## **13. 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 normally published either in the Economic Times or Financial Express (English) and Navbharat Times (Hindi)

within 48 hours of the conclusion of the said meeting and also uploaded on the company's website www.bhel.com. Further, as required by Clause 52 of the Listing Agreement, the aforesaid information up to 31.03.2012 is also posted on CFDS (Corporate Filing and Dissemination System) website "www.corpfiling.co.in" where they are freely accessible by any person.

Official news releases including important events like receipt of major orders as well as presentations made to the investors and financial analysts at periodic investors' meets are also displayed on the Company's website.

In compliance with Clause 54 of the Listing Agreement, the company's website also contains additional updated information like shareholding pattern, compliance with corporate governance, contact information of the designated officials of the company responsible for assisting and handling investor grievances etc.

#### 14. General Shareholder Information

##### i. AGM (Date, Time and Venue)

<u>Date</u>	<u>Time</u>	<u>Venue</u>
19 <sup>th</sup> September, 2012	10.00 AM	FICCI AUDITORIUM, Barakhamba Road, (Tansen Marg), New Delhi-110001
ii. <b>Financial year</b>	—	1 <sup>st</sup> April, 2011 to 31 <sup>st</sup> March, 2012
iii. <b>Dates of Book Closure</b>	—	10 <sup>th</sup> September, 2012 to 19 <sup>th</sup> September, 2012 (Both days inclusive)
iv. <b>Dividend payment date</b>	—	On or before 18 <sup>th</sup> October, 2012

#### v. Dividend History:

BHEL has been following "Stability cum Growth" policy with regard to dividend payment. The details of dividend paid by BHEL during the last ten years and the amount of unclaimed dividend as on 31.03.2012 are summarized as under:

Year	Rate of Dividend	No. of Shares	Total Amount of Dividend Paid (₹)	Date on which Dividend was declared	Unclaimed Dividend as on 31.03.2012 (₹)
2002-2003	40%	244,760,000	979,040,000	30.09.2003	Already transferred to Investor Education & Protection Fund
2003-2004 (Interim)	30%	244,760,000	734,280,000	01.03.2004*	Already transferred to Investor Education & Protection Fund
2003-2004 (Final)	30%	244,760,000	734,280,000	28.09.2004	Already transferred to Investor Education & Protection Fund
2004-2005 (Interim)	35%	244,760,000	856,662,089	10.12.2004*	Already transferred to Investor Education & Protection Fund
2004-2005 (Final)	45%	244,760,000	1,101,423,062	29.09.2005	327338 <sup>#</sup>
2005-2006 (Interim)	40%	244,760,000	979,040,000	07.12.2005*	261352 <sup>\$</sup>
2005-2006 (Spl. Interim)	85%	244,760,000	2,080,460,000	07.03.2006*	508215 <sup>\$\$</sup>
2005-2006 (Final)	20%	244,760,000	489,520,000	15.09.2006	157958
2006-2007 (Interim)	125%	244,760,000	3,059,513,890	25.01.2007*	839765
2006-2007 (Final)	60%	489,520,000	2,937,120,000	17.09.2007	981510
2007-2008 (Interim)	90%	489,520,000	4,405,680,000	25.01.2008*	1623753
2007-2008 (Final)	62.50%	489,520,000	3,059,541,073	17.09.2008	1710633
2008-2009 (Interim)	90%	489,520,000	4,405,680,000	29.01.2009*	2430765
2008-2009 (Final)	80%	489,520,000	3,916,160,000	17.09.2009	1562928
2009-2010 (Interim)	110%	489,520,000	5,384,720,000	21.01.2010*	2703833
2009-2010 (Final)	123%	489,520,000	6,021,119,004	17.09.2010	2762485
2010-2011 (Interim)	132.50%	489,520,000	6,486,174,770	15.03.2011*	2411519
2010-2011 (Final)	179%	489,520,000	8,762,445,814	20.09.2011	3490147
2011-2012 (Interim)	136%	2,447,600,000 <sup>@</sup>	6,657,472,357	02.03.2012*	9217967

\* Date of meeting of Board of Directors in which interim dividend was declared

<sup>#</sup> proposed to be transferred to Investor Education and Protection Fund (IEPF) on 28.10.2012

<sup>\$</sup> proposed to be transferred to Investor Education and Protection Fund (IEPF) on 05.01.2013

<sup>\$\$</sup> proposed to be transferred to Investor Education and Protection Fund (IEPF) on 05.04.2013

<sup>@</sup> Post-split number of shares of face value of ₹ 2/-

#### vi. Listing on Stock Exchanges and Stock Code

BHEL's shares are listed on the following Stock Exchanges for which listing fees for 2011-12 has been paid

Name of the Stock Exchange	Stock Code
1. Bombay Stock Exchange Limited Phiroze Jeejeebhoy, 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

### vii. Delisting of Equity Shares

BHEL filed necessary application with Calcutta Stock Exchange Association Limited (CSE) for delisting. Final approval from CSE is still awaited, however, "BHEL" Scrip has not been appearing in the list of securities listed on the CSE.

### viii. Market Price Data & performance in comparison to broad-based indices such as BSE Sensex, BSE PSU Index and S&P CNX Nifty Index are as under:-

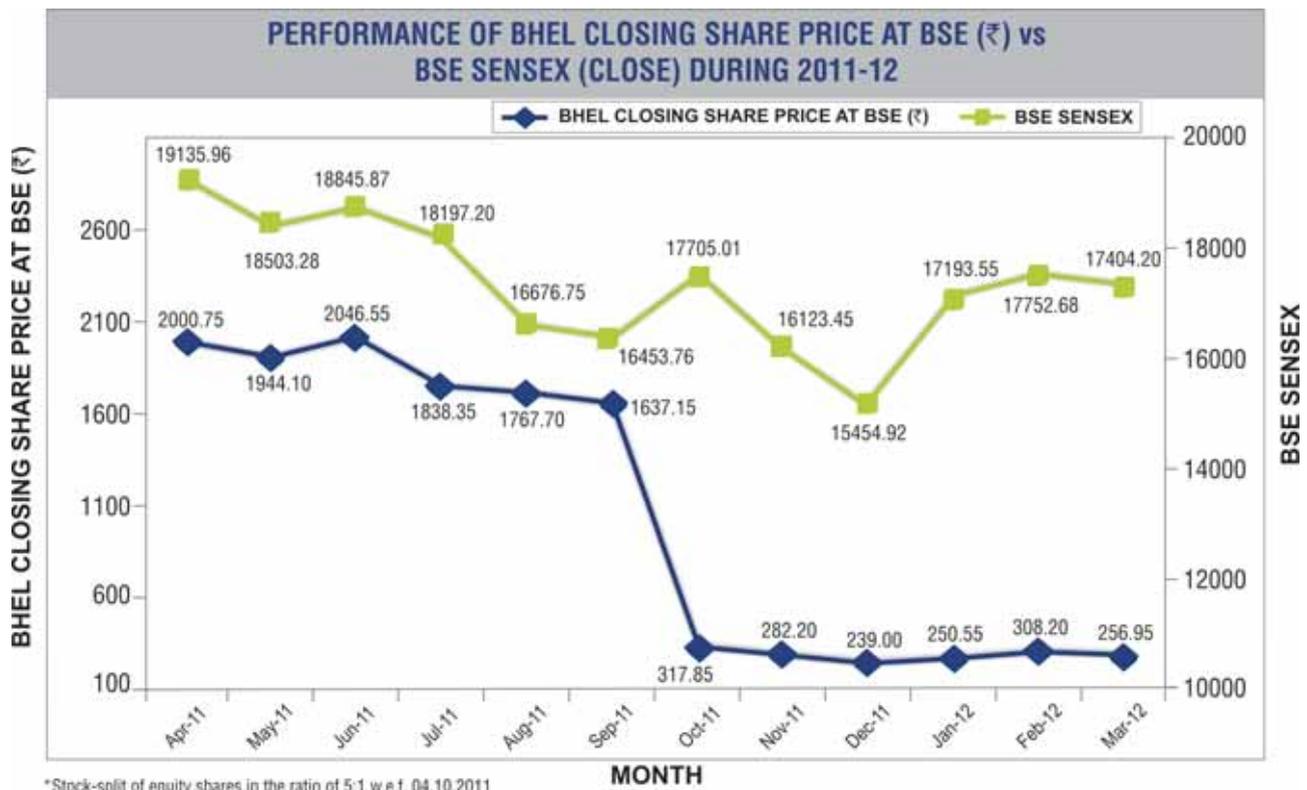
#### BHEL Vs. BSE Sensex

High, Low and Closing market price of BHEL shares on the **Bombay Stock Exchange Ltd. (BSE)** vis-à-vis **BSE Sensex**, No. of shares traded and Turnover, during each month in last financial year ended 31.03.2012 are summarized as under:

Month	BHEL Share Prices at BSE (₹)			BSE Sensex			No. of shares traded	Turnover (₹ in Lacs.)
	High	Low	Close	High	Low	Close		
Apr-11	2,251.00	1,976.15	2,000.75	19,811.14	18,976.19	19,135.96	1,812,242	38,387.85
May-11	2,108.90	1,892.00	1,944.10	19,253.87	17,786.13	18,503.28	2,513,687	50,240.38
Jun-11	2,063.05	1,872.50	2,046.55	18,873.39	17,314.38	18,845.87	1,163,372	22,622.94
Jul-11	2,074.40	1,802.00	1,838.35	19,131.70	18,131.86	18,197.20	2,230,492	42,939.76
Aug-11	1,861.00	1,662.00	1,767.70	18,440.07	15,765.53	16,676.75	1,902,942	33,409.58
Sep-11	1,820.00	1,575.00	1,637.15	17,211.80	15,801.01	16,453.76	1,870,452	31,372.37
Oct-11	344.00*	310.50*	317.85*	17,908.13	15,745.43	17,705.01	4,412,896	14,369.85
Nov-11	340.00*	246.20*	282.20*	17,702.26	15,478.69	16,123.46	10,275,972	29,432.95
Dec-11	295.50*	225.00*	239.00*	17,003.71	15,135.86	15,454.92	12,244,544	30,967.63
Jan-12	287.20*	233.50*	250.55*	17,258.97	15,358.02	17,193.55	14,812,197	38,616.81
Feb-12	328.35*	247.25*	308.20*	18,523.78	17,061.55	17,752.68	25,927,663	75,698.21
Mar-12	306.00*	246.25*	256.95*	18,040.69	16,920.61	17,404.20	18,574,896	50,964.43

\* Post-Split

Source: [www.bseindia.com](http://www.bseindia.com)



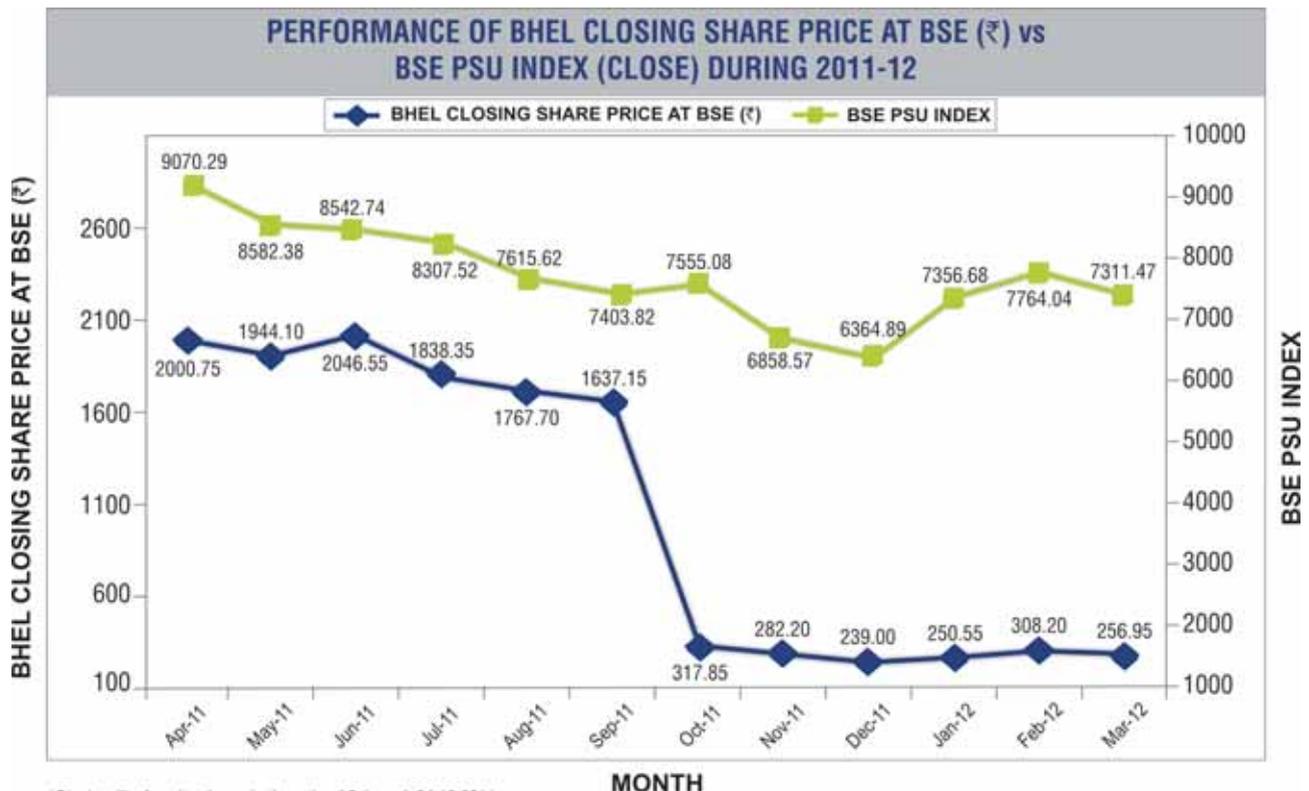
### BHEL Vs. BSE PSU Index

High, Low and closing market price of BHEL shares on the **Bombay Stock Exchange Limited (BSE)** vis-à-vis **BSE PSU Index**, during each month in last financial year ended 31.03.2012 are summarized as under:

Month	BHEL Share Prices at BSE (₹)			BSE PSU Index		
	High	Low	Close	High	Low	Close
Apr-11	2,251.00	1,976.15	2,000.75	9,254.33	8,932.48	9,070.29
May-11	2,108.90	1,892.00	1,944.10	9,099.14	8,176.56	8,582.38
Jun-11	2,063.05	1,872.50	2,046.55	8,680.23	8,118.30	8,542.74
Jul-11	2,074.40	1,802.00	1,838.35	8,712.19	8,297.03	8,307.52
Aug-11	1,861.00	1,662.00	1,767.70	8,393.26	7,423.17	7,615.62
Sep-11	1,820.00	1,575.00	1,637.15	7,804.40	7,301.06	7,403.82
Oct-11	344.00*	310.50*	317.85*	7,640.72	7,141.93	7,555.08
Nov-11	340.00*	246.20*	282.20*	7,659.78	6,504.15	6,858.57
Dec-11	295.50*	225.00*	239.00*	7,150.39	6,204.05	6,364.89
Jan-12	287.20*	233.50*	250.55*	7,451.27	6,345.88	7,356.68
Feb-12	328.35*	247.25*	308.20*	8,062.60	7,273.97	7,764.04
Mar-12	306.00*	246.25*	256.95*	7,844.03	7,073.77	7,311.47

\* Post-Split

Source: [www.bseindia.com](http://www.bseindia.com)



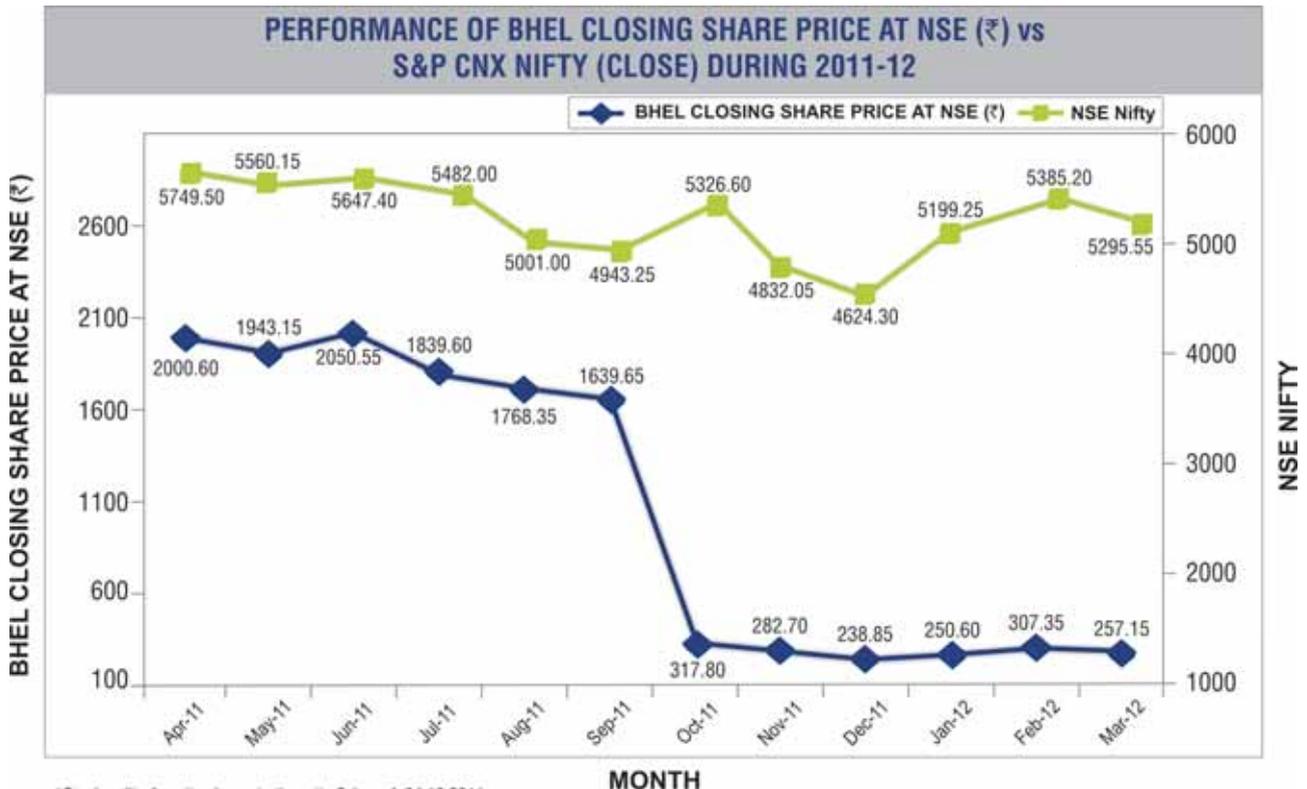
## BHEL Vs. S&P CNX Nifty

High, Low and Closing market price of BHEL shares on the **National Stock Exchange of India Limited (NSE)** vis-à-vis **S&P CNX Nifty**, No. of shares traded and Turnover, during each month in last financial year ended 31.03.2012 are summarized as under:

Month	BHEL Share Prices at NSE (₹)			NSE Nifty			No. of shares traded	Turnover (₹ in Lacs.)
	High	Low	Close	High	Low	Close		
Apr-11	2,250.00	1,975.00	2,000.60	5944.45	5693.25	5749.50	15,462,296	327,881.59
May-11	2,109.40	1,890.00	1,943.15	5775.25	5328.70	5560.15	14,090,707	281,864.48
Jun-11	2,062.80	1,871.55	2,050.55	5657.90	5195.90	5647.40	11,397,807	221,955.13
Jul-11	2,075.00	1,800.00	1,839.60	5740.40	5453.95	5482.00	17,824,288	342,434.15
Aug-11	1,853.00	1,660.35	1,768.35	5551.90	4720.00	5001.00	16,297,343	285,718.55
Sep-11	1,822.00	1,573.05	1,639.65	5169.25	4758.85	4943.25	14,259,170	240,151.14
Oct-11	344.45*	309.45*	317.80*	5399.70	4728.30	5326.60	41,960,863	135,986.10
Nov-11	338.90*	246.00*	282.70*	5326.45	4639.10	4832.05	80,584,684	231,566.71
Dec-11	295.65*	223.35*	238.85*	5099.25	4531.15	4624.30	76,724,489	194,172.64
Jan-12	287.15*	233.65*	250.60*	5217.00	4588.05	5199.25	108,467,474	285,205.34
Feb-12	328.00*	246.65*	307.35*	5629.95	5159.00	5385.20	162,339,531	472,403.15
Mar-12	304.95*	246.00*	257.15*	5499.40	5135.95	5295.55	126,379,558	345,883.85

\* Post-Split

Source: [www.nseindia.com](http://www.nseindia.com)



## 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.

Pursuant to SEBI (Prohibition of Insider Trading) (Amendment) Regulations, 2008 issued in November, 2008, BHEL has revised its “Code of Conduct for Prevention of Insider Trading”. The revised BHEL “Code of Conduct for Prevention of Insider Trading, 2009” came into force on 29<sup>th</sup> January, 2009. The objective of the Code is to prevent dealing in securities of the Company by an Insider (Directors and other Designated Employees) either on his own behalf or on behalf of any other person, on the basis of unpublished price sensitive information. The Board has appointed Director (Finance) as the Compliance Officer under the Code.

## x. Registrar & Share Transfer Agent (RTA)

### M/s. Karvy Computershare Private Ltd.

#### Delhi Address

UNIT: **BHEL**  
 105-108, Arunachal Building,  
 19, Barakhamba Road,  
 New Delhi-110 001  
 Tel. : 011-23324401  
       43681700/01/02/21  
 Fax: 011-23730743  
 Email: [ksbl Delhi@karvy.com](mailto:ksbl Delhi@karvy.com)

#### Hyderabad Address

UNIT: **BHEL**  
 17-24, Vittal Rao Nagar,  
 Madhapur, Hyderabad-500 081  
 Tel.: 040-44655000  
 Fax : 040-44655024  
 Email: [madhusudhan@karvy.com](mailto:madhusudhan@karvy.com)  
       [einward.ris@karvy.com](mailto:einward.ris@karvy.com)  
 Website : [www.karvycomputershare.com](http://www.karvycomputershare.com)

RTA’s performance in servicing shareholders has been satisfactory. All the investor grievances have been promptly attended to.

## xi. Share Transfer System

The share transfer system with respect to physical shares consists of activities like receipt of shares along with transfer deed from transferees, its verification, preparation of Memorandum of Transfers, its approval by the Share Transfer Committee and dispatch of transferred certificates to the respective transferees within the prescribed time as per the Listing Agreement. Share Transfer activities under physical segment like receipt/ dispatch of documents, their verification and preparation of Memorandum of Transfers are being carried out by Karvy Computershare Private Limited.

## xii. Distribution of Shareholding

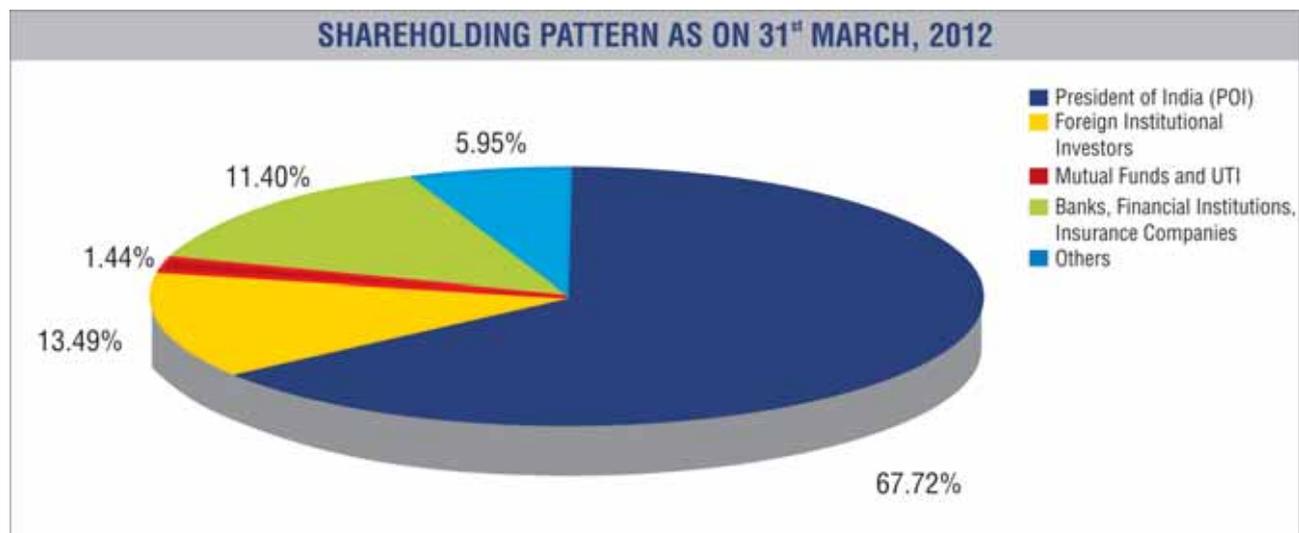
### (i) Distribution of shares according to size of holding as on 31<sup>st</sup> March 2012

No. of equity share (s) held	No. of Shareholders	% of Shareholders	No. of Shares	% of Shareholding
1 - 500	345596	93.26	32,755,533	1.34
501 - 1000	14023	3.78	11,184,457	0.46
1001 - 2000	6040	1.63	9,297,269	0.38
2001 - 3000	1751	0.47	4,430,444	0.18
3001 - 4000	652	0.18	2,320,100	0.09
4001 - 5000	579	0.16	2,768,364	0.11
5001 - 10 000	767	0.21	5,623,092	0.23
10001 & Above	1149	0.31	2,379,220,741	97.21
<b>Total</b>	<b>370557</b>	<b>100%</b>	<b>2,447,600,000</b>	<b>100%</b>

(ii) Shareholding Pattern as on 31<sup>st</sup> March 2012

Category	2012		2011	
	Voting strength (%)	No. of shares held* (Face Value ₹2)	Voting strength (%)	No. of shares held (Face Value ₹ 10)
<b>Promoters Holding</b>				
<b>Indian Promoters-</b>				
- President of India (POI)	67.72	1,657,552,000	67.72	331,510,000
- Nominees of POI	0.00	0.00	0.00	400
<b>Total Promoter holding</b>	<b>67.72</b>	<b>1,657,552,000</b>	<b>67.72</b>	<b>331,510,400</b>
<b>Non-promoters Holding</b>				
<b>Institutional Investors</b>				
Mutual Funds and UTI	1.44	35,324,113	7.03	34,415,090
Banks, Financial Institutions, Insurance Companies	11.40	278,981,481	5.68	27,806,836
Foreign Institutional Investors	13.49	330,058,708	12.91	63,170,722
<b>Others</b>				
Directors & Relatives	0.00	3100	0.00	600
Bodies Corporate	2.83	69,234,164	4.49	21,980,537
Individuals	2.69	65,769,748	1.87	9,152,130
Foreign Nationals	0.00	790	0.00	8
NRIs	0.19	4,738,757	0.13	639,450
Trust	0.05	1,262,523	0.03	149,967
Clearing Members	0.19	4,674,616	0.14	694,260
<b>Total Non-promoter holding</b>	<b>32.28</b>	<b>790,048,000</b>	<b>32.28</b>	<b>158,009,600</b>
<b>Grand Total</b>	<b>100.00</b>	<b>2,447,600,000</b>	<b>100.00</b>	<b>489,520,000</b>

\* The Equity shares were sub-divided in the ratio 5:1 w.e.f. 04.10.2011

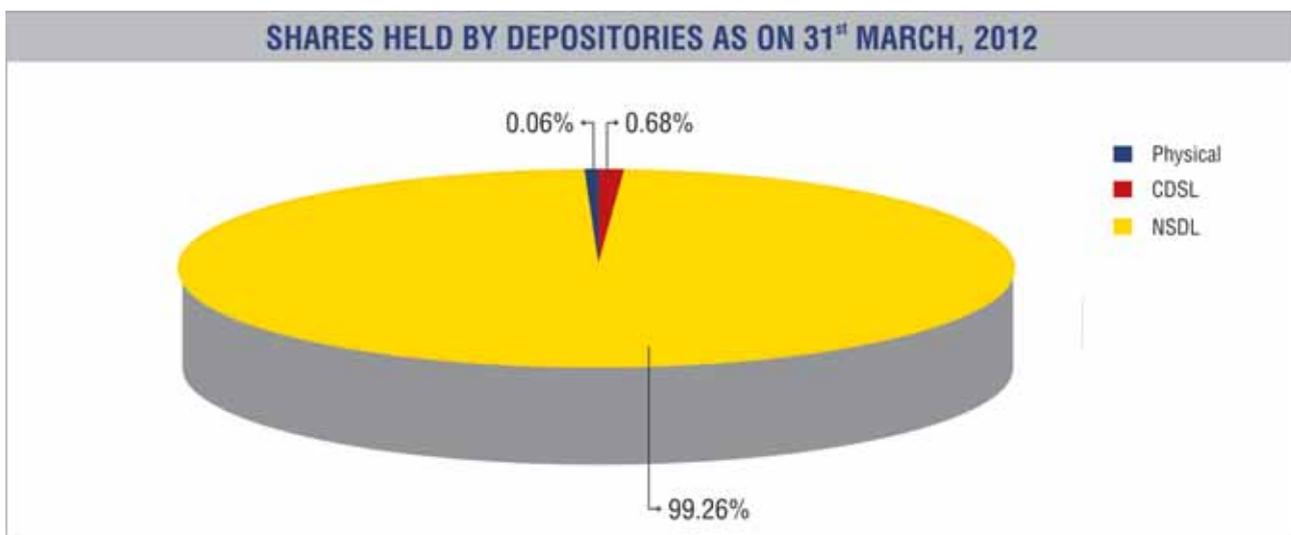


(iii) List of shareholders who are holding more than 1% of the shares of the Company as on 31<sup>st</sup> March 2012

Category & Shareholder's Name	2012	
	Voting strength (%)	No. of shares held
<b>Promoters</b>		
1. President of India (POI)	67.72	1,657,552,000
<b>Non-promoters</b>		
1. Life Insurance Corporation of India	5.78	141,433,662
2. Lazard Asset Management LLC A/c Lazard Emerging Markets Portfolio	1.36	33,372,660
3. LIC of India Market plus 1 Growth Fund	1.02	24,939,880

xiii. Dematerialisation of shares and liquidity

In accordance with the directions of the Securities & Exchange Board of India (SEBI) trading in BHEL shares by all categories of investors in demat form has been made compulsory w.e.f. 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, 2012, 99.94% of the total equity share capital of BHEL has been dematerialised by the shareholders and held in the name of the NSDL / CDSL. During the year, shareholding of the President of India (which constitutes 67.72% of the paid-up share capital of the Company) was dematerialized. The International Securities Identification Number (ISIN) allotted to Company is INE257A01026.



**xiv. Outstanding GDRs / ADRs / Warrants or any convertible instruments, conversion date and likely impact on equity:**

Nil

**xv. Plant locations**

**BHEL Manufacturing Units**

Bangalore	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

**BHEL Repair Units**

Mumbai	1. Electrical Machine Repair Plant
Varanasi	2. Heavy Equipment Repair Plant

**BHEL Subsidiaries**

Visakhapatnam	1. Bharat Heavy Plate and Vessels Ltd.
Kasaragod	2. 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:

Shri I.P. Singh	Phone : 011-26001046
Company Secretary	Fax : 011-66337533
BHEL	Email : <a href="mailto:shareholderquery@bhel.in">shareholderquery@bhel.in</a>
Regd. Office: BHEL House, Siri Fort	
New Delhi – 110 049	

OR

**KARVY COMPUTERSHARE PVT. LTD.**

UNIT: BHEL

<b>Delhi</b> : 105-108, Arunachal Building	Phone : 011-23324401
19, Barakhamba Road	43681700/01/02/21
New Delhi – 110 001	Fax : 011-23730743
	Email : <a href="mailto:ksbldelhi@karvy.com">ksbldelhi@karvy.com</a>
<b>Hyderabad</b> : 17-24, Vittal Rao Nagar,	Phone : 040-44655000
Madhapur,	Fax : 040-44655024
Hyderabad – 500 081	Email: <a href="mailto:madhusudhan@karvy.com">madhusudhan@karvy.com</a>
	<a href="mailto:einward.ris@karvy.com">einward.ris@karvy.com</a>

**Note:** Shareholders holding shares in electronic mode should address all correspondence to their respective depository participants.

**Declaration:** Pursuant to Clause 49(D) of the Listing Agreement with Stock Exchanges, it is hereby declared that all Board members and Senior Management personnel have affirmed compliance with BHEL's Code of "Business Conduct and Ethics" for the financial year 2011-12.

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 26, 2012

## CEO and CFO Certification

To,

The Board of Directors  
Bharat Heavy Electricals Ltd.,  
New Delhi.

- (a) We have reviewed financial statements and the cash flow statement of Bharat Heavy Electricals Limited for the year ended 31<sup>st</sup> March, 2012 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 2011-12 which are fraudulent, illegal or violative of the Company's Code of Conduct.
- (c) We accept responsibility for establishing and maintaining internal controls for financial reporting and that we have evaluated the effectiveness of the internal control systems of the company pertaining to financial reporting and we have disclosed to the auditors and the Audit Committee, deficiencies in the design or operation of such internal controls, if any, of which we are aware and the steps we have taken or propose to take to rectify these deficiencies.
- (d) We have indicated to the auditors and the Audit Committee.
- (i) significant changes in internal control over financial reporting during the year 2011-12;
  - (ii) significant changes in accounting policies during the year 2011-12 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  
Dated: May 23, 2012



## 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 Limited for the year ended on 31.03.2012 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 31.03.2012, the company has complied with all the conditions of Corporate Governance as stipulated in the above mentioned Listing Agreement and DPE Guidelines *except Clause 49(1)(A) of Listing Agreement (Clause 3.1.4 of the DPE Guidelines) relating to condition of not less than fifty percent of board of directors being Independent.*

We further state that such compliance is neither an assurance as to the future viability of the company nor the efficiency or effectiveness with which the management has conducted the affairs of the company.

For and on behalf of  
S.N. Dhawan & Co.  
Chartered Accountants  
FRN 000050N

**(S.K. Khattar)**

Partner

M. No. 84993

Place: New Delhi

Dated: July 26, 2012

## ANNEXURE – IV TO THE DIRECTORS’ REPORT

### Conservation of Energy

Energy Management is an important thrust area in BHEL. BHEL has been proactive in Energy Conservation in its operation.

Broad framework or Action plan of energy conservation in BHEL is as follows:

- A. Enhancing the efficiency of existing equipment.
- B. Purchasing BEE labelled Equipment.
- C. Spreading awareness among employees & their family members.
- D. Promoting renewable sources of energy.

Major activities undertaken for energy conservation (during the financial year 2011-12) were:

1. Key personnel were certified as Energy Manager/ Energy Auditor at manufacturing units.
2. Energy conservation week was celebrated across the company from 14<sup>th</sup> to 21<sup>st</sup> December. Several competitions like painting, essay writing in regional language, quiz, were organized in units/ offices, schools and townships.
3. Energy audit was conducted at HPEP Hyderabad, IP Jagdishpur, and EPD Bangalore to find OFI (opportunities for improvement).
4. Solar street lighting had been installed to tap renewable energy.
5. Guidelines for Procurement of Energy Efficient Equipment on the basis of LCCA (Life Cycle Costing Analysis) were issued.

### Technology Absorption and Research & Development

#### Research & Development

1. Specific areas in which R&D carried out by the Company
  2. Benefits derived as a result of the above R&D
  3. Future plan of action:
- } Given in the Directors’ Report  
} under “R&D & Technology”

The following are the major thrust areas for R&D and technology:

- More efficient conventional thermal power plants using supercritical parameters
- More efficient conventional thermal power plants using ultra-supercritical & Advanced Ultra supercritical 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

- Efficient, reliable and cost effective transportation solutions including IGBT – based applications, three-phase AC drive system for diesel electric locos
- 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 Intelligent machines & robotics, for reducing cycle time and cost
- Specialized engineering software applications
- Knowledge Management
- Total Engineering solutions including EPC with focus on automation.
- Vibration and noise reduction
- Applications based on high temperature Superconductors.
- Desalination and Water Treatment Plants
- Nano-technology applications
- Hydrogen energy and fuel cells

#### EXPENDITURE ON R&D

Total	....	₹ 1198.82	Crore
a) Recurring	....	₹ 1160.52	Crore
b) Capital	....	₹ 38.30	Crore
Expenditure as a percentage of total turnover	....	2.42	%

## Technology Absorption and Adoption

Details of technology imported during the last 5 years:

Technology	Year of import	Absorption status
Pumps for higher rating thermal power plants	2007	Technology absorption in progress.
Large size forgings	2010	Technology absorption in progress.
Centrifugal Compressors	2010	Technology absorption in progress.
Water Treatment Systems	2011	Technology absorption in progress.

## Foreign Exchange Earnings and Outgoings

	(₹ in Crore)	
	2011-12	2010-11
(i) Foreign Exchange Used	9815	8389
(ii) Foreign Exchange Earned	14419	9226

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 26, 2012

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

	Name of the Subsidiary Company	Bharat Heavy Plate & Vessels Ltd.	BHEL Electrical Machines Ltd.
1	Financial year of the Subsidiary ended on	31 <sup>st</sup> March, 2012	31 <sup>st</sup> March, 2012
2	Date from which they became subsidiary	10 <sup>th</sup> May, 2008	19 <sup>th</sup> January, 2011
3	Share of the Subsidiary held by the Company as on 31 <sup>st</sup> March 2012		
	a) Number & Face Value	337978 Equity Shares of ₹ 1000/- each fully paid up	5355000 Equity Shares of ₹ 10/- each fully paid up
	b) Extent of holding	100%	51%
4	The Net aggregate amount of the subsidiary Company Profit/(Loss) so far as it concerns the member of the holding Company	(₹ in Crore)	(₹ in Crore)
	a) Not dealt with in the holding Company’s Accounts		
	i) For the Financial Year ended 31.03.2012	10.44	(-) 0.19
	ii) Up to the previous financial years of the Subsidiary Company	(-) 43.82	Nil
	b) Dealt with in the holding Company’s accounts		
	i) For the Financial Year Ended 31.03.2012	Nil	Nil
	ii) For the Previous financial years of the Subsidiary Company since they became the holding Company’s Subsidiary	Nil	Nil

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 26, 2012

**ANNEXURE – VI TO THE DIRECTORS' REPORT**

**AUDITORS' REPORT**

**TO THE MEMBERS OF BHARAT HEAVY ELECTRICALS LIMITED**

1. We have audited the attached Balance Sheet of **Bharat Heavy Electricals Limited** as at 31<sup>st</sup> March, 2012, the Statement of Profit and Loss and also the Cash Flow Statement for the year ended on that date annexed thereto. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. We conducted our audit in accordance with the Auditing Standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.
3. As required by the Companies (Auditor's Report) Order, 2003, as amended, issued by the Central Government of India in terms of sub-section (4A) of Section 227 of the Companies Act, 1956, we enclose in the Annexure a statement on the matters specified in paragraphs 4 and 5 of the said Order.
4. Further to our comments in the Annexure referred to in paragraph 3 above, we report that:
  - (a) We have 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 appears from our examination of the books and proper returns adequate for the purposes of our audit have been received from the branches not visited by us.
  - (c) The Branch Auditor's Reports have been furnished to us and have been appropriately dealt with while preparing our report.
  - (d) The Balance Sheet, the Statement of Profit and Loss and Cash Flow Statement dealt with by this report are in agreement with the books of account and with the audited returns received from the branches.
  - (e) In our opinion, the Balance Sheet, the Statement of Profit and Loss and Cash Flow Statement dealt with by this report comply with the Accounting Standards referred to in sub Section (3C) of Section 211 of the Companies Act, 1956.
  - (f) In terms of Notification No. GSR 829(E) dated 21.10.2003 issued by the Department of Company Affairs, Government of India, the provisions of Section 274(1)(g) of the Companies Act, 1956 are not applicable to the Company.
  - (g) In our opinion and to the best of our information and according to the explanations given to us, the said accounts read together with the Significant Accounting Policies and Notes thereon, give the information required by the Companies Act, 1956, in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:
    - (i) In the case of the Balance Sheet, of the state of affairs of the Company as at 31<sup>st</sup> March, 2012;
    - (ii) In the case of the Statement of Profit & Loss of the profit for the year ended on that date; and
    - (iii) In the case of Cash Flow Statement of the cash flows for the year ended on that date.

**For Gandhi Minocha & Co.**

Chartered Accountants

FRN 000458N



**(Bhupinder Singh)**

M.No. 092867

**For S.N. Dhawan & Co.**

Chartered Accountants

FRN 000050N



**(Suresh Sethi)**

M.No. 010577

Date: May 23, 2012

Place: New Delhi

## Annexure to the Auditors' Report

(Referred to in paragraph 3 of our report of even date on the accounts of Bharat Heavy Electricals Limited for the year ended 31<sup>st</sup> March, 2012)

- i) (a) The Company has maintained proper records showing full particulars including quantitative details and situation of its fixed assets.
- (b) According to the information and explanations given to us, physical verification of fixed assets is being conducted in a phased manner by the management under a programme designed to cover all the fixed assets over a period of three years, which, in our opinion, is reasonable having regard to the size of the Company and nature of its business and no material discrepancies were noticed on such verification to the extent verification was made during the year. In respect of 65 locomotives given to Indian Railways on lease instead of physical verification a certificate confirming physical possession of these locomotives has been obtained from Indian Railways as per the lease agreement.
- (c) According to the information and explanations given to us, the Company has not disposed off any substantial part of its fixed assets during the year.
- ii) (a) As explained to us physical verification of inventory has been conducted by the management under Perpetual Inventory Programme at regular intervals during the year except for stock of work in progress and finished goods in few units where these are verified at the year end with reference to the inspection reports and production reports of the Production Planning Department of such units. In regard to stocks lying with contractors/fabricators and other parties, confirmations were received in a few cases only. In our opinion the frequency of verification is reasonable.
- (b) In our opinion and according to the information and explanations given to us, the procedures of physical verification of inventories followed by the management are reasonable and adequate in relation to the size of the Company and the nature of its business.
- (c) In our opinion and according to the information and explanations given to us, the Company has maintained proper records of its inventories and discrepancies noticed on physical verification of inventories with regard to the size and nature of operations of the Company were not material and have been properly dealt with in the books of account.
- iii) (a) According to the information given to us, the Company has not granted any loans, secured or unsecured to companies, firms and other parties covered in the register maintained under section 301 of the Companies Act, 1956. Therefore clauses (iii)(b) to (iii)(d) of Paragraph 4 of the Order are not applicable to the Company.
- (b) According to the information given to us, the Company has not taken any loans, secured or unsecured, from companies, firms or other parties covered in the register maintained under Section 301 of the Companies Act, 1956. Therefore clauses (iii) (f) and (iii) (g) of Paragraph 4 Order are not applicable to the Company.
- iv) In our opinion and according to the information and explanations given to us, there is an adequate internal control system commensurate with the size of the Company and the nature of its business with regard to purchase of inventory and fixed assets and for the sale of goods and services. Further on the basis of our examination of the books and records of the Company, and according to the information and explanations given to us, we have neither come across nor have been informed of any continuing failure to correct major weaknesses in the internal control systems.
- v) According to the information and explanations given to us, we are of the opinion that during the year there are no contracts and arrangements that need to be entered in the register maintained under Section 301 of the Companies Act, 1956. Therefore clause (v) (b) of Paragraph 4 of the Order is not applicable to the Company.
- vi) According to the information and explanations given to us, the Company has not accepted any deposits from public during the year within the meaning of sections 58A and 58AA or any other relevant provisions of the Companies Act, 1956 and the Companies (Acceptance of Deposits) Rules 1975.

- vii) According to the information and explanations given to us, the Company has an internal audit department responsible for carrying out internal audit of various sections at head office, regional offices and units at periodical intervals as per the approved audit plan. In our opinion, the internal audit system of the Company is generally commensurate with size and nature of its business.
- viii) We have broadly reviewed the books of account and records maintained by the Company pursuant to the Companies (Cost Accounting Records) Rules 2011 prescribed by the Central Government under section 209(1)(d) of the Companies Act, 1956 and are of the opinion that prima facie the prescribed accounts and records have been made and maintained. We have, however, not made a detailed examination of the cost records with a view to determine whether they are accurate & complete.
- ix (a) According to the information and explanations given to us, in our opinion, the Company is generally regular in depositing with appropriate authorities undisputed statutory dues including Provident Fund, Investor Education and Protection Fund, Employees State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, Excise Duty, Customs Duty, Cess and any other material statutory dues as applicable to it.
- (b) According to the information and explanations given to us, no undisputed amounts payable in respect of Provident Fund, Investor Education and Protection Fund, Employees State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, Excise Duty, Customs Duty, Cess and other statutory dues outstanding as at 31<sup>st</sup> March, 2012 for a period of more than six months from the date they become payable **except in the case of Libya project, where as per the agreement, the income tax liability has to be discharged by the customer, directly to the Libyan Government. The amount outstanding for more than six months is ₹ 31.94 Crore pertaining to financial year 2008-09 & 2009-10.**
- (c) According to the information and explanations given to us, the particulars of Sales Tax, Income Tax, Excise Duty, Service Tax, Custom Duty and Cess which have not been deposited on account of dispute are as under:

Sl. No.	Name of the Statute	Nature of the Dues	Pending Amount (₹ in Crore)	Amount paid under protest (₹ in Crore)	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	25.28	5.55	Assessing Officer
			258.23	11.12	Dy. Commissioner/Jt. Commissioner
			218.44	29.11	Commissioner Appeals
			119.75	43.47	Appellate Tribunal
			3.43	3.38	High Court
		107.57	5.76	Supreme Court	
				Various Appellate Authorities	
2	Income Tax Act, 1961	Income Tax	3.18	-	High Court
			26.50	-	Appellate Tribunal
			15.52	-	Commissioner(Appeals)
3	Central Excise Act, 1944	Excise Duty	30.20	0.06	Assessing Officer
			72.96	0.40	Commissioner (Appeals)
			174.25	3.06	Appellate Tribunal
			42.88	4.37	High Court
4	Service Tax under the Finance Act, 1994	Service Tax	24.73	-	Commissioner (Appeals)
			4.53	-	Appellate Tribunal
			97.21	-	Assessing Officer
			5.70	-	High Court

- x) The Company has no accumulated losses as at 31<sup>st</sup> March, 2012 and has not incurred any cash losses during the financial year covered by our audit and the immediately preceding financial year.
- xi) According to the records of the Company examined by us and the information and explanations given to us, the Company has not defaulted in repayment of dues to financial institutions, banks or debenture holders.
- xii) According to the information and explanations given to us, the Company has not granted any loans and advances on the basis of security by way of pledge of shares, debentures and other securities.
- xiii) In our opinion, the Company is not a chit fund or a Nidhi/mutual benefit fund/ society. Therefore, provisions of clause (xiv) of Paragraph 4 of the Order are not applicable to the Company.
- xiv) In our opinion and according to the information and explanations given to us, the Company is not dealing or trading in shares, securities, debentures and other investments. Accordingly, the provisions of clause (xiv) of the Paragraph 4 of the Order are not applicable to the Company.
- xv) In our opinion and according to the information and explanations given to us, the Company has not given guarantees for loans taken by others from banks or financial institutions.
- xvi) As per information and explanations given to us, the Company has not obtained any term loan during the year.
- xvii) According to the information and explanations given to us and on an overall examination of the Balance Sheet of the Company, we report that no funds raised on short-term basis have been used for long-term investment.
- xviii) According to the information and explanations given to us, the Company has not made any preferential allotment of shares to parties and companies covered in the register maintained under section 301 of the Companies Act, 1956.
- xix) In our opinion, the Company has not issued any debentures during the year. Therefore, provisions of clause (xix) of Paragraph 4 of the Order are not applicable to the Company.
- xx) The Company has not raised any money by way of public issue during the year. Therefore, provisions of clause (xx) of Paragraph 4 of the Order are not applicable to the Company.
- xxi) During the course of our examination of the books and records of the Company, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, no fraud on or by the Company has been noticed or reported during the year.

**For Gandhi Minocha & Co.**

Chartered Accountants

FRN 00458N



**(Bhupinder Singh)**

M.No. 092867

**For S.N. Dhawan & Co.**

Chartered Accountants

FRN 000050N



**(Suresh Sethi)**

M.No. 010577

Date: May 23, 2012

Place: New Delhi

**Management Reply to Point No. (ix)(b) :** *As per the contract, the income tax liability has to be discharged by the customer (ECCO). The customer had directly approached Libyan authorities for rescheduling the payment and agreed; partial payment has also been made by ECCO to Libyan authorities. Presently, the site is under mobilization stage and ECCO has reconfirmed that they will honour their commitment.*

गोपनीय

सं/No. प्रति/24-24/2012-13/Vol-V/274



प्रधान निदेशक, वाणिज्यिक लेखा परीक्षा  
एवं पदेन सदस्य लेखा परीक्षा बोर्ड-III,  
नई दिल्ली

PRINCIPAL DIRECTOR OF COMMERCIAL AUDIT  
& EX-OFFICIO MEMBER, AUDIT BOARD-III,  
NEW DELHI

दिनांक/Dated: 29/6/2012

सेवा में,

अध्यक्ष एवं प्रबंध निदेशक,  
भारत हेवी इलेक्ट्रिकल्स लिमिटेड,  
नई दिल्ली

विषय:- 31 मार्च 2012 को समाप्त वर्ष के लिये भारत हेवी इलेक्ट्रिकल्स लिमिटेड, नई दिल्ली, के वार्षिक लेखों पर कंपनी अधिनियम 1956 की धारा 619(4) के अन्तर्गत भारत के नियंत्रक-महालेखा परीक्षक की टिप्पणियाँ ।

महोदय,

मैं भारत हेवी इलेक्ट्रिकल्स लिमिटेड, नई दिल्ली, के वर्ष 2011-12 के लेखों पर कंपनी अधिनियम, 1956, की धारा 619(4) के अर्थात् भारत के नियंत्रक-महालेखा परीक्षक की टिप्पणियाँ अग्रोषित करता हूँ । कृपया इस पत्र की संलग्नकों सहित प्राप्ति की पावती भेजी जाए ।

संलग्न: यथोपरि ।

भवदीय,

प्रवीण कुमार सिंह  
(प्रवीण कुमार सिंह) 29/6/12  
प्रधान निदेशक

## Comments of the Comptroller and Auditor General of India under section 619(4) of the Companies Act, on the Accounts of Bharat Heavy Electricals Limited, New Delhi for the year ended 31<sup>st</sup> March, 2012

The preparation of financial statements of Bharat Heavy Electricals Limited, New Delhi for the year ended 31<sup>st</sup> March 2012 in accordance with the financial reporting framework prescribed under the Companies Act, 1956 is the responsibility of the Management of the Company. The statutory auditors are appointed by the Comptroller and Auditor General of India under section 619(2) of the Companies Act, 1956 are responsible for expressing opinion on these financial statements under section 227 of the Companies Act, 1956 based on independent audit in accordance with the auditing and assurance standards prescribed by their professional body, The Institute of Chartered Accountants of India. This is stated to have been done by them vide their Audit Report dated 23<sup>rd</sup> May, 2012.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under section 619(3)(b) of the Companies Act, 1956 of the financial statements of Bharat Heavy Electricals Limited, New Delhi, for the year ended 31<sup>st</sup> March 2012. The supplementary audit has been carried out independently without access to the working papers of the statutory auditors and is limited primarily to inquiries of the statutory auditors and company personnel and a selective examination of some of the accounting records. On the basis of my audit nothing significant has come to my knowledge which would give rise to any comment upon or supplement to Statutory Auditors' report under Section 619(4) of the Companies Act, 1956.

For and on the behalf of the  
Comptroller & Auditor General of India

A handwritten signature in black ink, appearing to read 'Praveen', is positioned above the printed name of the Principal Director.

(Praveen Kumar Singh)  
Principal Director of Commercial Audit &  
Ex-officio Member, Audit Board –III,  
New Delhi

Place: New Delhi  
Dated: June 29, 2012



## ANNUAL ACCOUNTS





## Balance Sheet As at March 31, 2012

(₹ in Crore)

Particulars	Note No.	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>I. EQUITY AND LIABILITIES</b>					
<b>(1) Shareholders' funds</b>					
(a) Share capital	1	489.52		489.52	
(b) Reserves & surplus	2	24883.69	25373.21	19664.32	20153.84
<b>(2) Non-current liabilities</b>					
(a) Long-term borrowings	3	123.43		102.14	
(b) Other long term liabilities	4	7550.77		9142.40	
(c) Long term provisions	5	5005.68	12679.88	4923.23	14167.77
<b>(3) Current liabilities</b>					
(a) Short-term borrowings	6	0.00		0.00	
(b) Trade payables	7	10271.31		8095.42	
(c) Other current liabilities	8	15815.93		14169.95	
(d) Short-term provisions	9	2635.69	28722.93	2673.31	24938.68
<b>TOTAL</b>			<b>66776.02</b>		<b>59260.29</b>
<b>II. ASSETS</b>					
<b>(1) Non current assets</b>					
(a) Fixed assets	10				
(i) Tangible assets		4160.72		3265.28	
(ii) Intangible assets		136.09		135.64	
(iii) Capital work-in-progress		1324.63		1723.40	
(iv) Intangible assets under development		22.98	5644.42	10.36	5134.68
(b) Non-current investments	11	461.67		439.17	
(c) Deferred tax assets (net)	12	1546.24		2163.55	
(d) Long-term loans and advances	13	900.10		882.91	
(e) Other non-current assets	14	9508.65	12416.66	7362.12	10847.75
<b>(2) Current assets</b>					
(a) Inventories	15	13444.50		10852.05	
(b) Trade receivables	16	26336.13		20103.50	
(c) Cash and cash equivalents	17	6671.98		9630.15	
(d) Short term loans and advances	18	2111.72		2382.53	
(e) Other current assets	19	150.61	48714.94	309.63	43277.86
<b>TOTAL</b>			<b>66776.02</b>		<b>59260.29</b>

### Significant Accounting Policies

### Other Notes to financial statements 31

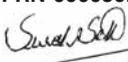
The Accompanying Notes 1 to 31 & Significant accounting policies form an integral part of the financial statements.

  
**(I. P. Singh)**  
Company Secretary

**For and on behalf of Board of Directors**  
  
**(P.K. Bajpai)**  
Director (Finance)

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

As per our report of even date attached  
For S. N. Dhawan & Co.  
Chartered Accountants  
FRN-000050N



**(Suresh Seth)**  
Partner  
M. No. 10577

For Gandhi Minocha & Co.  
Chartered Accountants  
FRN-000458N



**(Bhupinder Singh)**  
Partner  
M. No. 092867

Place : New Delhi  
Date : May 23, 2012

## Statement of Profit & Loss for the year ended March 31, 2012

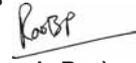
(₹ in Crore)

Particulars	Note No.	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
<b>I. Revenue from operations (Gross)</b>	<b>20</b>	<b>49509.78</b>	43337.00
Less: Excise duty & service tax		<u>2281.92</u>	<u>1770.87</u>
<b>Revenue from operations (Net)</b>		<b>47227.86</b>	41566.13
<b>II. Other operational income</b>	<b>21</b>	<b>751.03</b>	680.46
<b>III. Other income</b>	<b>22</b>	<b>1265.55</b>	1020.64
<b>Total revenue (I to III)</b>		<b>49244.44</b>	<u>43267.23</u>
<b>IV. Expenses</b>			
Cost of material consumption, erection and engineering expenses	<b>23</b>	<b>28907.73</b>	23209.07
Increase in Work in progress & Finished Goods	<b>24</b>	<b>-823.20</b>	-127.35
Employee benefits expense	<b>25</b>	<b>5465.83</b>	5396.71
Finance costs	<b>26</b>	<b>51.28</b>	54.73
Depreciation & amortisation expenses	<b>10.1</b>	<b>800.00</b>	544.12
Other expenses of manufacture, administration, selling and distribution	<b>27</b>	<b>3222.82</b>	2536.11
Provisions (net)	<b>28</b>	<b>1402.58</b>	2715.12
Less: Cost of jobs done for internal use		<u>104.11</u>	<u>68.51</u>
<b>Total expenses</b>		<b>38922.93</b>	<u>34260.00</u>
<b>V. Profit before prior period adjustments and tax</b>		<b>10321.51</b>	9007.23
<b>VI. Add/less: Prior period adjustments (net)</b>	<b>29</b>	<b>-19.25</b>	<u>-1.79</u>
<b>VII. Profit before tax for the year</b>		<b>10302.26</b>	9005.44
<b>VIII. Less: Tax expense</b>	<b>30</b>		
a) Current tax		<b>2645.00</b>	3630.55
b) Deferred tax		<b>617.30</b>	<u>-636.31</u>
<b>IX. Profit for the year</b>		<b>7039.96</b>	<u>6011.20</u>
Earning per share (Basic & Diluted) (Refer pt. no. 21 of Note 31) in ₹		<b>28.76</b>	24.56
Face Value per Share (in ₹) (Refer point no. 21 (a) of Note 31)		<b>2.00</b>	2.00
<b>Significant Accounting Policies</b>			
<b>Other Notes to financial statements</b>	<b>31</b>		

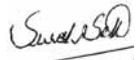
The accompanying Notes 1 to 31 & significant accounting policies form an integral part of the financial statements.

  
(I. P. Singh)  
Company Secretary

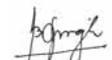
**For and on behalf of Board of Directors**  
  
(P.K. Bajpai)  
Director (Finance)

  
(B. Prasada Rao)  
Chairman and Managing Director

As per our report of even date attached  
For S. N. Dhawan & Co.  
Chartered Accountants  
FRN-000050N

  
(Suresh Seth)  
Partner  
M. No. 10577

For Gandhi Minocha & Co.  
Chartered Accountants  
FRN-000458N

  
(Bhupinder Singh)  
Partner  
M. No. 092867

Place : New Delhi  
Date : May 23, 2012

## Cash Flow Statement for the year ended March 31, 2012

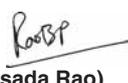
(₹ in Crore)

	2011-12	2010-11
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>		
Net Profit Before Tax as per Statement of Profit and Loss	<b>10302.26</b>	<b>9005.44</b>
Adjustment for		
Depreciation/Amortisation	802.67	544.44
Lease Equalisation	-3.82	-14.05
Provisions (Net)	539.77	630.61
Bad Debts & LD & investment written off	97.29	40.97
Provision for diminution in investment	0.00	0.05
Profit on sale of Fixed assets	-4.01	-4.27
Finance cost	51.28	54.73
Interest/Dividend Income	-830.63	-641.82
Operating Profit before Working Capital changes	<b>10954.81</b>	<b>9616.10</b>
Adjustment for		
Increase/ (decrease) in Trade & Other Receivables	-8793.32	-7873.19
Increase/(decrease) in Inventories	-2576.01	-1737.98
Increase/(decrease) in Trade Payable & Advances	2784.13	5586.52
Cash generated from operations	<b>2369.61</b>	<b>5591.45</b>
Direct Taxes Paid (Net of refund)	-3183.18	-2932.83
<b>NET CASH INFLOW / (OUTFLOW) FROM OPERATING ACTIVITIES</b>	<b>-813.57</b>	<b>2658.62</b>
<b>B. CASH FROM INVESTING ACTIVITIES</b>		
Purchase of Fixed Assets	-1307.21	-1730.04
Sale and Disposal of Fixed Assets	9.27	6.26
Investment in Subsidiary & Joint Ventures	-22.50	-359.38
Interest & Dividend income	990.73	740.34
<b>NET CASH USED IN INVESTING ACTIVITIES</b>	<b>329.70</b>	<b>1342.82</b>
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>		
Borrowings	28.60	35.11
Dividend Paid (including tax on dividend )	-1793.70	-1456.32
Finance cost	-49.80	-54.51
<b>NET CASH USED IN FINANCING ACTIVITIES</b>	<b>1814.90</b>	<b>1475.72</b>
<b>D. NET DECREASE IN CASH AND CASH EQUIVALENTS</b>	<b>-2958.17</b>	<b>-159.93</b>
Opening Balance of Cash and Cash Equivalents	9630.15	9790.08
Closing Balance of Cash and Cash Equivalents	6671.98	9630.15

- 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 ₹ 2.18 Crore (₹ 3.74 Crore) unclaimed dividend lying in designated bank accounts

  
**(I. P. Singh)**  
 Company Secretary

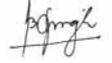
**For and on behalf of Board of Directors**  
  
**(P.K. Bajpai)**  
 Director (Finance)

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

As per our report of even date attached  
 For S. N. Dhawan & Co.  
 Chartered Accountants  
**FRN-000050N**

  
**(Suresh Seth)**  
 Partner  
 M. No. 10577

For Gandhi Minocha & Co.  
 Chartered Accountants  
**FRN-000458N**

  
**(Bhupinder Singh)**  
 Partner  
 M. No. 092867

Place : New Delhi  
 Date : May 23, 2012

## 1 - Share Capital

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>Authorised</b>				
1000,00,00,000 equity shares of ₹ 2 each (previous year 200,00,00,000 equity shares of ₹ 10 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 (prev year 48,95,20,000 equity shares of ₹ 10 each)				
a) Out of which 122,38,00,000 equity shares of ₹ 2 each (previous year 24,47,60,000 equity shares of ₹ 10 each) allotted as bonus shares				
b) The reconciliation of the number of equity shares outstanding is set out below:				
Shares outstanding at the beginning of the year		489520000		489520000
Shares issued during the year towards split of shares from ₹ 10 to ₹ 2 per share		1958080000		-
Shares bought back during the year		-		-
Shares outstanding at the end of the year		<u>2447600000</u>		<u>489520000</u>
c) Details of shares held by shareholders holding more than 5% shares at the year end	No. of shares	%age of holding	No. of shares	%age of holding
President of India (POI) alongwith nominees	1657552000	67.72%	331510400	67.72%
Life Insurance Corporation of India	141433662	5.78%	-	-
Face Value per share		<u>2.00</u>		<u>10.00</u>
d) 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 ₹ 10 per share). Each holder of the equity shares is entitled to one vote per share.				

## 2 - Reserves & surplus

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>Capital reserve</b>		
Opening Balance	2.74	2.74
Add: Additions	-	-
Less: Deductions	-	-
	<u>2.74</u>	<u>2.74</u>
<b>General reserve</b>		
Opening balance	18849.72	14849.72
Add: transfer from surplus of profit & loss	5000.00	4000.00
Less: Deductions	-	-
	<u>23849.72</u>	<u>18849.72</u>
<b>Surplus from statement of profit &amp; loss</b>		
Opening Balance	811.86	575.39
Add: profit for the year	7039.96	6011.20
Profit available for appropriation	7851.82	6586.59
Less: Appropriation-		
— General reserve	5000.00	4000.00
— Dividend (including interim dividend of ₹ 665.75 crore, previous year ₹ 648.61 crore)	1566.47	1524.85
— Corporate dividend tax (including tax on interim dividend ₹ 108 crore, previous year ₹ 107.73 crore)	254.12	249.88
	<u>1031.23</u>	<u>811.86</u>
	<u>24883.69</u>	<u>19664.32</u>
<b>Proposed dividend on equity per share (₹)</b>	<b>3.68</b>	<b>3.58</b>

## 3 - Long-term borrowings

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>Secured</b>		
Debentures/Bonds	-	-
Term Loans from State Government	-	-
Term Loans from Financial Institutions	-	-
	<u>-</u>	<u>-</u>
<b>Unsecured</b>		
Long term maturities of finance lease obligations	123.43	102.14
	<u>123.43</u>	<u>102.14</u>
	<u>123.43</u>	<u>102.14</u>

## 4 - Other long term liabilities

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Trade payables	617.76	384.00
Advances received from customers & others	6829.04	8663.28
Deposits from contractors & others	103.97	95.12
	<u>7550.77</u>	<u>9142.40</u>

## 5 - Long-term provisions

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Provision for employee benefits	2076.18	1991.83
Contractual Obligation	2793.48	2338.60
Other long-term provisions	136.02	126.93
Provision for Tax (Net of advance tax/TDS ₹ 7433.57 crore)	-	465.87
	<u>5005.68</u>	<u>4923.23</u>

## 6 - Short-term borrowings

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>Secured</b>		
<b>Loans from banks</b>		
<b>Cash credit</b> (secured by first charge by way of hypothecation of raw materials, components, work-in-progress, finished goods, stores, book debts and other current assets both present and future)	-	-
<b>Packing credit</b> (secured by first charge by way of hypothecation of raw materials, components, work-in-progress, finished goods, stores, book debts and other current assets both present and future)	-	-
	-	-

## 7 - Trade Payables

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Trade Payables	10160.38	8052.58
Acceptances	110.93	42.84
	10271.31	8095.42

(refer to point no.10 Note 31 for Micro and small enterprises disclosure)

## 8 - Other current liabilities

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Current maturities of finance lease obligation	62.43	55.12
Advances received from customers & others (including valuation adjustments credit)	13152.24	11727.32
Deposits from Contractors & others	444.27	398.24
Unclaimed dividend*	2.18	3.74
Other payables/ liabilities	2147.01	1979.20
Interest accrued but not due	0.65	0.25
Interest accrued and due on:		
State Government Loans	2.33	2.33
Finance lease	4.82	3.75
	15815.93	14169.95

\* 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 31.03.2012	Figures as at 31.03.2011
Provision for employee benefits	401.38	902.24
Proposed Dividend	900.72	876.24
Corporate dividend tax	146.12	142.15
Contractual obligation	1057.43	643.57
Other short-term provisions	87.61	91.86
Corporate Social Responsibility fund	42.43	17.25
	<b>2635.69</b>	<b>2673.31</b>

## 10 - Fixed assets

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>(i) Tangible assets</b>		
Gross block	9406.70	7781.98
Less: Accumulated depreciation	5249.62	4516.52
Less: Lease adjustment account	-3.64	0.18
Net Block	<b>4160.72</b>	<b>3265.28</b>
<b>(ii) Intangible assets</b>		
Gross block	299.94	267.76
Less: Accumulated depreciation	163.85	132.12
Net block	<b>136.09</b>	<b>135.64</b>
<b>(iii) Capital work in progress</b>		
Construction work-in-progress -Civil	338.31	321.08
Construction stores (including in transit)	9.99	13.13
Plant & machinery and other equipments		
- Under Erection/ Fabrication/awaiting erection	702.25	911.82
- In transit	273.80	472.97
Leased assets under erection	0.28	4.40
	<b>1324.63</b>	<b>1723.40</b>
<b>(iv) Intangible assets under development</b>	<b>22.98</b>	<b>10.36</b>
	<b>22.98</b>	<b>10.36</b>
<b>Total</b>	<b>5644.42</b>	<b>5134.68</b>
<b>Refer to details in Note 10.1</b>		

## Note 10.1

### Fixed Assets

(₹ in Crore)

	Gross Block			Cost As at 31.03.2012	Depreciation		Net Block		
	Cost as at 31.03.2011	Additions/ adjustments during the year	Deductions/ adjustments during the year		Lease adjustment account	Depreciation/ Amortisation upto 31.03.2012	As at 31.03.2012	As at 31.03.2011	Depreciation/ Amortisation for the year
<b>Factory/ Office Complex</b>									
<b>(i) Tangible Assets</b>									
Freehold land (incl. development exp.)	15.74	1.13		16.87			16.87	15.74	
Leasehold land (incl. development exp.)	6.05			6.05		0.39	5.66	5.67	0.01
Roads, bridges and culverts	15.09	5.44		20.53		3.71	16.82	11.71	0.33
Buildings	1070.84	267.70	4.94	1333.60		471.40	862.20	696.73	101.47
Leasehold buildings	3.12			3.12		1.33	1.79	1.84	0.05
Drainage, sewerage and water supply	18.75	2.67	0.05	21.37		11.13	10.24	8.14	0.50
Railway siding	11.01	3.86		14.87		8.48	6.39	3.00	0.46
Locomotives and wagons	27.73	3.24		30.97		19.19	11.78	9.69	1.15
Plant & Machinery	4858.15	1116.17	8.72	5965.60		3364.12	2601.48	2010.08	523.82
Electronic data processing equipments	133.53	1.39	-0.94	135.86		130.05	5.81	6.90	2.14
Electrical installations	197.46	82.25	2.96	276.75		101.17	175.58	111.89	14.35
Construction Equipment	184.72	29.25	1.80	212.17		133.90	78.27	75.33	26.30
Vehicles	18.81	0.63	0.48	18.96		16.08	2.88	2.75	0.49
Furniture & fixtures	29.98	13.16	0.06	43.08		11.54	31.54	20.48	2.26
Office & other equipments	110.19	37.06	0.55	146.70		72.58	74.12	44.77	7.51
Fixed assets costing upto ₹ 10000/- Capital expenditure	77.38 0.44	21.61	1.41	97.58 0.44		97.58 0.44			21.59
Assets Given on Lease	497.15			497.15	3.64	497.00	3.79	4.15	4.18
EDP Equipment taken on lease	287.61	74.62	22.09	340.14		184.39	155.75	138.12	55.63
Office & other equipment taken on lease	2.49	2.18		4.67		0.45	4.22	2.23	0.20
Other assets taken on lease	1.19	0.15		1.34		1.34		0.28	0.45
<b>Total Tangible Assets - Factory</b>	<b>7567.43</b>	<b>1662.51</b>	<b>42.12</b>	<b>9187.82</b>	<b>3.64</b>	<b>5126.27</b>	<b>4065.19</b>	<b>3169.50</b>	<b>762.89</b>
<b>(ii) Intangible Assets</b>									
- Internally developed									
Others	18.67	11.32	0.03	29.96		14.20	15.76	11.29	6.87
-Others									
Software	114.92	4.94	0.03	119.83		110.00	9.83	16.40	11.49
Patents & Trade Marks									
Technical Know-how	125.32	15.98		141.30		30.85	110.45	107.90	13.43
Others	8.85			8.85		8.80	0.05		
<b>Total Intangible Assets - Factory</b>	<b>267.76</b>	<b>32.24</b>	<b>0.06</b>	<b>299.94</b>		<b>163.85</b>	<b>136.09</b>	<b>135.59</b>	<b>31.79</b>
<b>Total of Factory Assets</b>	<b>7835.19</b>	<b>1694.75</b>	<b>42.18</b>	<b>9487.76</b>	<b>3.64</b>	<b>5290.12</b>	<b>4201.28</b>	<b>3305.09</b>	<b>794.68</b>
<b>Township/ Residential</b>									
<b>(i) Tangible Assets</b>									
Freehold land (incl. development exp.)	2.09			2.09			2.09	2.09	
Leasehold land (incl. development exp.)	1.99			1.99		0.58	1.41	1.43	0.02
Roads, bridges and culverts	5.09			5.09		2.92	2.17	2.25	0.08
Buildings	130.87	0.72	0.66	130.93		62.18	68.75	70.16	2.06
Leasehold buildings	0.27			0.27		0.20	0.07	0.08	0.01
Drainage, sewerage and water supply	17.14	0.05		17.19		14.15	3.04	3.38	0.39
Plant and Machinery	16.58	1.05	0.08	17.55		11.19	6.36	6.41	1.09
Electronic Data Processing Equipment									
Electrical installations	17.13	0.62	0.02	17.73		14.52	3.21	3.03	0.42
Vehicles	1.08			1.08		1.01	0.07	0.08	0.01
Furniture & fixtures	0.73	0.12		0.85		0.29	0.56	0.52	0.08
Office & other equipments	19.22	2.60	0.15	21.67		13.87	7.80	6.40	1.07
Fixed assets costing upto ₹ 10000/-	2.36	0.09	0.01	2.44		2.44			0.09
<b>Total Tangible Assets - Township</b>	<b>214.55</b>	<b>5.25</b>	<b>0.92</b>	<b>218.88</b>		<b>123.35</b>	<b>95.53</b>	<b>95.83</b>	<b>5.32</b>
<b>Total of Township Assets</b>	<b>214.55</b>	<b>5.25</b>	<b>0.92</b>	<b>218.88</b>		<b>123.35</b>	<b>95.53</b>	<b>95.83</b>	<b>5.32</b>
<b>Total of Tangible Assets</b>	<b>7781.98</b>	<b>1667.76</b>	<b>43.04</b>	<b>9406.70</b>	<b>3.64</b>	<b>5249.62</b>	<b>4160.72</b>	<b>3265.33</b>	<b>768.21</b>
<b>Total of Intangible Assets</b>	<b>267.76</b>	<b>32.24</b>	<b>0.06</b>	<b>299.94</b>		<b>163.85</b>	<b>136.09</b>	<b>135.59</b>	<b>31.79</b>
<b>Total of Factory &amp; Township</b>	<b>8049.74</b>	<b>1700.00</b>	<b>43.10</b>	<b>9706.64</b>	<b>3.64</b>	<b>5413.47</b>	<b>4296.81</b>	<b>3400.92</b>	<b>800.00</b>
<b>Previous year</b>	<b>6580.14</b>	<b>1517.90</b>	<b>48.30</b>	<b>8049.74</b>	<b>-0.18</b>	<b>4648.64</b>	<b>3400.92</b>	<b>2415.40</b>	<b>544.12</b>
The details of R&D capital items included in above									
<b>Plant &amp; Machinery &amp; other Equipments</b>	<b>303.61</b>	<b>57.80</b>	<b>2.29</b>	<b>359.12</b>		<b>234.87</b>	<b>124.25</b>	<b>75.94</b>	<b>28.53</b>
<b>Building</b>	<b>25.80</b>	<b>5.82</b>		<b>31.62</b>		<b>16.64</b>	<b>14.98</b>	<b>11.21</b>	<b>0.92</b>

Gross Block as at 31.03.2012 includes assets condemned and retired from active use ₹ 59.20 Crore (Previous year ₹ 49.99 Crore)

Net Block as at 31.03.2012 includes assets condemned and retired from active use ₹ 0.18 Crore (Previous year ₹ 0.19 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.

2011-12    2010-11

30.81	30.81
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There is no impairment loss in fixed assets during the year.

## 11 - Non current investments

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>Long Term Investments (at cost)</b>				
<b>Unquoted Shares(Fully paid up):</b>				
<b>TRADE:</b>				
1402 (previous year 360) Equity shares of ₹ 10/- each (Previous year ₹38.95 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 Companies -</b>				
337978 (previous year 337978) Equity Shares of ₹ 1000/- each of Bharat Heavy Plate & Vessels Ltd. acquired at a nominal value of ₹ 1/-	*		*	
5355000 (previous year 51000) Equity Shares of ₹ 10/- each of BHEL Electrical Machines Ltd.	5.36	5.36	0.05	0.05
<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 dimunition in value	2.00		2.00	
— Nil (previous year 50000) Equity Shares of ₹ 10/- each of Barak Power Pvt. Ltd.	-		0.05	
Less: Provision for dimunition in value	-	0.00	0.05	0.00
— 25000000 (previous year 25000000) Equity Shares of ₹ 10/- each of NTPC-BHEL Power Projects Pvt. Ltd.	25.00		25.00	
— 32500000 (previous year 32500000) Equity Shares of ₹ 10/- each of Udangudi Power Corporation Ltd.	32.50		32.50	
— 331523312 (previous year 331523312) Equity Shares of ₹ 10/- each of Raichur Power Corporation Ltd.	331.52		331.52	
— 22500000 (previous year 2500000) Equity Shares of ₹ 10/- each of Dada Dhuniwale Khandwa Power Ltd.	22.50		2.50	
— 2500000 (previous year nil) Equity Shares of ₹ 10/- each of Latur Power company Ltd.	2.50		-	
— 2379999 (previous year 2379999) Equity Shares of ₹ 10/- each of BHEL-GE Gas Turbine Services Pvt. Ltd.	2.38	416.40	2.38	393.90
<b>Advances deposit towards issue of Shares</b>				
To Bharat Heavy Plate & Vessels Ltd. (Subsidiary Company)	34.00		34.00	
To BHEL Electrical Machines Ltd. (Subsidiary Company)	-	34.00	5.31	39.31
<b>OTHER THAN TRADE:</b>				
3 (Previous year 3) shares of ₹100/- each of BHEL House Building Cooperative Society Ltd., Hyderabad		*		*
* Value of less than ₹ 1 lakh/-				
	461.67		439.17	
<b>Aggregate value of Unquoted Investments</b>	461.67		439.17	
<b>Aggregate provision in diminution in value of Investments</b>	2.00		2.05	

## 12 - Deferred tax assets (Net)

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Provisions	1018.58	1819.50
Statutory dues	555.64	411.99
Modvat Adjustment	75.57	45.43
Others	36.47	9.64
	<u>1686.26</u>	<u>2286.56</u>
Deferred Tax Liabilities		
Depreciation	140.02	123.01
<b>Deferred tax assets (net)</b>	<u>1546.24</u>	<u>2163.55</u>

## 13 - Long term loans and advances

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>Loans</b>		
Loans to Subsidiary Companies	218.87	217.54
Capital advance	21.77	28.42
Deposits	42.65	36.85
Loans to employees	0.01	0.01
Loans to Public Sector Undertakings	16.00	0.00
Loans to Others	0.01	0.02
Interest accrued and or due on loans	0.78	1.39
	<u>300.09</u>	<u>284.23</u>
<b>Advances (Recoverable in cash or in kind or for value to be received)</b>		
For purchases	416.66	469.09
To Others	118.02	136.71
	<u>534.68</u>	<u>605.80</u>
<b>Deposits</b>		
Balance with customs, Port Trust and other Govt Authorities	38.50	33.82
Advance Tax/TDS (Net of Provision for Taxation ₹ 8293.49 crore)	72.31	-
	<u>945.59</u>	<u>923.85</u>
Less: Provisions	45.49	40.94
	<u>900.10</u>	<u>882.91</u>
<b>Sub classification:-</b>		
Secured, considered good	16.27	1.24
Unsecured, considered good	883.83	881.67
Doubtful	45.49	40.94
	<u>945.59</u>	<u>923.85</u>
Includes:		
Due from Directors	-	-
Due from Officers	-	0.01

## 14 - Other non-current assets

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
Long term trade receivables	11494.90		8496.03	
Less: Provision for bad & doubtful debts	1749.90		1034.16	
Less :Automatic price reduction adjustment	340.59	9404.42	210.74	7251.13
Non moving inventory	162.39		178.82	
Less: Provision for non-moving inventory	58.16	104.23	67.83	110.99
		9508.65		7362.12
<b>Sub classification: Long term trade receivables</b>				
Secured, considered good		-		-
Unsecured, considered good		9404.42		7251.13
Doubtful		2090.49		1244.90
		11494.90		8496.03
Long term trade receivables include deferred debts - ₹ 8194.77 crore (previous year ₹ 6810.73 crore)				

## 15 - Inventories

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
Raw material & components	4937.63		3699.91	
Material-in-transit	1846.42	6784.05	1445.99	5145.90
Work-in-progress (including items with sub-contractors)		4820.87		4126.25
Finished goods	951.41		855.91	
Inter division transfers in transit	199.60	1151.01	176.29	1032.20
Stores & spare parts				
Production	209.83		165.07	
Fuel stores	15.03		20.57	
Miscellaneous	35.87	260.73	25.52	211.16
Materials with fabricators/contractors		316.70		237.07
Loose tools		46.16		29.25
Scrap (at estimated realisable value)		64.98		70.22
		13444.50		10852.05
Refer to Significant accounting policy No. 8 regarding mode of valuation				

## 16 - Trade receivables

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Debts outstanding for a period exceeding six months	10279.39	9252.38
Other debts	16811.30	11656.34
	<u>27090.69</u>	<u>20908.72</u>
Less : Provision for bad & doubtful debts & automatic price reduction adjustment	754.56	805.22
	<u>26336.13</u>	<u>20103.50</u>
Trade receivables include deferred debts - ₹ 6057.02 crore (previous year ₹ 4090.74 crore)		
Trade receivables include goods despatched pending billing - ₹1717.07 crore (previous year ₹ 1828.39 crore)		
<b>Particulars of trade receivables :</b>		
Secured, considered good	-	-
Unsecured, considered good	26336.13	20103.50
Doubtful	754.56	805.22
	<u>27090.69</u>	<u>20908.72</u>

## 17 - Cash & cash equivalents

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Balances with Banks *	6311.62	9186.53
Cheques, Demand Drafts on hand	359.11	433.52
Cash & Stamps in on hand	1.25	1.46
Remittances in transit	0.00	8.64
	<u>6671.98</u>	<u>9630.15</u>
<b>* Includes</b>		
Earmarked against unclaimed dividend	2.18	3.74
Non-repatriable account	19.28	21.79

## 18 - Short term loans and advances

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>Loans</b>				
Loans to Subsidiary Companies	1.70		-	
Loans to Employees	0.02		0.03	
Materials Issued on loan	9.74		10.05	
Loans to others	0.01		0.01	
Loans to Public Sector Undertakings	4.00		0.00	
Interest accrued and or due on loans	1.59	17.06	2.06	12.15
<b>Advances (Recoverable in cash or in kind or for value to be received)</b>				
To subsidiaries	1.86		1.76	
To employees	30.97		30.28	
For purchases	945.26		1036.96	
To Others	844.57	1822.66	914.61	1983.61
<b>Deposits</b>				
Balance with customs, Port Trust and other Govt Authorities		285.34		243.79
Others		44.50		195.69
		2169.56		2435.24
<b>Less: Provision for doubtful loans &amp; advances</b>		57.83		52.71
		2111.72		2382.53
<b>Particulars of Loans and advances:-</b>				
Secured, considered good		4.25		10.38
Unsecured, considered good		2107.47		2372.15
Doubtful		57.83		52.71
		2169.56		2435.24
Includes:				
Due from Directors		-		*
Due from Officers		0.13		0.13
* value less than ₹ 1 lakh				

## 19 - Other current assets

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
Interest Accrued on Banks Deposits and investments		150.61		309.63
		150.61		309.63

## 20 - Revenue from operations

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
Sales less returns (gross)	44147.75	38312.97
Income from external erection & other services & revenue from works contract	<u>5362.03</u>	<u>5024.03</u>
	<b>49509.78</b>	<b>43337.00</b>

## 21 - Other Operational Income

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
Export Incentives	11.95	42.89
Rental income on leased assets	0.93	0.93
Lease equalisation account	<u>3.82</u> <u>4.75</u>	<u>14.05</u> <u>14.98</u>
Scrap sale	307.59	271.68
Receipt from sale/transfer of surplus stock	0.17	0.05
Others	<u>426.57</u>	<u>350.86</u>
	<b>751.03</b>	<b>680.46</b>

## 22 - Other Income

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
<b>A. Other income</b>		
Profit from sale of fixed assets & capital stores (net)	4.01	4.27
Dividend on Investment (Long term-Trade)	16.98	14.99
Exchange variation ( net)	99.32	99.69
Others (including grants of ₹ 0.33 crore (prev year ₹ 0.33 crore) from Govt. of India for R & D Projects)	<u>331.37</u>	<u>274.87</u>
<b>Total (A)</b>	<b>451.68</b>	<b>393.82</b>
<b>B. Interest Income *</b>		
From customers	2.56	0.01
From employees	0.00	0.01
From banks	786.78	610.03
Others	24.53	16.77
*(TDS ₹ 83.22 crore (previous year ₹ 56.96 crore)		
<b>Total (B)</b>	<b>813.87</b>	<b>626.82</b>
<b>Total Other Income</b>	<b>Total (A+B)</b>	
	<b>1265.55</b>	<b>1020.64</b>

## 23 - Cost of material consumption, erection and engineering expenses

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
Consumption of raw material & components	24549.35	19417.59
Consumption of stores & spares	563.77	469.86
Erection and Engineering exp.-payment to subcontractors	3794.61	3321.62
	<u>28907.73</u>	<u>23209.07</u>

## 24 - Increase in work in progress & finished goods

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
<b>Work -in -progress</b>		
Closing Balance	4821.13	4126.60
Opening Balance	4126.60	4321.40
	694.53	-194.80
<b>Finished Goods</b>		
Closing Balance	952.42	858.65
Opening Balance	858.65	599.53
	93.77	259.12
<b>Inter-division transfer in transit</b>	34.90	63.03
	<u>823.20</u>	<u>127.35</u>
<b>NOTE:</b>		
<b>Element of Excise duty in Finished Goods</b>		
Closing Balance	99.97	81.96
Opening Balance	81.96	53.06

## 25 - Employee benefits expense

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
Salaries, wages, bonus, allowances & other benefits	4595.08	4540.04
Contribution to gratuity fund	150.66	216.92
Contribution to provident and other funds	275.77	269.38
Group insurance	12.12	9.90
Staff welfare expenses	432.20	360.47
	<u>5465.83</u>	<u>5396.71</u>

## 26 - Finance costs

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
Interest expense	47.34	54.73
Other Borrowing Costs	3.94	-
	<b>51.28</b>	<b>54.73</b>
Less: Borrowing Cost capitalised	-	-
	<b>51.28</b>	<b>54.73</b>

## 27 - Other expenses of manufacture, administration, selling & distribution

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
Royalty, technical, Resident consultant's charges & other consultancy charges	79.84	133.22
Rent	94.92	79.99
Excise duty	248.30	209.13
Power & Fuel	510.25	402.86
Rates & taxes	46.26	38.52
Service tax	15.15	12.21
Insurance	133.46	109.22
Repairs:		
Buildings	79.64	54.01
Plant & machinery	35.60	27.92
Others	138.21	119.31
Other expenses in connection with exports	26.79	33.14
Loss on investments written off	0.09	-
Bad debts written off	22.64	20.94
Carriage outward	623.06	358.00
Travelling & conveyance	183.02	164.52
Miscellaneous expenses	874.39	731.36
Liquidated damages charged off	74.56	20.03
Donations	0.17	0.18
Corporate social responsibility & sustainability development expenses	36.46	21.55
	<b>3222.82</b>	<b>2536.11</b>

## 28 - Provision (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>Doubtful debts ,Liquidated Damages and Loans &amp; advances</b>				
Created during the year	973.61		729.76	
Less written back during the year	345.30	628.31	240.70	489.06
<b>Contractual Obligations</b>				
Created during the year	1193.73		2687.58	
Less written back during the year	330.92	862.81	603.07	2084.51
<b>Others</b>				
Created during the year	52.56		168.37	
Less written back during the year	141.10	-88.54	26.82	141.55
		1402.58		2715.12

## 29 - Prior period adjustments (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>INCOME</b>				
Sales less returns	-19.32		-1.74	
Other operational income	0.30		-	
Other income	0.17		-	
Interest income	-0.21	-19.06	-	-1.74
<b>EXPENDITURE</b>				
Consumption of Raw material & components	1.64		0.24	
Depreciation	2.67		0.32	
Misc. Expenses	-4.11	0.19	-0.51	0.05
		-19.25		-1.79

## 30 - Tax Expense

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>a) Current tax</b>				
for current year	3277.00		3712.00	
excess provision created in earlier years written back	-632.00	2645.00	-81.45	3630.55
<b>b) Deferred tax charge /(credit)</b>		617.30		-636.31
		3262.30		2994.24

## Significant Accounting Policies

### 1 Basis of preparation of Financial Statements

The financial statements have been prepared as of a going concern on historical cost convention and on accrual method of accounting in accordance with the generally accepted accounting principles and the provisions of the Companies Act, 1956 as adopted consistently by the Company.

### 2 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.

Cost includes value of internal transfers for capital works, taken at actual / estimated factory cost or market price, whichever is lower. Effect of extraordinary events such as devaluation / revaluation in respect of long term liabilities / loans utilised for acquisition of fixed assets is added to / reduced from the cost.

Land acquired free of cost from the State Government is valued at ₹1/- except for that acquired after 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.

### 3 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 recognised 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 recognised as sales at normal sale price / fair value / NPV.

Finance income is recognised over the lease period.

Initial direct costs are expensed at the commencement of lease.

#### B) Assets Taken on Lease on or after 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 therefrom is recognised as income over the lease period.

#### B) Assets Taken on Lease:

Lease payments made for assets taken on operating lease are recognised as expense over the lease period.

### 4 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 account 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.

## 5 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.

## 6 Depreciation

- (i) Depreciation on fixed assets (other than those used abroad under contract) is charged upto the total cost of the assets on straight-line method as per the rates prescribed in Schedule XIV of the Companies Act, 1956, except where depreciation is charged at rates determined on the basis of the technically assessed estimated useful lives shown hereunder:-

	Single Shift	Double Shift	Triple Shift
General Plant & Machinery Automatic/Semi-	8%	12%	16%
Automatic Machines	10%	15%	20%
Erection Equipment,			
Capital Tools & Tackles	20%		
Township Buildings			
– Second Class	2.5%		
– Third Class	3.5%		
Railway Sidings	8%		
Locomotives & Wagons	8%		
Electrical Installations	8%		
Office & Other Equipments	8%		
Drainage, Sewerage &			
Water supply	3.34%		
Electronic Data			
Processing Equipment	20%		

In respect of additions to/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

- (ii) Fixed assets used outside India pursuant to long term contracts are depreciated over the duration of the initial contract.
- (iii) Fixed assets costing ₹ 10,000/- or less and those whose written down value as at the beginning of the year is ₹ 10,000/- or less, are depreciated fully. In so far as township buildings are concerned, the cost per tenement is the basis for the limit of ₹ 10,000/-.
- (iv) At erection/project sites: The cost of roads, bridges and culverts is fully amortized over the tenure of the contract, while sheds, railway sidings, electrical installations and other similar enabling works (other than purely temporary erections, wooden structures) are so depreciated after retaining 10% as residual value.
- (v) Purely Temporary Erection such as wooden structures are fully depreciated in the year of construction.
- (vi) Leasehold Land and Buildings are amortised over the period of lease. Buildings constructed on land taken on lease are depreciated over their useful life or the lease period, whichever is earlier.

## 7 Investments

- (i) Long-term investments are carried at cost. Decline, other than temporary, in the value of such investments, is recognised and provided for.
- (ii) Current investments are carried at cost or quoted/fair value whichever is lower. Unquoted current investments are carried at cost.
- (iii) The cost of investment includes acquisition charges such as brokerage, fees and duties. Any reduction in the carrying amount & any reversals of such reductions are charged or credited to the Statement of Profit & Loss.

## 8 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 recognised immediately irrespective of whether or not work has commenced.
- b) For all other contracts:  
Where current estimates of cost and selling price of an individually identified project forming part of a contract indicates loss, the anticipated loss in respect of such project on which the work had commenced, is recognised.
- 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.

## 9 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 01.04.2003 :

Revenue is recognized on percentage completion method based on the percentage of actual cost incurred upto the reporting date to the total estimated cost of the contract.

### B. For all other contracts

- (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.

## 10 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.

## **11 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 Profit & Loss Account.

## **12 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.

## **13 Claims by/against the Company**

- (i) Claims for liquidated damages against the Company are recognised in accounts based on management's assessment of the probable outcome with reference to the available information supplemented by experience of similar transactions.
- (ii) Claims for export incentives / duty drawbacks / duty refunds and insurance claims etc. are taken into account on accrual.
- (iii) Amounts due in respect of price escalation claims and/or variations in contract work are recognised as revenue only when there are

conditions in the contracts for such claims or variations and/or evidence of the acceptability of the same from customers. However, escalation is restricted to intrinsic value.

## **14 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.

## **15 Government Grants**

Government Grants are accounted when there is reasonable certainty of their realisation.

Grants related to fixed depreciable assets are adjusted against the gross cost of the relevant assets while those related to non-depreciable assets are credited to capital reserve. Grants related to revenue, unless received as compensation for expenses/losses, are recognised as revenue over the period to which these are related on the principle of matching costs to revenue.

Grants in the form of non-monetary assets are accounted for at the acquisition cost, or at nominal value if received free.

## 31- Other Notes on Financial Statements

S. No.	Description		2011-12	2010-11
1	Estimated amount of contracts, net of advances, remaining to be executed on capital account and not provided for	₹ Crore	<b>625.12</b>	1331.82
	The above includes for acquisition of intangible assets	₹ Crore	<b>13.84</b>	4.68
	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.			
2	Land and buildings includes			
a)	(i) Acres of land for which formal transfer/ lease deed has not been executed	Acres	<b>8662.27</b>	8662.27
	(ii) Number of flats for which formal transfer/ lease deed has not been executed	Nos	<b>12</b>	12
	(iii) Number of buildings for which formal transfer/ lease deed has not been executed	Nos	<b>1</b>	1
	(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	<b>91.52</b>	91.52
b)	Acres of land leased to Ministry of Defence, Govt. of India Departments & others	Acres	<b>28.77</b>	28.77
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 is under adverse possession.	Acres	<b>122.94</b>	97.25
3	The impact on the profit of providing 100 percent depreciation on fixed assets upto ₹10,000/- each, without considering such impact of earlier years, is as under :			
	100% depreciation on assets upto ₹10,000/- charged off in the accounting year.	₹ Crore	<b>22.98</b>	10.02
	Normal depreciation on above.	₹ Crore	<b>5.79</b>	2.99
	Excess amount charged.	₹ Crore	<b>17.19</b>	7.03
4	Sales less returns			
a	Includes based on provisional prices;	₹ Crore	<b>242.89</b>	0.70
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;	₹ Crore	<b>2156.26</b>	1388.54
c	includes despatches of equipment held on behalf of customers at their request for which payment has been received by Company; and	₹ Crore	<b>30.88</b>	96.99
d	excludes for price reduction (net of refund) due to delay in delivery as per the terms of the contract.	₹ Crore	<b>263.79</b>	13.94

<b>5</b>	<b>Contingent liabilities :</b>			
	Claims against the company not acknowledged as debt :			
i)	a Income Tax Pending Appeals	₹ Crore	<b>45.20</b>	32.61
	b Against which paid under protest included under the head "deposits others"	₹ Crore	<b>0.00</b>	0.02
ii)	a Sales Tax Demand	₹ Crore	<b>732.70</b>	509.84
	b Against which paid under protest included under the head "Advances Recoverable"	₹ Crore	<b>98.39</b>	92.97
iii)	a Excise Duty demands	₹ Crore	<b>320.08</b>	216.14
	b Against which paid under protest included under the head "Advances Recoverable"	₹ Crore	<b>7.84</b>	8.41
iv)	a Custom Duty demands	₹ Crore	<b>0.21</b>	0.21
	b Against which paid under protest included under the head "Advances Recoverable"	₹ Crore	<b>0.06</b>	0.06
v)	Court & Arbitration cases	₹ Crore	<b>559.23</b>	375.07
vi)	a Liquidated Damages	₹ Crore	<b>2283.63</b>	1401.11
	b Amount deducted by customers towards LD included in vi) a	₹ Crore	<b>1579.19</b>	825.70
vii)	Counter Claim by contractors	₹ Crore	<b>0.61</b>	0.61
viii)	a Service Tax Demand	₹ Crore	<b>132.17</b>	214.13
	b Against which paid under protest	₹ Crore	<b>0.00</b>	0.22
ix)	Others	₹ Crore	<b>106.34</b>	120.58
x)	Corporate Guarantee given on behalf of subsidiary company (BHPV)	₹ Crore	<b>9.57</b>	-

(In view of the various court cases and litigations and claims disputed by the company financial impact as to outflow of resources is not ascertainable at this stage).

- 6** Cash credit limit from banks aggregating to ₹ 3000 crore (previous year ₹ 600 crore) and Company's counter guarantee / indemnity obligations in regard to bank guarantee / letters of credit limit aggregating to ₹ 52000 Crore (previous year ₹ 49400 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, book debts and other current assets both present and future. The outstanding bank guarantees as at 31.03.2012 is ₹ 38200 Crore (previous year ₹ 37474 Crore) and Corporate Guarantee as on 31.03.2012 is ₹ 4448.14 Crore (Previous year ₹ 4192 Crore).
- 7** Other payable/ liabilities include a sum of ₹ 100.51 Crore (previous year ₹100.51 Crore) towards guarantee fee demanded by the Government of India in respect of foreign currency loans taken by the company at the instance of the Government upto 1990-91. The matter for its waiver has been taken up with the Government since there was no stipulation for payment of such guarantee fee at the time the loans (guaranteed by Government) were taken. Vide BHEL letter dated 18.02.2011, Department of Heavy Industries (DHI) has been again requested for waiver of the guarantee fee. The matter is under discussions with DHI.
- 8** Amorphous Silicon Solar Cell Plant (ASSCP), Gurgaon was taken on April 1, 1999 from Ministry of Non-conventional Energy Sources on lease for a period of 30 years. The formal lease agreement with the Ministry of Non-Conventional Energy Sources is yet to be finalised.
- 9** Balances shown under debtors, creditors, contractor's advances, deposits and stock/materials lying with sub-contractors/fabricators are subject to confirmation, reconciliation & consequential adjustment, if any. The reconciliation is carried out ongoing basis as the company is in the business of long term construction contracts & provisions wherever considered necessary have been made in line with the guidelines.

## 10 The disclosure relating to Micro and Small Enterprises

### Total Outstanding at the end of the accounting year

		2011-12	2010-11
		<b>554.33</b>	312.63
i	The principal amount remaining unpaid to supplier as at the end of the accounting year.	₹ Crore <b>542.82</b>	302.81
ii	The interest due thereon remaining unpaid, to supplier as at the end of accounting year.	₹ Crore <b>11.51</b>	9.82
iii	The amount of interest paid, along with the amounts of the payment made to the supplier beyond appointed day during the year.	₹ Crore <b>0.00</b>	0.02
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.	₹ Crore <b>0.00</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.	₹ Crore <b>1.76</b>	0.78
vi	The amount of interest accrued during the year and remaining unpaid at the end of year.	₹ Crore <b>4.05</b>	4.11
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.	₹ Crore <b>5.22</b>	2.61

## 11 a) The disclosures relating to Construction Contracts entered on or after 01.04.2003 as per the requirement of Accounting Standard -7 (Revised) are as follows:

Contract revenue recognised for the year

In respect of Contract in progress at the end of year :

Cost incurred and recognised profits (less recognised losses)

Amount of advance received

Amount of retentions (deferred debts)

In respect of dues from customers after appropriate netting off

Gross amount due from customer for the contract work as an asset

Gross amount due to customer for the contract work as a liability

Contingencies

(₹ in Crore)

	2011-12	2010-11
	<b>41979.32</b>	37108.87
	<b>166382.69</b>	126492.61
	<b>10231.36</b>	10936.59
	<b>13466.79</b>	9689.76
	<b>2658.54</b>	4946.97
	<b>4021.67</b>	3401.12
	-	-

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.

12 The company has accounted for leave encashment expenditure with 30 days a month as base for computation of encashment of leave as per specific instructions from Department of Public Enterprises (DPE) on the subject. This is against the earlier formula of computation of leave encashment on 26 days a month as base. The impact due to this change, is increase in Profit before tax by ₹ 180.46 crore for the year 2011-12. However, in some of the units the workers union has filed an appeal against the change and court has given interim stay order. The consequent impact, if any, will be accounted for in the year of settlement.

- 13** The operations of the Libyan project site have been consolidated based on the unaudited accounts maintained at the regional headquarter at Noida, in view of the ongoing turmoil in Libya.
- 14** The details of Research & Development Expenditure incurred during the year which is deductible under section 35 (2AB) of the Income Tax Act. 1961.

**A. Capital Expenditure on R&D**

		<b>2011-12</b>	<b>2010-11</b>
Land	₹ Crore	<b>0.04</b>	0.00
Building	₹ Crore	<b>5.82</b>	2.12
Plant & Machinery & Other Equipments	₹ Crore	<b>55.51</b>	52.36
Total Capital Expenditure	₹ Crore	<b>61.37</b>	54.48

**B. Revenue Expenditure on R & D**

Salaries & Wages	₹ Crore	<b>158.86</b>	156.55
Material Consumables/spares	₹ Crore	<b>27.13</b>	29.14
Manufacturing & Other Expenses (Net of Income)	₹ Crore	<b>63.97</b>	54.01
Total Revenue Expenditure (Net of Income)	₹ Crore	<b>249.96</b>	239.70

Note: Expenditure on land and building has not been considered as deductible under section 35 (2AB) of the Income Tax Act, 1961.

- 15** The disclosure relating to derivative instruments:

a) The derivative instruments that are hedged and outstanding as on 31.03.2012 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 (i.e. Debtors)

**in foreign currency**

		<b>2011-12</b>	<b>2010-11</b>
in US \$	in Crore	<b>55.61</b>	34.60
in EURO	in Crore	<b>46.69</b>	34.32
in LYD	in Crore	<b>0.87</b>	0.94
in RO	in Crore	<b>0.03</b>	0.19

**In Indian currency**

in US \$	₹ Crore	<b>2774.30</b>	1542.12
in EURO	₹ Crore	<b>3123.98</b>	2127.66
in LYD	₹ Crore	<b>35.60</b>	34.39
in RO	₹ Crore	<b>4.48</b>	22.05
in Others	₹ Crore	<b>43.59</b>	38.92

b) Liabilities (i.e. Advances from customers / creditors)

**in foreign currency**

in US \$	in Crore	<b>35.37</b>	29.40
in EURO	in Crore	<b>34.17</b>	32.26
in LYD	in Crore	<b>1.49</b>	1.46

**In Indian currency**

in US \$	₹ Crore	<b>1777.45</b>	1326.04
in EURO	₹ Crore	<b>2347.33</b>	2064.51
in LYD	₹ Crore	<b>62.18</b>	54.78
in Others	₹ Crore	<b>230.31</b>	115.28

(₹ in Crore)

16	Remuneration paid/payable to Directors (including Chairman & Managing Director)*	2011-12	2010-11
	Salaries & Allowances	2.15	1.67
	Contribution to PF	0.10	0.06
	Contribution to Gratuity Fund	0.08	0.06
	Others	0.21	0.24

\*The above amount include 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 provisionsof I.T. Rules 1962 would amount to ₹ 0.02 Crore (Previous Year ₹ 0.01 Crore)

(₹ in Crore)

17	a) Expenditure on departmental Repair & maintenance which are as under:	2011-12	2010-11
	Plant & Machinery	178.30	157.27
	Buildings	54.93	45.54
	Others	36.75	30.33
	b) Agency Commission on exports included in expenses in connection with exports	17.48	21.63
	c) Expenditure on research & development	320.26	360.83
	d) Rent Residential	73.55	65.70
	e) Payment to Auditors		
	As Auditors	0.50	0.40
	includes paid abroad	0.04	0.01
	Reimbursement of expenses	0.16	0.17
	Taxation matters(including certification)	0.14	0.10
	includes paid abroad	0.02	0.01
	Other services	0.33	0.24
	f) Payment to Cost Auditors	0.01	0.01
	g) Expenditure on entertainment	8.00	6.45
	h) Expenditure on foreign travel		
	No. of tours	933	994
	Expenditure in Rupees	17.20	17.43
	i) Expenditure on Publicity and Public relations		
	Salaries allowances & other benefits	10.40	9.89
	Other expenses	15.11	16.08
	j) Director's Fees	0.23	0.16

**18** 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)	
		2011-12	2010-11
1	<b>Change in present value of obligation</b>		
	a) Present value of obligation as at the beginning	1770.22	1657.46
	b) Acquisition adjustment	-	-
	c) Interest Cost	150.47	124.31
	d) Past service cost	-	-
	e) Current service cost	78.85	72.04
	f) Curtailment cost / (Credit)	-	-
	g) Settlement cost / (Credit)	-	-
	h) Benefits paid	-239.80	-240.70
	i) Actuarial (gain) / Loss	68.47	157.12
	j) Present value of obligation at the end of the period	1828.21	1770.22
2	<b>Change in the fair value of plan assets</b>		
	a) Fair value of plan assets at the beginning	1770.26	637.62
	b) Acquisition Adjustments	-	-
	c) Expected return on plan assets	150.47	54.20
	d) Contributions	-	1019.83
	e) Benefits paid	-239.80	-240.70
	f) Actuarial gain / (Loss) on plan assets	-3.53	82.27
	g) Fair value of plan assets as at the end of the year	1677.40	1553.22
3	<b>Fair value of plan assets</b>		
	a) Fair value of plan assets at the beginning	1770.26	637.62
	b) Acquisition Adjustments	-	-
	c) Actual return on plan assets	146.94	136.47
	d) Contributions	-	1019.83
	e) Benefits paid	-239.80	-240.70
	f) Fair value of plan assets at the year end	1677.40	1553.22
	g) Funded status	-150.81	-217.00
	h) Excess of actual over estimated return of plan assets	-3.53	82.27
4	<b>Actuarial gain / loss recognized</b>		
	a) Actuarial gain / (loss) for the period - obligation	-68.47	-157.12
	b) Actuarial (Gain) / loss for the period – plan assets	3.53	-82.27
	c) Total (gain) / loss for the period	72.00	74.85
	d) Actuarial (gain)/ loss recognized in the period	72.00	74.85
	e) Unrecognized actuarial (gains)/ losses at the end of the period	-	-
5	<b>The amount recognized in balance sheet and statement of profit and loss</b>		
	a) Present value of obligation as at end of the period	1828.21	1770.22
	b) Fair value of plan assets as at the end of period	1677.40	1553.22

c)	Funded status	-150.81	-217.00
d)	Excess of actual over estimated	-3.53	82.27
e)	Unrecognised actuarial (gains)/ losses	-	-
f)	Net asset/ (liability) recognized in balance sheet	-150.81	-217.00
6	Expense recognized in the statement of profit and loss a/c		
a)	Current service cost	78.85	72.04
b)	Past service cost	-	-
c)	Interest cost	150.47	124.31
d)	Expected return on plan assets	-150.47	-54.20
e)	Curtailement cost / (Credit)	-	-
f)	Settlement cost / (Credit)	-	-
g)	Net actuarial (gain) / loss recognized in the period	72.00	74.85
h)	Expenses recognized in the statement of profit & losses	150.85	217.00
Assumptions- Discounting rate 8.50% (prev. year 7.50%), Future salary increase 6.00% (prev. year 5.00%), Expected rate of return on plan assets 8.50% (prev. year 8.50%).			
<b>b)</b>	<b>Post Retirement Medical Benefits plan</b>		(₹ in Crore)
1	Change in present value of obligation	<b>2011-12</b>	<b>2010-11</b>
a)	Present value of obligation as at the beginning	951.35	860.43
b)	Acquisition adjustment	0.00	0.00
c)	Interest Cost	80.86	64.53
d)	Past service cost	0.00	0.00
e)	Current service cost	18.54	17.19
f)	Curtailement cost / (Credit)	0.00	0.00
g)	Settlement cost / (Credit)	0.00	0.00
h)	Benefits paid	-56.54	-36.10
i)	Actuarial (gain) / Loss	74.90	45.30
j)	Present value of obligation as at the end of year	1069.10	951.35
2	Change in the fair value of plan assets	-	-
3	Fair value of plan assets	-	-
	Funded Status	-1069.10	-951.35
4	Actuarial gain / loss recognized		
a)	Actuarial gain / (loss) for the period - obligation	74.90	45.30
b)	Actuarial (Gain) / loss for the period – plan assets	-	-
c)	Total (gain) / loss for the year	74.90	45.30
d)	Actuarial (gain) / loss recognized in the period	74.90	45.30
e)	Unrecognized actuarial (gains) / losses at the end of the period	-	-

5	The amount recognized in balance sheet and statement of profit and loss		
	a) Present value of obligation as at the end of the year	<b>1069.10</b>	951.35
	b) Fair value of plan assets as at the end of the year	-	-
	c) Funded status	<b>-1069.10</b>	-951.35
	d) Net assets / (liability) recognized in balance sheet	<b>-1069.10</b>	-951.35
6	Expenses recognized in the statement of profit and loss		
	a) Current service cost	<b>18.54</b>	17.19
	b) Interest cost	<b>80.86</b>	64.53
	c) Net actuarial (gain) / loss recognized in the year	<b>74.90</b>	45.30
	d) Expenses recognized in the statement of profit & loss	<b>174.30</b>	127.02
<b>c)</b>	<b>Long Term Leave Liability (EL/NEL/HPL)</b>		(₹ in Crore)
	The leave liability has been treated as other long term benefits and has been assessed using projected unit credit actuarial method.		
1	Change in present value of obligation	<b>2011-12</b>	<b>2010-11</b>
	a) Present value of obligation as at the beginning	<b>1192.95</b>	1294.22
	b) Acquisition adjustment	-	-
	c) Interest Cost	<b>101.40</b>	97.07
	d) Past service cost	-	-
	e) Current service cost	<b>42.84</b>	87.53
	f) Curtailment cost / (Credit)	-	-
	g) Settlement cost / (Credit)	-	-
	h) Benefits paid	<b>-259.62</b>	-207.59
	i) Actuarial (gain) / Loss	<b>121.65</b>	-78.27
	j) Present value of obligation at the end of the period	<b>1199.22</b>	1192.95
2	Change in the fair value of plan assets	-	-
	a) Fair value of plan assets at the beginning	-	-
	b) Acquisition Adjustments	-	-
	c) Expected return on plan assets	-	-
	d) Contributions	-	-
	e) Benefits paid	-	-
	f) Actuarial gain / (Loss) on plan assets	-	-
	g) Fair value of plan assets as at the end of the year	-	-
3	Fair value of plan assets		
	a) Fair value of plan assets at the beginning	-	-
	b) Acquisition Adjustments	-	-
	c) Actual return on plan assets	-	-
	d) Contributions	-	-

e)	Benefits paid	-	-
f)	Fair value of plan assets at the year end	-	-
g)	Funded status	-1199.22	-1192.95
h)	Excess of actual over estimated return of plan assets	-	-
4	Actuarial gain / loss recognized		
a)	Actuarial gain / (loss) for the period - obligation	-121.65	78.28
b)	Actuarial (Gain) / loss for the period – plan assets	-	-
c)	Total (gain) / loss for the period	121.65	-78.28
d)	Actuarial (gain) / loss recognized in the period	121.65	-78.28
e)	Unrecognized actuarial (gains) / losses at the end of the period	-	-
5	The amount recognized in balance sheet and statement of profit and loss		
a)	Present value of obligation as at end of the period	1199.22	1192.95
b)	Fair value of plan assets as at the end of period	-	-
c)	Funded status	-1199.22	-1192.95
d)	Excess of actual over estimated	-	-
e)	Unrecognised actuarial (gains) / losses	-	-
f)	Net asset / (liability) recognized in balance sheet	-1199.22	-1192.95
6	Expense recognized in the statement of profit and loss a /c		
a)	Current service cost	42.84	87.53
b)	Past service cost	-	-
c)	Interest cost	101.40	97.07
d)	Expected return on plan assets	-	-
e)	Curtailement cost / (Credit)	-	-
f)	Settlement cost / (Credit)	-	-
g)	Net actuarial (gain) / loss recognized in the period	121.65	-78.28
h)	Expenses recognized in the statement of profit & loss	265.89	106.32
d)	In line with the guidance note on AS-15(R), 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	₹ Crore	4.96
	Accumulated provision for shortfall in PF interest liability based on actuarial valuation	₹ Crore	32.14

## 19 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.  
 Udangudi Power Corporation Ltd.  
 Barak Power Pvt. Ltd. (wound up w.e.f. 11.10.2011)  
 Raichur Power Corporation Ltd.  
 Dada Dhuniwale Khandwa Power Ltd.  
 Latur Power Company Ltd. (w.e.f. 06.04. 2011)

**ii) Other related parties (Key Management Personnel- Functional Directors: existing & retired):**

S/Shri B.P. Rao , Anil Sachdev (upto 31.03.2012), Atul Saraya, O. P. Bhutani, M.K. Dube (w.e.f. 25.06.2011) and P. K. Bajpai (w.e.f. 01.07.2011)

**iii) Details of Transactions**

Joint Ventures		2011-12	2010-11
Purchase of Goods and Services	₹ Crore	98.14	76.06
Sales of Goods and services	₹ Crore	654.23	67.28
Receiving of Services	₹ Crore	97.52	25.24
Rendering of Services	₹ Crore	46.98	101.18
Dividend income	₹ Crore	16.96	14.99
Royalty income	₹ Crore	0.63	0.78
Purchase of shares	₹ Crore	22.50	354.02
Amounts due to BHEL at the end of the year	₹ Crore	595.06	59.68
Amounts due from BHEL (incl. advances) at the end of the year	₹ Crore	1022.24	145.01
Advance deposit towards issue of shares	₹ Crore	0.00	0.00
Provision for Doubtful debts	₹ Crore	0.76	0.02
Advances given	₹ Crore	8.36	27.04
Note : Majority of transactions are with BGGTS, NBPPL and Raichur power corporation Ltd.			
<b>Key Management Personnel (KMP)</b>			
Payment of Salaries	₹ Crore	2.54	2.02
<b>Relatives of KMP</b>			
Amounts due to BHEL at the end of the year	₹ Crore	0.00	0.01
Payment of Salaries	₹ Crore	0.20	0.20

**20 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		2011-12	2010-11
not later than one year	₹ Crore	81.80	65.52
later than one year and not later than five years	₹ Crore	143.89	120.30
later than five years	₹ Crore	0.00	0.00
Total minimum lease payments at the balance sheet date	₹ Crore	225.69	185.82

b.	Present Value of (a) above			
	not later than one year	₹ Crore	62.43	55.12
	later than one year and not later than five years	₹ Crore	123.43	102.14
	later than five years	₹ Crore	0.00	0.00
	Total of Present Value at the balance sheet date	₹ Crore	185.86	157.26
c.1	Finance charges	₹ Crore	39.83	28.56
c.2	Present value of Residual value, if any	₹ Crore	0.01	0.01
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)	<u>Operating Lease</u>		2011-12	2010-11
	The future minimum lease payments under non-cancellable operating lease are as under			
	not later than one year	₹ Crore	3.97	3.75
	later than one year and not later than five years	₹ Crore	3.29	6.25
	later than five years	₹ Crore	0.79	0.85
iv)	Details regarding rentals in respect of assets taken on lease prior to 01.04.2001 are as given below:			
	Cost of Assets			
	Land & Buildings	₹ Crore	0.01	0.01
	Computers & peripherals	₹ Crore	0.00	0.00
	Rentals payable over unexpired period of lease			
	Land & buildings	₹ Crore	0.02	0.02
	Computers & peripherals	₹ Crore	0.00	0.00

## 21 Earnings per Share:

		2011-12	2010-11
Weighted average number of Equity Shares outstanding during the year (A)	Nos. in Crore	244.760	48.952
Nominal Value of Equity Share	(₹)	2.00	10.00
Net Profit for the year (B)	(₹ in Crore)	7039.96	6011.20
Basic and Diluted Earnings Per Share (B)/(A)	(₹)	28.76	122.80
Basic and Diluted Earnings Per Share (B)/(A) - Restated	(₹)	28.76	24.56

a) During the year company has sub-divided existing equity shares of face value of ₹ 10/- into 5 equity shares of face value of ₹ 2/- each and the record date was fixed 04.10. 2011. Hence, previous year Basic and Diluted earning per share has been restated accordingly.

21.1 The company has filed Draft Red Herring Prospectus (DRHP) dated 28.09.2011 with Securities and Exchange Board of India (SEBI) on 30.09.2011 for disinvestment of 5% of the paid up equity capital out of Government of India's shareholding. Consequent upon the receipt of 'no-objection' for withdrawal of DRHP for FPO, from Department of Heavy Industry/ Department of Disinvestment, the Board of Directors in its meeting held on 03.04. 2012 has approved the withdrawal of DRHP filed by the company with (SEBI).

## 22 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:

- | a) Names of joint ventures               | Country of<br>Incorporation | Proportion of Ownership |               |
|--|-----------------------------|-------------------------|---------------|
|  |                             | 2011-12                 | 2010-11       |
| Power plant Performance Improvement Ltd. | India}                      | One share               | One share     |
| BHEL-GE Gas Turbine Services Pvt Ltd.    | India}                      | less than 50%           | less than 50% |
| NTPC-BHEL Power Projects Pvt. Ltd.       | India                       | 50%                     | 50%           |
| Udangudi Power Corporation Ltd.          | India                       | 50%                     | 50%           |
| Latur Power company Ltd.                 | India                       | 50%                     | 50%           |
| Raichur Power Corporation Ltd.           | India                       | 46%                     | 50%           |
| Dada Dhuniwale Khandwa Power Ltd.        | India                       | 50%                     | 50%           |
- b) The provision for diminution in value of investment in PPIL has been made since the company is under liquidation and the amount paid as equity is not recoverable, the investment in Barak Power Pvt. Ltd. is written off as the company has been wound up w.e.f. 11.10.2011.
- 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)

	2011-12	2010-11
Fixed Assets	4.40	3.86
Net Current Assets	50.17	36.09
Loan funds	0.22	0.17
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	2.11	1.56
Shareholders Funds	57.24	45.67
Income	260.56	212.13
Expenses	215.35	169.12
Contingent Liabilities	6.04	3.05
Capital Commitments	0.18	0.77

### NTPC-BHEL Power Project Pvt. Ltd.

(₹ in Crore)

	2011-12	2010-11
Fixed Assets	12.90	2.79
Net Current Assets	21.11	22.05
Loan funds	0.05	0.09
Misc. Exp. not written off	0.00	0.00

Deferred Tax Assets (net)	1.13	0.06
Shareholders Funds	33.15	26.61
Income	73.46	54.61
Expenses	64.74	46.51
Contingent Liabilities	4.81	1.72
Capital Commitments	15.26	22.58

**Udangudi Power Corporation Ltd.**

(₹ in Crore)

	2011-12*	2010-11
Fixed Assets	35.42	30.82
Net Current Assets	-2.64	1.91
Loan funds	0.00	0.00
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	32.78	32.73
Income	0.08	0.11
Expenses	0.00	0.00
Contingent Liabilities	0.00	0.00
Capital Commitments	0.00	6.74

\* Figures of 2011-12 are based on unaudited financial results

**Raichur Power Corporation Ltd.**

(₹ in Crore)

	2011-12*	2010-11
Fixed Assets	678.11	426.16
Net Current Assets	-167.89	-88.25
Loan funds	159.52	0.00
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	333.91	331.52
Income	0.06	0.22
Expenses	21.73	4.26

\* Figures of 2011-12 are based on unaudited financial results

**Dada Dhuniwala Khandwa Power Ltd.**

(₹ in Crore)

	2011-12*	2010-11
Fixed Assets	0.38	0.12
Net Current Assets	4.48	2.22

Loan funds	0.00	0.00
Misc. Exp. not written off	0.00	0.00
Deferred Tax Assets (net)	0.00	0.00
Shareholders Funds	22.63	2.35
Income	0.40	0.12
Expenses	0.00	0.23

\* Figures of 2011-12 are based on unaudited financial results

**Latur Power Corporation Ltd.**

(₹ in Crore)

	2011-12
Fixed Assets	0.00
Net Current Assets	2.32
Loan funds	0.00
Misc. Exp. not written off	0.28
Deferred Tax Assets (net)	0.00
Shareholders Funds	2.60
Income	0.14
Expenses	0.00
Contingent Liabilities	0.00
Capital Commitments	15.00

Latur power company Ltd. was incorporated on 06.04.2011. Therefore, first account of the company are made for the period from 06.04.2011 to 31.03.2012.

23 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)	
	2011-12	2010-11
<b>Bharat Heavy Plates &amp; Vessels Ltd. (interest free)</b>		
Loans and advances in the nature of loans outstanding	218.87	217.54
Maximum amount of loans and advances in the nature of loans outstanding during the year	218.87	217.54
<b>BHEL Electrical Machines Ltd.</b>		
Loans and advances in the nature of loans outstanding	1.70	-
Maximum amount of loans and advances in the nature of loans outstanding during the year	1.70	-

ii) No loans have been given (other than loans to employees), wherein there is no repayment schedule or repayment is beyond seven years; and

iii) There are no loans and advances in the nature of loans, to firms/companies, in which directors are interested.

24 The disclosure relating to Accounting Standard -29

	(₹ in Crore)	
	2011-12	2010-11
<b>a) Liquidated Damages</b>		
Opening	697.96	483.25
Additions	555.86	282.61
Usage/ Write off/payment	-74.56	-20.03
Withdrawal/adjustments	-41.82	-47.87
Closing Balance	1137.44	697.96
<b>Contractual Obligation</b>		
Opening	2982.16	895.36
Additions	1193.73	2687.58
Usage/ Write off/payment	-133.48	-99.09
Withdrawal/adjustments	-191.50	-501.69
Closing Balance	3850.91	2982.16

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.14 Note no. 1 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.

25 The financial statements have been prepared in line with the requirements of Revised Schedule VI of Companies Act, 1956 as introduced by the Ministry of Corporate Affairs from financial year ended on 31<sup>st</sup> March 2012. Accordingly, assets and liabilities are classified between current and non-current considering 12 months period as operating cycle. The adoption of Revised Schedule VI does not impact recognition and measurement principles followed for preparation of financial statements. However, it has significant impact on presentation and disclosures made in the financial statements. Consequently, the company has re-classified previous year figures to conform to this year classification.

26 Item of expense and income less than ₹ one Lakh are not considered for booking under Prior Period Items.

## 27. SEGMENT INFORMATION

(₹ in Crore)

	For the year ended 31.03.2012			For the year ended 31.03.2011		
<b>A PRIMARY SEGMENT-BUSINESS SEGMENTS</b>						
	<b>Power</b>	<b>Industry</b>	<b>Total</b>	Power	Industry	Total
<b>I. SEGMENT REVENUE</b>						
a. Segment Revenue	37862.87	11658.86	<b>49521.73</b>	33165.45	10214.44	43379.89
b. Operating Revenue-External	37862.87	11658.86	<b>49521.73</b>	33165.45	10214.44	43379.89
<b>II. SEGMENT RESULTS</b>						
a. Segment Results	8183.81	3342.42	<b>11526.23</b>	7935.07	2282.21	10217.28
b. Unallocated expenses (Net of income)			<b>1172.69</b>			1157.11
c. Profit before Interest, DRE & Income tax (a) - (b)			<b>10353.54</b>			9060.17
d. Interest			<b>51.28</b>			54.73
e. Net Profit before Income Tax (c) - (d)			<b>10302.26</b>			9005.44
f. Income Tax			<b>3262.30</b>			2994.24
g. Net Profit after Income Tax			<b>7039.96</b>			6011.20
<b>III ASSETS &amp; LIABILITIES</b>						
a. Segment Assets	44134.64	13430.20	<b>57564.84</b>	35367.69	11021.75	46389.44
b. Unallocated Assets			<b>9211.18</b>			12870.85
c. Total Assets			<b>66776.02</b>			59260.29
d. Segment Liabilities	31973.02	8074.50	<b>40047.52</b>	29405.57	7172.56	36578.13
e. Unallocated Liabilities			<b>1355.29</b>			2528.32
f. Total Liabilities			<b>41402.81</b>			39106.45
<b>IV OTHER INFORMATION</b>						
a. Cost incurred during the period to acquire fixed assets (Incl. CWIP)	792.95	434.94		1186.39	455.99	
b. Depreciation	598.46	150.75		408.18	122.05	
c. Non Cash Expenses (other than depreciation)	1397.25	120.37		2256.87	412.98	
<b>B. SECONDARY SEGMENT - GEOGRAPHICAL SEGMENTS</b>						
	Within India	Outside India	<b>Total</b>	Within India	Outside India	Total
1 Net Sales / Income from Operations	48059.05	1462.68	<b>49521.73</b>	41979.58	1400.31	43379.89
2 Total Assets	66297.33	478.69	<b>66776.02</b>	58862.41	397.88	59260.29
3 Cost incurred during the period to acquire Fixed Assets	1263.95	0.15	<b>1264.10</b>	1680.31	1.42	1681.73

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.

## 28. Other information

### A. Sales, Opening Stocks & Closing Stocks

(₹ in Crore)

Product	Unit	Sales during the Year 2011-2012		Op. Stock of Fin. Goods 01.04.2011		Cl. Stock of Fin. Goods 31.03.2012	
		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	3972	306.87	29	1.64	16	0.67
		(2726)	(299.38)	0	0.00	(29)	(1.64)
Control Panels	Nos	250	69.79	0	0.02	0	0.08
		(351)	(89.01)	(2)	(0.34)	0	(0.02)
Industrial controlgear	Nos	0	15.13	0	0.00	0	0.00
		0	(24.01)	0	0.00	0	0.00
Traction controlgear for AC, DC & diesel system	Set	247	164.56	8	1.07	0	0.92
		(128)	(119.80)	(1)	(0.11)	(8)	(1.07)
Rectifiers with Electronics	Nos	357	107.29	0	0.00	0	0.00
		(593)	(140.03)	(5)	(0.57)	0	0.00
Capacitors	MVAR	1590	12.39	23	0.45	27	0.28
	MVAR	(2686)	(20.66)	(100)	(1.28)	(23)	(0.45)
Bushings		0	20.73	0	0.18	0	0.20
		0	(23.43)	0	0.00	0	(0.18)
<b>Transformers</b>							
Power transformers upto 400 kv	MVA	23389	851.44	540	13.25	311	22.73
	MVA	(17752)	(702.90)	0	(0.12)	(540)	(13.25)
Instrument, welding, transformers and reactors	MVA	0	16.32	0	0.03	0	0.19
	Nos	354		25		24	
	MVA	0	(15.37)	0	0.00	(0)	(0.03)
	Nos	(389)		0	0.00	(25)	
<b>Industrial And Traction Machines</b>							
Traction Motors for AC, DC & diesel system, main/auxiliary generators	Nos	2009	493.35	30	4.50	0	10.79
		(2113)	(539.46)	(30)	(3.83)	(30)	(4.50)
Industrial machines, AC motors upto 1000 HP, DC motors & generators of all types	Nos	1392	383.25	37	5.94	108	12.18
		(1319)	(348.57)	(37)	(5.15)	(37)	(5.94)
<b>Heavy Rotating Plant &amp; Turbines</b>							
Large electrical machines above 1000 HP	Nos	389	432.08	10	11.46	30	17.42
		(383)	(347.28)	(7)	(3.03)	(10)	(11.46)
Water wheel alternators & water turbines & Mini micro turbines & generators	Nos/ MW	22	467.85	12	52.98	0	50.94
	Nos/ MW	854	0.00	0	32.35	0	39.16
	Nos/ MW	9	275.18	0	32.35	0	39.16
	Nos/ MW	380		0	(4.08)	0	(32.35)
	Nos/ MW	(15)	(347.08)	0	(4.08)	0	(32.35)
	Nos/ MW	(1149)		0	(11.93)	(12)	(52.98)
	Nos/ MW	(2)	(403.88)	0	(11.93)	(12)	(52.98)
	Nos/ MW	(1256)		0	(11.93)	(12)	(52.98)
Turbo Alternators & Steam turbines	Set	2	465.12	0	1.43	0	4.05
	Set	0	(174.08)	0	0.00	0	0.00
Heat Exchangers	Nos	46	264.24	0	0.00	0	0.00
	Nos	(42)	(258.92)	0	(0.44)	0	(1.43)
Others			222.27		0.63		0.35
			(206.28)		(0.90)		(0.63)
<b>TOTAL</b>			<b>4567.86</b>		<b>125.93</b>		<b>159.96</b>

(₹ in Crore)

Product	Unit	Sales during the Year 2011-2012		Op. Stock of Fin. Goods 01.04.2011		Cl. Stock of Fin. Goods 31.03.2012	
		Qty.	Value	Qty.	Value	Qty.	Value
<b>TP, Jhansi</b>							
Power transformers and special transformers	Nos	157	548.18	4	14.03		
ESP Transformer	Nos	(149)	(443.91)	(2)	(1.53)	(4)	(14.03)
ACEMU Transformer	Nos	1280	142.83	4	0.15	4	0.19
		(1232)	(121.67)	(8)	(0.51)	(4)	(0.15)
Freight Loco transformers	Nos	17	3.12	0	0.00	0	0.00
		(5)	(1.45)	0	0.00	0	0.00
Instrument transformers	Nos	67	51.25	0	0.00	8	6.49
		(76)	(32.89)	0	0.00	0	0.00
Bus Duct	Nos/Set	335	7.36	0	0.00	0	0.00
		(462)	(21.48)	(6)	(0.15)	0	0.00
Dry Type Transformer	Nos	0	(1.52)	0	0.00	0	0.00
		88	38.02	2	0.07		
		(162)	(58.74)	(2)	(0.07)	(2)	(0.07)
Diesel Shunters	Nos	10	32.02	0	0.00	0	0.00
		(7)	(29.26)	(1)	(0.00)	0	0.00
AC LOCO	Nos	53	367.96	1	5.62		
		(30)	(198.09)	0	0.00	(1)	(5.62)
Others/Misc.	Nos		22.68		1.47		0.31
		0	(13.64)	0	0.00	0	(1.47)
		<b>TOTAL</b>	<b>1214.09</b>	<b>21.34</b>		<b>6.99</b>	
<b>HEEP, Haridwar</b>							
Electrical Machines	MW/Nos			1/2	0.22	1/2	0.22
		0.00	0.00	(1/2)	(0.22)	(1/2)	(0.22)
Industrial controls panels	Nos			3	0.18	3.00	0.19
		0.00	0.00	(3)	(0.19)	(3)	(0.18)
<u>Turbo Sets</u>							
Turbine Modules	MW/Nos	8356/131				99/3	
		(7018/106)	4816.67	(137/2)	12.89		69.07
Turbogenerator modules	MW/Nos	3498/28	(3599.90)		(31.48)		(12.89)
		(2833/24)		(41/0.5)			
Hydro sets	MW/Nos		4.07	0	0.05		
		(200/2)	(11.10)	0	(0.14)	0	(0.05)
Super Rapid Gun Mount	Nos	3	111.83	0	0.00	0	0.00
		(2)	(53.11)	0	0.00	0	0.00
Gas Turbine	MW/Nos		4.06	0	0.00		
		0.00	(46.53)	0	0.00	0	0.00
Others			475.72	0	12.29		22.70
		0.00	(519.94)	0	(7.60)	0	(12.29)
		<b>TOTAL</b>	<b>5412.35</b>	<b>25.63</b>		<b>92.18</b>	

(₹ in Crore)

Product	Unit	Sales during the Year 2011-2012		Op. Stock of Fin. Goods 01.04.2011		Cl. Stock of Fin. Goods 31.03.2012	
		Qty.	Value	Qty.	Value	Qty.	Value
<b>HPBP, Trichy</b>							
Boilers	MT	692272	13953.26	21717	328.53	16047	285.09
		(597345)	(11793.58)	(23123)	(337.78)	(21717)	(328.53)
Valves	Nos	155976	552.14	6541	12.07	2341	45.55
		(123128)	(457.69)	(5025)	(15.43)	(6541)	(12.07)
Income from testing & other services		0	6.10	0	0.00		
		0	(6.55)	0	0.00	0	0.00
Seamless steel tubes	MT	41	0.72				
		(98)	(1.31)				
		<b>TOTAL</b>	<b>14512.22</b>		<b>340.60</b>		<b>330.64</b>
<b>BAP, Ranipet</b>							
Boiler auxiliaries	MT	304303	4201.22	23279	173.15	37701	256.25
		(281923)	(3573.62)	(12738)	(95.56)	(23279)	(173.15)
Wind Mill	MT	0	0.00	0	0.00	0.00	0.00
		0	(0.03)	0	0.00	0.00	0.00
Income from testing & other services		0	5.25				
		0	(3.03)	0	0.00	0.00	0.00
Income from external erection & other services		0	0.24				
		0	(0.84)	0	0.00	0.00	0.00
		<b>TOTAL</b>	<b>4206.71</b>		<b>173.15</b>		<b>256.25</b>
<b>HPEP, Hyderabad</b>							
60 MW Sets	Nos	P	1065.66	7P	8.63	1P	12.11
Utility Sets		(3P)	(518.00)	(1P)	(12.04)	(7P)	(8.63)
Small & Medium Sets	Nos	12P	276.56	7P	6.47	1P	11.11
		(14P)	(498.37)	(1P)	(12.29)	(7P)	(6.47)
Pumps and heaters	Nos	8P	1138.43	2P	3.46	7P	2.49
		(9P)	(1034.79)	(3P)	(5.18)	(2P)	(3.46)
Compressors	Nos	7P	655.20	3P	4.61	P	17.78
		(20P)	(596.10)	(1)	(7.56)	(3P)	(4.61)
Gas Turbine	Nos	10P	2475.10	3P	102.30	P	6.97
		(9P)	(2930.91)	(2P)	(2.70)	(3P)	(102.30)
Bowl Mills	Nos	19P	1260.15	0.00	0.00		
		(10P)	(899.35)	(3.00)	(1.20)	0.00	0.00
Heat Exchangers	Nos	P	1.65	0.00	0.00		
		(P)	(23.64)	0.00	0.00	0.00	0.00
Erection Income			40.90		0.00		
			(18.66)		0.00		0.00
Castings			3.29		0.00		
			(2.65)		0.00		0.00
Breakers	Nos	16	9.09				
		(5)	(10.36)	0	0.00		0.00
Oil Rigs	Nos	P	74.56				
		(P)	(116.40)				
		<b>TOTAL</b>	<b>7000.59</b>		<b>125.47</b>		<b>50.46</b>

(₹ in Crore)

Product	Unit	Sales during the Year 2011-2012		Op. Stock of Fin. Goods 01.04.2011		Cl. Stock of Fin. Goods 31.03.2012	
		Qty.	Value	Qty.	Value	Qty.	Value
<b>ISG, Bangalore</b>							
Other Services		0	999.29 (686.89)	0.00 0	0.00 0.00	0.00 0	0.00 0.00
		<b>TOTAL</b>	<b>999.29</b>	<b>0.00</b>		<b>0.00</b>	
<b>EDN, Bangalore</b>							
Power devices*	Nos	7461 (6252)	1.89 (1.09)	72 (146)	0.29 (0.19)	129 (72)	0.06 (0.29)
Photovoltaics	KWs	17521 (4699)	267.55 (68.06)	1 0	0.01 0.00	1 (1)	0.01 (0.01)
Control Equipments	Cubicles	5650 (5983)	1950.59 (1875.63)	19 (20)	11.79 (3.58)	176 (19)	26.49 (11.79)
		<b>TOTAL</b>	<b>2220.03</b>	<b>12.09</b>		<b>26.56</b>	
<b>EPD, Bangalore</b>							
Insulators & bushings	MT	7970 (8058)	123.22 (120.26)	595 (397)	9.13 (4.33)	513 (595)	5.25 (9.13)
Ceralin	MT	4020 (3085)	97.25 (65.35)	388 (60)	3.55 (0.56)	28 (388)	0.35 (3.55)
Income from testing & other services		(0)	0.03 (2.10)	0 (0)	0.00 (0.00)	(0)	(0.00)
		<b>TOTAL</b>	<b>220.50</b>	<b>12.68</b>		<b>5.60</b>	
<b>Power Group</b>							
Income from erection & Other services & spares			8118.83 (7811.94)		-5.79 (3.98)		1.55 (-5.79)
		<b>TOTAL</b>	<b>8118.83</b>	<b>-5.79</b>		<b>1.55</b>	
<b>IP, Jagdishpur</b>							
Insulators	CMT	6967.00 (7002.36)	74.66 (76.46)	459.91 (286.36)	5.46 (3.38)	699.46 (459.91)	8.84 (5.46)
Ceralin	MT	4391.00 (4140.00)	71.28 (63.39)	134.60 (67.64)	2.66 (2.79)	36.12 (134.60)	1.11 (2.66)
		<b>TOTAL</b>	<b>145.94</b>	<b>8.12</b>		<b>9.95</b>	
<b>IVP Goindwal</b>							
Industrial Valves	Nos	0	0.00	307 (125)	1.21 (0.53)	364.00 (307)	1.07 (1.21)
Fuel Pipe Couping	Nos	0	0.00		16 0		0.01 0.00
		<b>TOTAL</b>	<b>0.00</b>	<b>1.21</b>		<b>1.08</b>	
<b>CFP, Rudrapur</b>							
Busduct Project	Sets	35 (32)	134.85 (88.01)	14 (1)	8.98 (0.49)	21 (14)	6.76 (8.98)
		<b>TOTAL</b>	<b>134.85</b>	<b>8.98</b>		<b>6.76</b>	

(₹ in Crore)

Product	Unit	Sales during the Year 2011-2012		Op. Stock of Fin. Goods 01.04.2011		Cl. Stock of Fin. Goods 31.03.2012	
		Qty.	Value	Qty.	Value	Qty.	Value
<b>HERP, Varanasi</b>							
Spares & Repairs for Boiler/ Turbine & Auxiliaries			209.20 (186.86)		0.28 (0.36)	0.00	0.22 (0.28)
		<b>TOTAL</b>	<b>209.20</b>		<b>0.28</b>		<b>0.22</b>
<b>Transmission Business Group</b>							
Spares(Including Services)			380.65 (782.80)		8.37 (14.41)		4.22 (8.37)
		<b>TOTAL</b>	<b>380.65</b>		<b>8.37</b>		<b>4.22</b>
<b>EMRP, Mumbai</b>							
Repair & Project work			38.82 (48.44)		0.00 0.00		0.00 0.00
		<b>TOTAL</b>	<b>38.82</b>		<b>0.00</b>		<b>0.00</b>
<b>International Operations</b>							
Income from Sales (Revenue Recognition Adjustment)			20.54 (57.19)		0.00 0.00		0.00 0.00
		<b>TOTAL</b>	<b>20.54</b>		<b>0.00</b>		<b>0.00</b>
<b>Industry Sector</b>							
Income from Sales (Revenue Recognition Adjustment)			71.64 (-183.99)		0.00 0.00		0.00 0.00
		<b>TOTAL</b>	<b>71.64</b>		<b>0.00</b>		<b>0.00</b>
<b>PE&amp;SD</b>							
Industrial sets			42.94				
Gas Turbine			14.52				
		<b>TOTAL</b>	<b>57.46</b>				
Adjustment			-21.79 (-112.73)		(1.52)		0.59 (0.59)
		<b>GRAND TOTAL</b>	<b>49509.78</b>		<b>858.65</b>		<b>952.42</b>
			<b>(43337.00)</b>		<b>(599.53)</b>		<b>(858.65)</b>

(₹ in Crore)

	For the year ended 31.03.2012	For the year ended 31.03.2011
<b>b. Value of imports</b>		
CIF basis		
Raw materials	4884.27	4243.07
Components and spare parts	4049.33	2837.80
Capital goods	401.25	700.94
<b>c. Expenditure in foreign currency</b>		
Royalty	68.59	52.96
Know-how	4.28	132.10
Professional & Consultancy fees	1.93	0.29
Interest and others (incl. on foreign sites)	405.16	421.61
Dividend : @		
a) number of non-resident shareholders	6698	5058
b) number of shares held	63851148	74213588
c) gross amount of dividend	114.29	91.28
d) year to which dividend relates	2010-11	2009-10
Interim Dividend : @	(Final Dividend)	(Final Dividend)
a) number of non-resident shareholders	8292	5938
b) number of shares held	339026338	64320886
c) gross amount of dividend	92.22	85.22
d) year to which dividend relates	2011-12	2010-11
	(Interim Dividend)	(Interim Dividend)
<p>@ 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.</p>		
<b>d. Value of consumption of raw materials, components, stores &amp; spare parts</b>		
#Imported (including custom duty)	8048.81	6217.12
Indigenous	17064.31	13669.89
Percentage of total consumption		
Imported	32	31
Indigenous	68	69
<b>e. Earnings in foreign exchange</b>		
Export of goods (FOB basis) **	1006.53	769.21
Interest	0.03	0.01
Erection & other services **	477.01	449.57
FE in Deemed Exports (incl. domestic contracts)	12935.58	8007.21
# Includes canalised items wherever ascertained.		

(₹ in Crore)

		For the year ended 31.03.2012		For the year ended 31.03.2011	
<b>F. Statement for raw materials and components consumed</b>					
Group of materials	Units	Quantity	Value	Quantity	Value
Ferrous materials					
	MT	647585		630011	
	Meters	16084481		13749271	
	Nos	5839126		5184210	
	Sq.M	50035		958	
	Kg.	64246360		67442605	
	Others	143		93	
			5774.15		5017.28
Non-ferrous materials					
	MT	6101		23782	
	Meters	3050477		1757921	
	Nos	211852		274269	
	Sq.M.	96		242	
	Kg.	6967175		8015569	
	RL	26960		27781	
	Others	444		688	
			554.30		497.14
Insulating materials					
	Meters	79130216		68635813	
	MT	33058		76561	
	Nos	469400		730866	
	Sq.M.	2024396		1653750	
	Kg	1242793		987949	
	LT	5268930		7290736	
	RL	135391		216335	
	M2	171330		113102	
	ST	509		411	
	Others	31596		41404	
			280.41		227.51
Insulated cables and Magnet wires					
	Meters	3762371		2786052	
	Nos	153753		175718	
	Kg	6149		9661	
			60.09		41.02
Components					
			10739.08		10504.74
Others					
			7141.32		3129.90
			24549.35		19417.59

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## **SUBSIDIARY COMPANIES**



## Bharat Heavy Plate and Vessels Limited

### Directors' Report

To,  
 The Shareholders,  
 Bharat Heavy Plate and Vessels Limited,  
 Visakhapatnam.

The Directors are presenting the 46<sup>th</sup> Annual Report on the business and operations of the Company for the year ended 31<sup>st</sup> March, 2012.

#### SALES

The Company achieved a Turnover of ₹ 155.80 Crore as against ₹ 136.98 Crore in the previous year (i.e., a growth of 13.74 % over previous year).

#### FINANCIAL PERFORMANCE

The salient features of Financial Performance of the Company for the year are as follows:

	(₹ in Crore)	
	2011-2012	2010-2011
1. Turnover	155.80	136.98
2. Gross Margin	12.70	3.53
3. Interest	1.40	1.40
4. Depreciation	1.02	1.10
5. Profit Before Tax & Exceptional items	10.28	1.03
6. Extra ordinary Income	0.16	7.75
7. Profit before tax	10.44	8.78
8. Profit after tax	10.44	8.78

The Gross Margin for the Year 2011-12 is ₹ 12.71 Crore as against ₹ 3.53 Crore in the previous year. The Profit before tax for the year 2011-12 is ₹ 10.44 Crore as against ₹ 8.78 Crore during 2010-11. Your Company could achieve the above performance due to the support extended by the Holding Company (BHEL) by way of financial support, deputing of officials, interest free loan/advances etc.

#### CONTRIBUTION TO EXCHEQUER

Your Company contributed to the Public Exchequer revenue of ₹ 16.16 Crore during the year 2011-12 as

against ₹ 17.89 Crore during 2010-11 as per the details given below:

	(₹ in Crore)	
	2011-2012	2010-2011
Excise Duty/Service Tax	9.58	14.25
Custom Duty	1.15	0.05
Sales Tax	7.16	1.86
	17.89	16.16

#### ORDER BOOK

The Company has faced many problems with regard to order inflow because of delay in execution of old and existing orders due to old Plant & Machinery. The increased international competition in terms of price and delivery and stringent pre-qualification criteria made the order book position of the Company critical during the year under review. Your Company could obtain orders mainly from BHEL-Trichy & ADA-Bangalore etc. The Company has booked orders of ₹ 124.11 Crore as against the target of ₹ 412 Crore (MOU excellent) and the Value of the orders on hand for execution as on 31.03.2012 were worth ₹ 402.97 Crore (as against ₹ 460.45 Crore as on 31.03.2011). Your Company has been submitting offers to various projects and making all out efforts to secure further orders.

#### MANAGEMENT DISCUSSION AND ANALYSIS.

A report on Management Discussion and Analysis is placed at Annexure -1

#### BOARD OF DIRECTORS

##### APPOINTMENT

- Shri R.P.Goyal, Director, DHI was appointed as part time official Director on the Board of BHPV with effect from 21.04.2011.
- Shri A.S.Nagaraja, Director (Operations), BHPV was entrusted the Additional Charge of the post of MD BHPV and he assumed the charge on 18.05.2011/FN.
- Shri B.D.Kaler was appointed as special Director by Hon'ble BIFR on the Board of BHPV with immediate effect i.e., 25.05.2011 (date of the order).
- Shri P.V.Sridharan, Director (HR), BHPV was entrusted the Additional Charge of the post of

Director (Operations) for a period of 3 months with effect from 01.05.2012 or until further orders.

- Shri B.P.Rao, continued to be as part time Chairman BHPV vide DHI order F.No.22 (04)/2011-PE-XI till his superannuation in BHEL or until further orders whichever is earlier.

### **CESSATION**

- Shri Ambuj Sharma, Joint Secretary, DHI ceased to be part time official Director of the Company with effect from 21.04.2011.
- Shri A.S.Nagaraja, Director (Operations) & Additional charge of the post of MD ceased to be Director of the Company with effect from 30.04.2012 in view of his superannuation in BHPV.

### **OFFICIAL LANGUAGE IMPLEMENTATION**

During the year 2011-12, the company continued its thrust on official language implementation in line with Government of India's policy on Official Languages Act, 1963 and Official Languages Rules, 1976.

41 employees were trained in Hindi Prabodh, Praveen and Pragya classes during the year. One increment for one year was given to the employees on passing Hindi Pragya examination.

Training in Hindi typewriting on Computers for one week was imparted to our Hindi staff through Hindi Teaching scheme during the month of December, 2011.

Hindi workshop on official Languages Act & Rules was conducted in July, 2011 for the benefit of employees, who had working knowledge in Hindi.

Hindi day was celebrated on 21<sup>st</sup> September, 2011. Various Hindi competitions were conducted for Hindi and Non-Hindi speaking employees separately. Cash Awards and Merit certificates were given to those employees who passed Hindi examinations and prizes were given to the winners of Hindi competitions. Three Hindi magazines are being procured and distributed regularly to employees.

MOU for 2012-13 between BHPV and BHEL was prepared in Bilingual form.

### **VIGILANCE**

Your Company continues to take all possible steps to build systems and procedures, which are simple, transparent and easy to comply with by every one

concerned so that a transparent and corruption free environment prevails.

Purchase Procedures and Works Procedures in line with the policies of BHEL were approved for implementation. Vigilance Awareness Week was observed from 31.10.2011 to 05.11.2011 to bring about greater awareness and accountability amongst employees. The Vigilance pledge was administered to all employees by their Departmental Heads on 31-10-2011. During the period, guest lectures and various competitions were arranged for the employees in addition to the display of banners at prime locations inside and outside the factory premises. Special Interactive Sessions on Systemic Improvements were also conducted among Senior Officials.

A booklet on preventive Vigilance containing Do's and Don'ts was released on the occasion and copies were distributed to all Executives and Supervisors. Two Training Programmes were also conducted for Executives and Supervisors in order to spread vigilance awareness and improvement in the Organizational culture. All the directives issued by the Central Vigilance Commission from time to time have been complied with.

### **QUALITY**

BHPV's products are known for their high quality. BHPV strives to maintain this position through adoption of ISO 9001:2008, international Quality Management standard. The existing certification to ISO 9001:2008 is valid up to 24.04.2012 During the year 2011-12, BHPV's Quality Management System was thoroughly audited by Bureau Veritas Certification India (Private) Limited who recommended for re-certification of BHPV to ISO 9001:2008 for a further period of three years.

Similarly Lloyds Register extended the recognition to BHPV as manufacturer of 'Fusion Welded Pressure Vessels Class 1' till 25<sup>th</sup> August, 2013.

### **ANCILLARIES / SUB-VENDORS**

The total output by the ancillaries / sub-vendors for the year under review is ₹ 80.00 Crore as against Turnover of ₹ 40.00 Crore in the previous year. New Vendors are registered in 2011-2012 for outsourcing jobs. Efforts are being made to further increase the No. of vendors to meet the future targets. Annual Rate contract for Fabrication of Structural Items at Vendor's units with free issue materials were entered into.

## FOREIGN TOURS

During the year 2011-12, no expenditure was incurred on foreign tours undertaken for business activities.

## DIRECTORS' RESPONSIBILITY STATEMENT

In compliance with the provisions of Sec.217 (2AA) of the Companies Act, 1956, it is hereby confirmed:

- In the preparation of Annual Accounts for the Financial Year ended 31<sup>st</sup> March, 2012, the applicable Accounting Standards have been followed along with proper explanation relating to material departures;
- The Directors have followed Accounting Policies and applied them consistently and made judgments and estimates that were reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at the end of the Financial Year 2011-12 and of the Profit 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 the Companies Act, 1956 for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities;
- The Directors have prepared the Annual Accounts for the Financial Year ended 31<sup>st</sup> March, 2012 on a 'going concern' basis.

## CORPORATE GOVERNANCE

The Department of Public Enterprises has issued guidelines on Corporate Governance. These guidelines were made mandatory vide OM No-18(8) 2005 GM Dt.14.05.2010. The quarterly report on compliance with the Corporate Governance requirements prescribed by DPE is also sent to Administrative Ministry (DHI) regularly. A report on the Corporate Governance along with Auditor's certificate on Corporate Governance is enclosed as Annexure-2 to the Directors' Report.

## OTHER DISCLOSURES

Information in accordance with the provisions of Section 217(1) (e) of the Companies Act, 1956 read with Companies (Disclosure of particulars in the Report of the Board of Directors) Rules, 1988 regarding conservation of energy, technology absorption and

foreign exchange earnings and outgo is detailed as under:

## CONSERVATION OF ENERGY

Your Company continued its efforts in taking various measures in the conservation of electricity, LPG, petrol & diesel. Different measures taken to save energy during the year include:

- The existing capacitor banks for 3 nos substations were reconditioned. After doing the same, the overall power factor of the factory is improved. Also close monitoring of capacitor banks (switching "ON" and "OFF") to maintain the power factor nearer to unity (one) is being done, which resulted into significant savings in consumption of electrical energy.
- Special attention was being paid to switch "OFF" the equipments like Power Supply Transformer for 24 V hand lamp points, Roller Positioners, Remote operated EOT cranes, Man coolers etc . which are left in "ON" position even in idle condition.
- Timers are installed for shop lighting of one LMS building 4 bays for automatic switching "ON" and "OFF" at preset times and time setting of all the timers are changed at an interval of every three months thereby saving good amount of power. Balance shop floor buildings are also planned to implement the same.
- For Conservation of LPG/Diesel, Jobs are clubbed together wherever it is possible while loading the furnace. Periodic Cleaning or replacing the LPG/ Diesel fired burners are carried out to work efficiently
- Timers are installed for street lights, parks, common facilities, etc at Township for automatic switching "ON" and "OFF" at preset times and time setting of all the timers are changed at an interval of every three months thereby saving good amount of power.
- New 11 KV VCBs -3 nos are installed replacing the old OCBs for better control over electrical power & utilization.

Power and Fuel cost as a percentage of Gross Turnover, net of Excise Duty, for the year is 2.50% as against 2.71% in the previous year.

## RESEARCH & DEVELOPMENT

Company's R&D Department continued its efforts for design and commercial production of new products after development and testing of their prototypes

The following are some of the important achievements during the year:

- R&D has continued execution of its task of manufacturing, testing and supply of Compact Heat Exchangers of Tejas aircraft for the Series production order from M/s HAL, Bangalore. During the year, 43 nos. of Compact Heat Exchangers worth ₹ 402.88 lakhs were fabricated, tested and delivered to M/s.HAL, Bangalore.
- Besides above, 2 Nos. Pre-coolers worth ₹ 37.50 lakhs have been fabricated, tested and supplied to ADA, Bangalore.

Apart from above 3 Nos. compact Heat Exchangers HE-2 of Secondary Power System worth ₹ 22 lakhs have also been manufactured, tested and supplied to ADA, Bangalore.

#### **TECHNOLOGY UPGRADATION**

- Machining of boiler drum half (pressed) shells for BCPL:

L/seam bevels machining of half (pressed) shells of size ID914mm X 110mm Thk., and ID 1372mm X 110mm Thk./ 150mmThk., inside 45 deg V-bevel, outside 4 deg J-bevel with radius 15 mm and 5 mm nose were done successfully (each half shell in 4 settings) on horizontal boring machine (WD 200) for the first time in BHPV shop.

#### **FOREIGN EXCHANGE EARNINGS & OUTGOINGS**

Foreign exchange valued at ₹ 0.72 Crore was spent towards procurement of raw material and components, acquisition of engineering, and other expenses for execution of orders quoted with the technical back up of reputed parties abroad. The foreign exchange earnings during the year are valued at NIL.

#### **PARTICULARS OF EMPLOYEES**

There was no employee of the Company who received remuneration in excess of the limits prescribed under the Sec.217 (2A) of the Companies Act, 1956 read with the Companies (Particulars of Employees) Rules, 1975.

#### **ENVIRONMENTAL MANAGEMENT AND POLLUTION CONTROL**

Your Company is aware of its responsibility towards the ill-effects caused through pollution and it has taken various measures to maintain clean and hygienic environment in and around factory premises. A large

green belt is maintained in the factory and town-ship.

Necessary statutory consents under Section 25/26 of Water (Prevention and control of Pollution) Act.1974 and under Section 21 of Air (Prevention and Control of Pollution) Act, 1981 and consent for Hazardous Waste Authorization have been obtained from AP Pollution Control Board which is valid up to 30.04.2012. Renewal of consent (Air & water) valid up to 30.04.2013 is in progress.

#### **AUDITORS**

M/s Grandhy & Co, Chartered Accountants of Visakhapatnam were appointed as the Statutory Auditors of the Company for the year 2011-12. The audited accounts of the Company were presented to the C & AG under Section 619(4) of the Companies Act, 1956. The replies to the points referred to in the Auditors Report are given at Annexure-3.

#### **COMMENTS OF C & AG**

Comments of Comptroller & Auditor General of India, under Sec.619 (4) of the Companies Act, 1956 on the accounts of the Company for the year ended 31<sup>st</sup> March, 2012, are placed as Annexure to this report.

#### **ACKNOWLEDGEMENTS**

The Directors wish to express their sincere thanks and appreciation for the continued support, guidance and cooperation received from the Department of Heavy Industry, Government of India, Government of Andhra Pradesh, Holding Company (BHEL), Suppliers, Valued Customers and Bankers. Your Directors are also thankful to the Principal Director of Commercial Audit & ex-officio Member, Audit Board and the Statutory Auditors for completion of audit in record time. The Directors also take this opportunity to express their appreciation for the efforts put in by the employees at all levels.

For and on behalf of the Board of Directors  
**Bharat Heavy Plate and Vessels Ltd.**



**B. Prasada Rao**  
Chairman

Date : 19.07.2012

Place : New Delhi

ANNEXURE – 1 TO THE DIRECTORS' REPORT

## Management Discussion and Analysis Report

### INDUSTRY STRUCTURE AND DEVELOPMENT:

The Company is an Engineering Industry essentially established to cater to the needs of the requirement of core sector industries like Refineries, Steel, Fertilizer and Nuclear Power etc. It is engaged in manufacture, supply and erection of capital equipments /machinery needed for core industries. The Company has become a wholly owned subsidiary of BHEL in the year 2008-09. The planned investment towards up-gradation, capital expenditure for Plants & Equipments and Infrastructure is under progress. Strategic tie-ups by BHEL to enhance Industrial Boiler capability, sharing load of Trichy, Hyderabad, Haridwar and other plants of BHEL to cater the need of Boilers, Heat exchangers and other vessels.

### OPPORTUNITIES AND THREATS

#### OPPORTUNITIES

The Industry has the potential for high growth and the opportunities before the Company are: – (a) becoming a hub for industrial boilers for BHEL, (b) supplying Power Plant Components to BHEL and (c) cater to demands in BHPV's existing portfolio.

#### THREATS

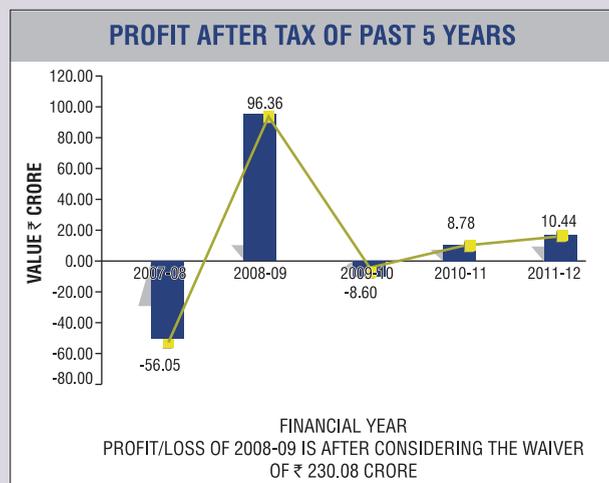
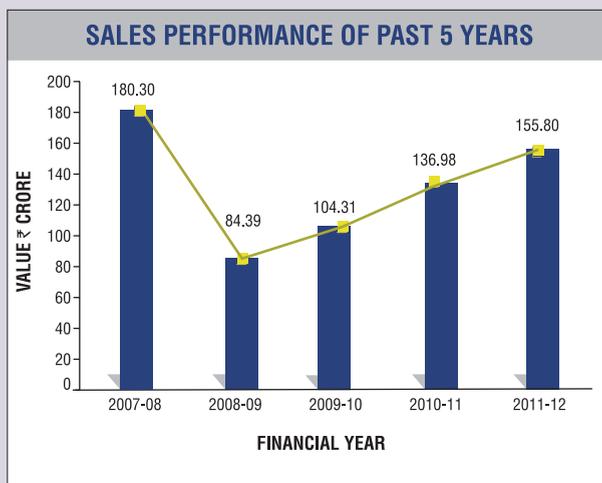
- i) Stiff competition from private players,
- ii) National and International players under-quoting for conventional jobs.

iii) Rising customer expectations.

iv) Stringent delivery conditions.

### PERFORMANCE

	(₹ in Crore)	
	2011-12	2010-2011
1. Turnover	155.80	136.98
2. Value Added	68.25	58.37
3. Profit Before Tax	10.44	8.78
4. Profit After Tax	10.44	8.78
5. Finance Cost (Interest)	1.40	1.40
6. Extraordinary Income	0.16	7.75
7. Capital Employed	43.63	30.71
8. Gross Block	82.64	81.53
9. Net Block	4.49	4.41
10. Working Capital	39.13	26.30
11. Net Worth	(-) 219.32	(-) 229.76
<b>Ratios:</b>		
PBDIT as a percentage of Turnover	8.16	2.58
PAT as percentage of Turnover	6.70	6.41
Value Added as a % of GTO (net of ED)	46.70	46.17



Major achievements of the year included the manufacture and supply of following critical equipments:

- **Duct Burner Assembly for MRPL and MSIL-I & II Projects:**

Duct Burner Assembly for MRPL Project is a specialized & critical item which involves fabrication of Oil Guns, Fabrication & Machining of SS items etc. Availability of Vendors for Fabrication of Duct Burner Assembly is very limited and most of these limited vendors are also located in Trichy. A local vendor has been identified and developed for the same who has successfully completed the Duct Burner Assembly for both the projects.

- **Structures for IOCL – Paradeep:**

Annual Rate Contract for Fabrication of Structural Items for boiler projects at Vendor's units with free issue materials was finalised. 1700 MT structures for IOCL – Paradeep III & IV projects successfully delivered.

- **LN2 Storage Tank for CPCL, Chennai:**

Cryogenic Storage Vessel (Liquid Nitrogen Storage Tanks) fabrication restarted after a gap of 9 years, 45 M<sup>3</sup> capacity LN2 Storage Tank fabrication and evacuation was carried out in the Shop with limited resources & skilled manpower and successfully handed over to M/s. CPCL, Chennai.

- **Condenser Tube Support plates :**

HMT horizontal drilling machine which was under break down was put back into operation and complete marking for drilling holes (127 plates – approx 7000 No. of holes on each plate) was successfully done with the help of this machine.

In addition to the above, on the External Services front, the Company has accomplished the following:

- (i) Modularisation of 2 x 135 MW CFBC Boiler components is being carried out at BHPV Lovagarden site. This job involves assembly and welding of individual DU components and into a bigger PAM's of over dimensional consignments and also for transportation by sea for Koniambo Nickel project.

Components i.e., Lime stone bunker, Lime stone bunker hopper, bed material bunker & hopper,

conical & cylindrical cyclone & duct portions, bag house filter, big assemblies (4 Nos.) small assemblies (4 Nos.) have been dispatched to Koniambo Nickel Project site in six shipments.

- (ii) Erection of ODC consignments (6 Nos.) i.e. Oxygen buffer vessels – 3 Nos. weighing around 105 MT each, Nitrogen Buffer vessels – 2 Nos., weighing around 140 MT each and Argon Buffer Vessel – 1 No. weighing around 30 MT completed successfully at M/s.TATA Steel Ltd, Jamshedpur. Oxygen Vessels 2 Nos., Nitrogen Vessel 1 No. and Argon Vessels 1 No. are commissioned.
- (iii) Fabrication, assembly & welding of 2 Nos. of De aerator storage tanks of BHEL, Hyderabad for IOCL – Paradeep.

## OUTLOOK

- As per the Rehabilitation Scheme sanctioned by BIFR, BHPV aims to cross the ₹1000 Crore Turnover level & also to become a positive Net Worth Company in year 2015-16.
- BHPV's reputation as a quality supplier of Process Plant equipment continues to help in getting further orders from oil, steel and fertilizers sectors. This coupled with executing more orders from BHEL will significantly contribute to the company's turnover in the coming years and will put BHPV back on track. Continuous efforts are also being made to bag more orders from existing as well as new customers.
- In line with the Modernisation & Capital Investment scheme approved by Board of BHEL, an amount of ₹ 230.91 Crore is being invested towards renovation and modernisation of the facilities. A review committee consisting of officials of BHEL and BHPV has been constituted to regularly review its progress.
- For bridging identified skill gaps at different levels, the process for recruitment of fresh Executives and Supervisors has started and will be continued for all cadres during 2012-13.
- In line with the growth agenda, the areas of cooperation between BHPV and BHEL are being worked out in consultation with the business sectors and manufacturing units of BHEL.

**AS PER MOU 2012-13, THE TARGETTED PERFORMANCE PARAMETERS:**

Order Booking	: ₹ 432.00 Crore
Turnover	: ₹ 287.00 Crore
Profit before Tax	: ₹ 6.33 Crore

**RISKS AND CONCERNS:**

- Speedy up-gradation of manufacturing facilities for existing and diversified business.
- Delay in Implementation of better compensation package to improve employees' morale.
- Gain Customer's confidence through speedy completion of existing projects.

**INTERNAL CONTROL SYSTEMS AND THEIR ADEQUACY**

The company has an Internal Audit Department for conducting audit with defined Audit programme. The Internal Audit Department is headed by a Dy. General Manager and reports to the Managing Director. The Company has formed an Audit Committee of Directors and the functions of Internal Audit and the Half yearly/ Quarterly reports are being periodically reviewed and corrective actions are taken for continuous improvement. The adequacy of internal control procedures is reviewed and reported by the Statutory Auditors in their Audit Report. The Vigilance Department deals with vigilance and disciplinary cases. Your company, being a Government company, is also subject to Government Audit .

**MATERIAL DEVELOPMENTS IN HUMAN RESOURCES/INDUSTRIAL RELATIONS FRONT, INCLUDING NUMBER OF PEOPLE EMPLOYED**

The total number of employees, as at the end of March 2012, was 1186 as against 1116 at the beginning of the year. For Human Resource Development and as a part of welfare measures, various training programs as mentioned below were organized:

**1) In-Company training programs:**

The Company conducted 15 in-company training programmes covering 433 employees. The programmes covered Executive, Supervisor and Workmen / Staff

category employees. These programmes included training on design, fabrication and inspection of pressure vessels, performance management system, physical testing of materials, usage of computer, quality, Hindi day programmes, vigilance, ISO 9000, welder refreshment course, etc.

**2) Outstation training programs:**

Seventeen Executives were sponsored for 11 external / outstation training programmes during the year. These programmes were on latest developments in export incentives, excise duty, welding for economic fabrication, repair and maintenance in industries, human resource development for sustainable competitiveness, managing stress & prevention of conflict, management of contract labour, etc.

A total of 433 employees were provided training during the year against an excellent MoU target of providing training to 400 employees.

Industrial Relations in the organization continued to be harmonious and cordial. Participative culture is being encouraged through various participatory bodies and the discussions in the bodies contribute towards improving work culture, industrial relations, productivity and resolving differences.

**STATUS OF EMPLOYMENT AND RESERVATION OF PH/SC/ST/EX-SERVICEMEN/OBC CATEGORIES**

- The instructions / guidelines issued by the Government of India from time to time in respect of reservations to PH / SC / ST / Ex-Servicemen / OBC categories are being regularly followed by the Company.
- The Annual Statement in the prescribed format showing the representation of SCs, STs and OBC as on 01.01.2012 and number of appointments made during the preceeding calendar year, as furnished to the Government, is given at Annexure-A.

**MANPOWER STRENGTH OF PHYSICALLY CHALLENGED EMPLOYEES AS ON 01.01.2012:**

- Presently we have a total of 30 Physically Challenged Employees as on 01.01.2012. The group-wise manpower in the Company as on 01.01.2012 is given at Annexure-B.



## CORPORATE SOCIAL RESPONSIBILITY

As a socially conscious Corporate Citizen, the Company is making efforts to contribute to the Society in the areas of Community Development and Environment Protection. Blood Donation camps were organised in association with the Indian Red Cross Society. The Company is providing concessional education in English Medium and Special Care School for which ₹ 25.00 (provisional) lakhs were spent. The Company conducted examination for mentally challenged children of Special School and Manovikas Rehabilitation Centre was conducted and treatment was provided to the children. Pulse Polio Programme was also conducted.

## CAUTIONARY STATEMENT

Statements in this Management Discussion and Analysis report describing the Company's objectives, projections, expectations and assumptions may be forward-looking statements within the meaning of applicable laws and regulations. Actual results may differ materially from those expressed or implied. Important factors that could affect the operations of the Company include economic conditions affecting demand/supply, price conditions in the domestic and international markets, Government policies and regulations, statutes, labour relations and other incidental factors.

## ANNEXURE - A

Annual Statement Showing the Representation of SCs, STs and OBCs as on 01.01.2012 and No. of appointments made during the preceding calendar year 2011.

Groups	Representatives of SCs/STs/ OBCs (As on 01.01.2012)				No. of appointments made during the calendar year									
					By Direct Recruitment				By Promotion**			By Other Methods		
	Total No. of Employees	SCs	STs	OBCs	Total	SCs	STs	OBCs	Total	SCs	STs	Total	SCs	STs
Group - A	206	39	9	23	10	1	1	3	11	2	2	—	—	—
Group - B	65	11	11	10	—	—	—	—	36	9	4	—	—	—
Group - C	913	134	87	241	162	23	8	70	74	9	—	—	—	—
Group - D (Exc. SW)	10	3	—	1	—	—	—	—	—	—	—	—	—	—
Group - D (SW)	—	—	—	—	—	—	—	—	—	—	—	—	—	—
<b>Total</b>	1194	187	107	275	172	24	9	73	121	20	6	—	—	—

## ANNEXURE - B

### REPRESENTATION OF THE PERSONS WITH DISABILITIES

Groups	No. of employees (Representation) (As on 01.01.2012)				Direct recruitment during the Calendar year 2011								Promotion							
					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		
Group - A	206	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Group - B	65	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Group - C	913	2	6	20	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
Group - D	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
<b>Total</b>	1194	2	6	22	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

- (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)

## Corporate Governance Report

### Preamble:

Corporate Governance is a key element in improving efficiency and growth as well as enhancing investor confidence. It is a process of providing direction and control. Corporate Governance is the application of best Management Practices, compliance of laws of the land in true spirit helps Companies in their endeavour towards being a good corporate citizen. Corporate Governance rests on the four fundamental pillars of Fairness, Transparency, Accountability and Responsibility. Corporate Governance thus refers to an economic, legal and institutional environment that allows companies to diversify, grow, restructure, exit and do every thing necessary to maximize long term share holders' value.

### Philosophy:

The Company strongly believes that good Corporate Governance practices in the long run lead to creation of wealth for all who are associated with the Company, such as investors, customers, employees, Government, vendors and society at large. The Company has consistently sought to improve its focus on increasing transparency and accountability. As a responsible citizen and a public Authority the Company provides appropriate access to information to the citizens of India under the provisions of the Right to information Act-2005 (RTI Act).

### Board of Directors:

The Board comprised of five Directors. During the year Shri R.P.Goyal, Director, DHI was appointed as part time official Director on the Board of BHPV representing the Government of India, Department of Heavy Industry (DHI) from 21.04.2011 in place of Shri. Ambuj Sharma. Shri A.S.Nagaraja, Director (Operations), BHPV was entrusted the Additional Charge of the post of MD BHPV

and he assumed the charge on 18.05.2011/FN. Sri B.D.Kaler was appointed as Special Director by BIFR on the Board of BHPV with effect from 25.05.2011. The Directors shall not require to hold any qualification shares. The appointment of Directors of the Company is made by the President of India.

The terms & conditions of the appointment including the remuneration of all the Whole time/Functional Directors will be issued by the Government of India. The Independent Directors are paid sitting fees as per the guidelines given by Department of Heavy Industries for attending each meeting of the Board / Committee(s) and reimbursed actual expenditure for attending the meetings of the Board / Board committee(s).

The Board meets regularly and is responsible for proper direction and management of the company. The whole time Directors manage the day to day affairs of the company. Advance notices convening the Board Meetings are given to all Directors. Sometimes meetings with shorter notice are convened to meet urgent needs or in case of exigencies, resolutions are passed by circulation. Members of the Board have complete access to all information and are free to call any senior officials during the meeting for additional information/ clarification.

### Board Meetings and Attendance:

During the financial year ending 31<sup>st</sup> March-2012, four meetings of the Board of Directors were held and the maximum interval between the any two meetings was not more than Four calendar months. The Board meetings were held on 16.05.2011, 06.09.2011, 26.12.2011 and 27.03.2012. Details of attendance of the Directors at the Board meetings, Annual General Meeting and the number of other Directorships held by them during 2011-12 etc are furnished below:

S. No.	Name of Directors	Category / Period	Number of Board Meetings during tenure	Meetings Attended	Whether attended AGM	No. of other Directorships held
1.	Shri B.P. Rao	Chairman /From 24.10.2009 FN	4	4	-	2
2.	Shri A.S. Nagaraja	Director (Operations) from 20.11.2009 & Additional charge of MD From 18.05.2011	4	4	Yes, Chairman of the Meeting	NIL
3.	Shri R.P. Goyal	Part time Official (Govt. Director)/From 21.04.2011	4	4	-	NIL
4.	Shri P.V. Sridharan	Director (HR)/l/c Finance From 09.11.2009	4	4	Yes	NIL
5.	Shri B.D. Kaler	Special Director appointed by BIFR From 25.05.2011	4	4	Yes	1

### Audit Committee:

During the year 2011-12 the Audit committee was reconstituted on appointment of Shri R.P. Goyal as part time official Director representing the Government of India, DHI from 21.04.2011 in place of Shri Ambuj Sharma. The Audit committee was again reconstituted on appointment of Shri B.D.Kaler as Special Director by BIFR from 25.05.2011. Four meetings of the Audit committee were held during the year under review. The Annual Accounts of 2011-12 were placed before the Audit committee to approve & recommend to the Board of Directors of the Company for approval in its meeting held on 17.05.2012. As the two Independent Directors completed the tenure of appointment of 3 years in March 2010, there are no Non-official (Independent) Directors in the Audit Committee. The issue for appointment of Non-official Directors has been brought to the notice of DHI.

The role and powers of the Audit Committee briefly are to review the reports of the Internal Auditors, review of pending IR Paras issued by Govt. Audit, meeting the Statutory Auditors and discuss their findings, suggestions and other related matters, review major accounting policies followed by the company and Annual Financial statements before submission to the Board of Directors of the Company. The Committee has authority to investigate into any matter referred to it by the Board.

### General Body Meetings

Details of last 3 Annual General Meetings:-

Financial Year	Date and time of AGM	Location
2008-09 (43 <sup>rd</sup> AGM)	8 <sup>th</sup> September, 2009 at 3.30 p.m.	The Park Hotel, Visakhapatnam
2009-10 (44 <sup>th</sup> AGM)	14 <sup>th</sup> September, 2010 at 9.00 a.m.	BHPV Board Room, Visakhapatnam
2010-11 (45 <sup>th</sup> AGM)	14 <sup>th</sup> September, 2011 at 9.00 a.m.	BHPV Board Room, Visakhapatnam

### Code of Conduct

The Board of Directors has laid down the code of Business conduct and ethics for the Board members and Senior Management of the Company.

The code comprises:

- General Moral Imperatives;
- Specific professional Responsibilities; and
- Specific Additional provisions for Board Members and Senior Management Personnel.

A copy of the said code has been placed on the website 'www.bhpl.com'

### Training of Board of Directors:

The company furnishes set of documents and booklets to the Directors on their joining the Board. This includes important data about the performance of the Company, Memorandum & Articles of Association, Corporate Governance guidelines, Delegation of powers, Product line brochures etc. A copy of the monograph on position, duties and liabilities of Directors is also circulated among the Directors.

### Subsidiary Companies:

The Company is a wholly owned subsidiary of BHEL. BHPV does not have any subsidiary company.

### Plant Location:

M/s. Bharat Heavy Plate & Vessels Ltd,  
Nathayapalem,  
Visakhapatnam - 530 012, (Andhra Pradesh)

### Disclosures:

There was no materially related party transactions of the company with its Directors or the Management or his relative, a firm in which such a Director or relative is a partner etc. that may have conflict with the interests of the company attracting the provisions of Sec.297 of the Companies Act. The Company is ensuring to make appropriate disclosures and comply with various laws to maintain ethical standards.

Statutory compliance Report together with the status of the statutory dues is being placed before the Board regularly. During the year, presidential directives issued by the Government of India have been complied with by the Company.

During the year, no expenditure is debited to the books and accounts which are not for the purpose of business expenditure and no expenses which are of personal nature have been incurred for the Board of Directors and Top Management.

The Company does not have the mechanism of whistle blower policy. However no personnel/employee having any grievance has been denied access to the Audit Committee.

As the Company is a non-listed Central Public Sector Enterprise, the requirements of the SEBI and Stock Exchanges or provisions of the listing are not applicable. However, during the year under review, the company complied with all the requirements of being a subsidiary company of BHEL.

### Means of Communication

The Company communicates major achievements and important events taking place in the company through press, electronic media. The company is also hosting the information on its web-site. Being a Government company, the records of the company are open for Audit of C & AG and for inspections by Vigilance / CBI etc.



## AUDITORS' CERTIFICATE ON CORPORATE GOVERNANCE

The Members,  
M/s Bharat Heavy Plate & Vessels Ltd.,  
Visakhapatnam.

We have examined the compliance of the conditions of the Corporate Governance by M/s. Bharat Heavy Plate & Vessels Ltd, (the Company) for the year ended 31<sup>st</sup> March, 2012 as stipulated in the Department of Public Enterprises (DPE) Guidelines on Corporate Governance issued dated 14<sup>th</sup> May, 2010 for Central Public Sector Enterprises (CPSEs) and Annexes thereof.

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 Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.

In our opinion and to the best of our information and according to the explanations given to us, subject to the following:

As per Corporate Governance guidelines for a not listed CPSE, at least one third of the Board Members should be Independent Directors and two third of the members of the Audit Committee shall be Independent Directors. Due to vacancy on account of expiry of the term of Independent Directors from the Board, the Company could not meet the conditions. Thus the company did not have Independent Directors on its Board during the year.

We certify that the Company has complied with the conditions of Corporate Governance as stipulated in the above mentioned Guidelines.

We further state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency of the effectiveness with which the Management has conducted the affairs of the Company.

**For M/s. Grandhy & Co.,  
FRN No: 001007S.  
Chartered Accountants**

**Naresh Chandra GV  
Membership No: 201754  
Partner**

Place: New Delhi

Date: 17.05.2012

## AUDITORS' REPORT

## ANNEXURE – 3

To  
**THE MEMBERS,  
BHARAT HEAVY PLATE AND VESSELS LIMITED  
VISAKHAPATNAM**

### MANAGEMENT REPLY

We have audited the attached Balance Sheet of Bharat Heavy Plate and Vessels Limited as at 31<sup>st</sup> March, 2012 and also the Statement of Profit and Loss and the cash flow statement for the year ended as on that date annexed thereto. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the Auditing Standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In accordance with the provisions of Section 227 of the Companies Act, 1956, we report that:

- I. As required by the Companies (Auditors' Report) Order, 2003, issued by the Central Government of India under sub-section (4A) of section 227 of the Companies Act, 1956 and on the basis of such checks of the books and records of the company as we considered appropriate and according to the information and explanations given to us, we enclose in the annexure a statement on the matters specified in paragraphs 4 and 5 of the said Order.
- II. Further to our comments in the Annexure to in paragraph I above, we report that:
  - (a) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit.
  - (b) In our opinion, proper books of account as required by law have been kept by the Company so far as appears from our examination of the books.
  - (c) The Balance Sheet and Statement of Profit and Loss and cash flow statement dealt with by this report are in agreement with the books of account.
  - (d) In our opinion, the Balance Sheet and Statement of Profit and Loss and cash flow

statement dealt with by this report comply with the Accounting Standards referred to in sub Section (3C) of Section 211 of the Companies Act, 1956;

- (e) In terms of Notification No. GSR 829(E) dated 21.10.2003 issued by the Department of Company Affairs, Government of India, the provisions of section 274(1)(g) of the Companies Act, 1956 are not applicable to the Company.
- (f) In our opinion and to the best of our information and according to the explanations given to us, the said accounts read together with the Accounting Policies and Explanatory Notes in Note 33, give the information required by the Companies Act, 1956, in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India:
- (i) In the case of the Balance Sheet, of the state of affairs of the Company as at March 31, 2012,
- (ii) In the case of Statement of Profit & Loss of the profit, for the year ended as on that date and
- (iii) In the case of cash flow statements, of the cash flows for the year ended as on that date.

For Grandhy & Co  
FRN No: 001007S



Naresh Chandra G.V.  
M.No: 201754  
Partner

Place : New Delhi  
Date : May17, 2012

## Annexure to the Auditors' Report

(Referred to in Para I of our report of even dates)

- i) a) The company has generally maintained proper records showing full particulars including quantitative details and situation of its fixed assets.
- b) We are informed that management has generally carried out the physical verification of a portion of the fixed assets in accordance with their phased programme of physical verification, which is considered reasonable having regard to the size of the Company and nature of its business and no material discrepancies were noticed on such verification.
- c) The Company has not disposed off any substantial part of its fixed assets so as to affect its going concern status.
- 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, where these are verified at the year end with reference to the inspection reports and production reports of the Erection Department. In regard to stocks lying with contractors / fabricators and other parties, confirmations were received in a few cases only. In our opinion the frequency of verification is reasonable.
- (b) In our opinion procedures of Physical verification of inventory followed by the management are generally reasonable and adequate in relation to the size of the Company and the nature of its business.
- (c) The company has maintained proper records

of inventory and the discrepancies noticed on physical verification of inventory with regard to the size and nature of operation of the company were not material and have been properly dealt with in the books of account of the company.

- iii) (a) Accounting to the information and explanations given to us, the company has not granted any loans, secured or unsecured to companies, firms and other parties covered in the register maintained under section 301 of the Companies Act, 1956. Accordingly, clauses (iii) (b) to (iii)(d) of paragraph 4 of the Companies (Auditor's Report) Order, 2003 are not applicable to the company for the current year.
- (b) According to the information and explanations given to us, the company has not taken any loans, secured or unsecured from companies, firms and other parties covered in the register maintained under section 301 of the Companies Act, 1956. Accordingly, clauses (iii) (f) to (iii) (g) of paragraph 4 of the Companies (Auditor's Report) Order, 2003 are not applicable to the company for the current year.
- iv) In our opinion and according to the information and explanation given to us, there are adequate internal control systems commensurate with the size of the company and the nature of its business with regard to purchase of inventory, fixed assets and sale of goods and services. Further on the basis of our examination and the books and records of the company, and according to the information and explanation given to us, we have neither come across nor have been informed of any continuing failure to correct major weaknesses in internal control systems.
- v) According to the information and explanation given to us, we are of the opinion that there are no contracts and arrangements referred to in Section 301 of the Act during the year that need to be entered in the register maintained under that Section. Accordingly, clause (v) (b) of paragraph 4 of the Companies (Auditor's Report) Order, 2003 is not applicable to the company for the current year.
- vi) According to the information and explanation given to us, the company has not accepted any deposits from public during year within the meaning of section 58A and 58AA or any other relevant

provisions of the Act and the Companies (Acceptance of Deposits) Rules 1975 framed there under.

- vii) In our opinion, the company has an Internal Audit System commensurate with the size and nature of its business.
- viii) We have broadly reviewed the books of account and records maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 209 (1) (d) of the Companies Act, 1956 and are of the opinion that prima facie the prescribed accounts and records have been made and maintained. We have, however, not made a detailed examination of the records with a view to determine whether they are accurate & complete.
- ix) a) According to the information and explanation given to us, and books and records as produced and examined by us, in our opinion, the company is generally regular in depositing undisputed statutory dues including provident fund, Investor Education and protection Fund, Employees State Insurance, Income Tax, Sales Tax, Wealth Tax, Service Tax, Excise Duty, Customs Duty, Cess and any other material statutory dues as applicable with appropriate authorities.
- b) According to the information and explanation given to us, there are undisputed amount payable in respect of Income Tax, Sales Tax / VAT, service Tax, Excise Duty, Customs Duty, Cess and other statutory dues outstanding as at 31<sup>st</sup> March, 2012 for a period of more than six months from the date they become payable

Sl. No.	Name of Statute	Nature of Dues	Amount (₹ in Crore)
1.	Excise Duty	Sale order assessment (COD not permitted BHPV to appeal further to CESTAT)	2.73

**Management Reply :**

*Subject liability arisen as COD has not given clearance to BHPV to pursue the case in Cestat. However, this is included in the DRS in the list of waivers/ reliefs sought.*

According to the information and explanation given to us, the particulars of Sales Tax, Income Tax, Excise Duty, Service Tax, Customs Duty and Cess which have not been deposited on account of dispute are as under.

Sl. No.	Name of Statute	Nature of Dues	Amount (₹ in Crore)	Forum where dispute is pending
1.	Central Sales Tax Act., & Works Contract Tax Act.	Sales Tax & Works Contract Tax	6.81	1 <sup>st</sup> Appellate Authority/ Dy. Commissioner / Commissioner
			0.87	Tribunal
2.	Central Excise Act, 1944	Excise duty	3.01	Commissioner (Appeals)
			101.55	CESTAT, Bangalore
3.	Service Tax under the Finance Act, 1994	Service Tax	0.09	Commissioner (Appeals)
			19.04	CESTAT, Bangalore
<b>TOTAL</b>			<b>131.38</b>	

- (x) The company has accumulated losses amounting to ₹ 25313.56 Lakhs as at March 31, 2012 and it has not incurred any cash losses during the financial year covered by our audit and the immediately preceding financial year.
- (xi) According to the records of the Company examined by us and the information and explanations given to us, the company has not defaulted in repayment of dues to financial institutions, banks or debenture holders. However, the company has not yet redeemed some value of Bonds issued during the year 1998-99

*Management Reply :*

*Being a sick company under reference to BIFR, the company is facing acute funds shortage. Hence some of the payments could not be made. During the current Financial Year, the company has repaid principal amount of ₹ 5.00 lakh to 1 bondholder (previous year ₹ 2.45 crore to 14 bondholders), being full and final settlement. For the remaining 8 unsecured bond holders liability towards principal and interest amounting to ₹ 10.08 crore (Principal ₹ 2.06 crore plus Interest ₹ 8.03 crore) has been provided in the books of accounts.*

- (xii) The company has not granted any loans and advances on the basis of security by way of pledge of shares, debentures and other securities.
- (xiii) The provisions of any special statute applicable to Chit Fund/ Nidhi/Mutual benefit fund/Societies are not applicable to the company.
- (xiv) In our opinion, the company is not dealing in or trading in shares, securities, debentures and other investments. Accordingly, the provisions of clause 4(xiv) of the Companies (Auditor's Report) Order, 2003 are not applicable to the Company.
- (xv) In our opinion and according to the information and explanations given to us, the company has not given any guarantee for loans taken by others from banks or financial institutions during the year.
- (xvi) As per information and explanation given to us, the company has not obtained any term loan during the year.
- (xvii) According to the information and explanations given to us, and on an overall examination of the balance sheet of the company, we report that no funds raised on short term basis have been used for long term investment.
- (xviii) The company has not made any preferential allotment of shares to parties and companies covered in the register maintained under section 301 of the Companies Act, 1956 during the year.
- (xix) In our opinion, the company has not issued any debentures during the year.
- (xx) The company has not raised any money by public issue during the year.
- (xxi) During the course of our examination of the books and records of the company, carried out in accordance with the generally accepted auditing practices in India, and according to the information and explanations given to us, we have neither come across any instance of fraud on or by the company noticed or reported during the year nor have we been informed of any such case by the management.

For Grandhy & Co  
FRN No: 001007S



Naresh Chandra G.V.  
M.No: 201754  
Partner

Place : New Delhi  
Date : May 17, 2012

## Comments of the Comptroller and Auditor General of India Under Section 619(4) of the Companies Act, 1956 on the Accounts of Bharat Heavy Plate & Vessels Limited, Visakhapatnam for the Year Ended 31<sup>st</sup> March 2012

The preparation of financial statements of Bharat Heavy Plate and Vessels Limited, Visakhapatnam for the year ended on 31 March 2012 in accordance with the financial reporting framework prescribed under the Companies Act, 1956 is the responsibility of the management of the company. The Statutory Auditor appointed by the Comptroller and Auditor General of India under Section 619(2) of the Companies Act, 1956 is responsible for expressing opinion on these financial statements under section 227 of the Companies Act, 1956 based on the independent audit in accordance with the auditing and assurance standards prescribed by their professional body, the Institute of Chartered Accountants of India. This is stated to have been done by them vide their Audit Report dated 17 May 2012.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 619 (3) (b) of the Companies Act, 1956 of the financial statements of Bharat Heavy Plate and Vessels Limited, Visakhapatnam for the year ended on 31 March 2012. 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 auditor and company personnel and a selective examination of some of the accounting records. On the basis of my audit, nothing significant has come to my knowledge, which would give rise to any comment upon or supplement to statutory auditor's report under Section 619 (4) of the Companies Act, 1956.

For and on the behalf of the  
Comptroller and Auditor General of India



(Y. N. Thakare)

Principal Director of Commercial Audit  
& Ex-Officio Member, Audit Board, Hyderabad

Place: Hyderabad  
Date: 29 June 2012

## Balance Sheet

As at March 31, 2012

(₹ in Lakh)

	Notes	As at 31.03.2012		As at 31.03.2011	
<b>EQUITY AND LIABILITIES</b>					
(1) Shareholders' Funds					
(a) Share Capital	1	3379.78		3379.78	
(b) Funds from Head Office	1A	0.00		0.00	
(c) Reserves & Surplus	2	-25311.55	-21931.77	-26355.72	-22975.94
Share Application money pending allotment			3400.00		3400.00
(2) Inter Division Accounts (Cr Balance)	1B		0.00		0.00
(3) Funds to & From Corp. Off -CCC A/c (Cr Balance)	1D		0.00		0.00
(4) Non-current liabilities					
Long-term borrowings	3	21887.18		21754.23	
Deferred tax liabilities (Net)	12	0.00		0.00	
Other Long term liabilities	4	2522.47		1755.33	
Long-term provisions	5	525.86		977.65	
Total Non-current liabilities			24935.51		24487.21
(5) Current liabilities					
Short-term borrowings	6	205.50		210.50	
Trade payables	7	4510.19		2845.31	
Other Current liabilities	8	12365.08		13496.54	
Short-term provisions	9	2344.23		1734.63	
Total Current liabilities			19425.00		18286.98
<b>TOTAL EQUITY &amp; LIABILITIES</b>			<b>25828.74</b>		<b>23198.25</b>
<b>ASSETS</b>					
1 Non Current Assets	10				
(a) Fixed Assets					
(i) Tangible Assets		449.09		440.90	
(ii) Intangible Assets		0.00		0.00	
(iii) Capital Work-in-progress		0.40		0.00	
(iv) Intangible assets under development		0.00	449.49	0.00	440.90
(b) Non-current Investments	11	1.31		1.31	
(c) Deferred tax Assets (Net)	12	0.00		0.00	
(d) Long-term loans and advances	13	274.04		288.62	
(e) Other non-current assets	14	2684.41	2959.76	2342.83	2632.76
2 Current Assets					
(a) Current Investments	15	0.00		0.00	
(b) Inventories	16	6330.83		4954.90	
(c) Trade Receivables	17	11626.28		9753.73	
(d) Cash & cash equivalents	18	1069.14		720.99	
(e) Short Term Loans & Advances	19	3366.34		4670.23	
(f) Other Current Assets	20	26.90	22419.49	24.74	20124.59
3 Inter Division Accounts (Dr Balance)	1C		0.00		0.00
4 Funds to & From Corp. Off -CCC A/c (Dr Balance)	1E		0.00		0.00
<b>TOTAL</b>			<b>25828.74</b>		<b>23198.25</b>

Other Notes to Accounts:

33

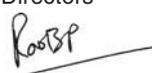
See accompanying Notes 1 to 20, 33 & Significant accounting policies form an integral part of the Balance Sheet.

For and on behalf of Board of Directors

  
A.S.S. SARMA  
Company Secretary

  
SUNITH SHOME  
General Manager (Fin)

  
P.V. SRIDHARAN  
Director (HR)

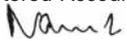
  
B.P. Rao  
Chairman

As per our report of even date

For GRANDHY & CO

FRN NO : 001007S

Chartered Accountants

  
Naresh Chandra GV

M. No : 201754

Partner

Place: New Delhi

Date : May 17, 2012

## Statement of Profit & Loss As at March 31, 2012

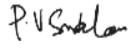
(₹ in Lakh)

	Notes	For the year ended 31.03.2012	For the year ended 31.03.2011
I Revenue from operations (Gross)	21	15580.08	13697.54
Less: Excise duty & Service Tax		1398.37	950.92
		14181.71	12746.62
II Other Operational Income	22	504.44	312.54
III Other Income	23	41.69	131.74
IV Transfers out to other divisions	23A		
V Allocation of expenditure to other divisions	25A		
<b>Total Revenue</b>		<b>14727.84</b>	<b>13190.90</b>
VI <b>Expenses</b>			
Accretion (Decretion) to WIP / FG	24	-432.09	105.78
Consumption Materials, Erection & Engg Exp	25	7649.03	6644.88
Employee remuneration & benefits expenses	26	4787.30	4661.20
Other Expenses of Manufacture, Administration, Selling and Distribution	27	1170.97	1190.14
Provisions (net)	28	282.04	236.05
Finance & Other borrowing costs	29	140.31	140.14
Depreciation, Amortisation, Impairment		102.35	109.92
Less: Cost Jobs done for internal use			
<b>Total Expenses</b>		<b>13699.91</b>	<b>13088.11</b>
VII Profit/(Loss) before Prior period adjustments exceptional items and tax		1027.93	102.79
VIII Add/Less : Exceptional items	30	16.24	774.77
IX Add/Less: Prior period adjustments (net)	31	0.00	0.00
X Profit (Loss) before Tax for the year		1044.17	877.56
XI Less: Tax expense		0.00	0.00
Profit (Loss) after Tax for the year		1044.17	877.56
Profit (Loss) for the period from continuing operations		1044.17	877.56
Other Notes to Accounts:	33		
See accompanying Notes 21 to 34 & Significant accounting policies form an integral part of the Statement of Profit & Loss			

For and on behalf of Board of Directors

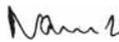
  
**A.S.S. SARMA**  
Company Secretary

  
**SUNITH SHOME**  
General Manager (Fin)

  
**P.V. SRIDHARAN**  
Director (HR)

  
**B.P. Rao**  
Chairman

As per our report of even date  
**For GRANDHY & CO**  
FRN NO : 001007S  
Chartered Accountants

  
**Naresh Chandra GV**  
M. No : 201754  
Partner

Place : New Delhi  
Date : May 17, 2012

## Cash Flow Statement for the year ended March 31, 2012

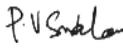
(₹ in Lakh)

DETAILS	For the year ended 31.03.2012	For the Year ended 31.03.2011
<b>Cash Flow from Operating Activities</b>		
Net Profit	1044.17	877.56
<b>Adjustments for</b>		
Depreciation	102.35	109.92
Increase/Decrease in Inventory	-1442.77	-688.03
Decrease in Loans & advances	3625.44	-886.95
Increase/Decrease in Trade Receivables	-4275.00	-238.71
Increase/Decrease in Deferred Revenue Expenditure	0.00	0.00
Increase/Decrease in Trade Payables / Liabilities	999.52	502.69
Increase/Decrease in Provisions	157.82	602.73
Total	-832.64	-598.35
<b>A Net cash flow from Operating Activities</b>	<b>211.53</b>	<b>279.21</b>
<b>Cash flow from Investing Activities</b>		
Purchase of Fixed Assets	-110.94	-89.91
Increase/Decrease in investments	0.00	0.00
<b>B Net cash used in Investing Activities</b>	<b>-110.94</b>	<b>-89.91</b>
<b>Cash flow from Financing Activities</b>		
Increase/ Decrease in Borrowings	263.80	-257.58
Interest Waiver (Extra Ordinary items)	-16.24	-774.77
<b>C Net Cash generated from Finance Activities</b>	<b>247.56</b>	<b>-1032.35</b>
<b>Net increase in cash and cash equivalents</b>	<b>348.15</b>	<b>-843.05</b>
Cash and cash equivalents as at 1 <sup>st</sup> April, 2011	720.99	1564.04
Cash and cash equivalents as at 31 <sup>st</sup> March, 2012	1069.14	720.99

For and on behalf of Board of Directors

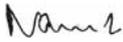
  
**A.S.S. SARMA**  
Company Secretary

  
**SUNITH SHOME**  
General Manager (Fin)

  
**P.V. SRIDHARAN**  
Director (HR)

  
**B.P. Rao**  
Chairman

As per our report of even date  
**For GRANDHY & CO**  
FRN NO : 001007S  
Chartered Accountants

  
**Naresh Chandra GV**  
M. No : 201754  
Partner

Place: New Delhi  
Date : May 17, 2012

## Note -1 Share Capital

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
<b>Authorised :</b>		
3,50,000 Equity Shares of ₹ 1,000/- each	<b>3500.00</b>	3500.00
<b>Issued, Subscribed and paid up :</b>		
3,37,978 (Previous year 3,37,978) Equity Shares of ₹ 1,000 each fully paid up (All the 3,37,978 Equity Shares of ₹ 1,000/- each are held by the Holding Company, M/s. Bharat Heavy Electricals Limited, New Delhi and its nominee).	<b>3379.78</b>	3379.78
<b>TOTAL</b>	<b>3379.78</b>	3379.78

## Note -1A - 1E

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
1A. Funds from Head Office	<b>0.00</b>	0.00
1B. Inter Division Account (Credit Balance)	<b>0.00</b>	0.00
1C. Inter Division Account (Debit Balance)	<b>0.00</b>	0.00
1D. Funds to & from Corporate Office under Central Cash Credit A/c (Credit Balance)		
1E. Funds to & from Corporate Office under Central Cash Credit A/c (Debit Balance)		
<b>TOTAL</b>	<b>0.00</b>	0.00

## Note 2 : Reserves & Surplus

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
<b>(a) Capital Reserve</b>				
Opening Balance	2.01		2.01	
Add: Additions / Adjustments	0.00		0.00	
Less: Deductions / Adjustments	0.00	2.01	0.00	2.01
<b>(b) Securities Premium A/c</b>				
Opening Balance	0.00		0.00	
Add: Additions / Adjustments	0.00		0.00	
Less: Deductions / Adjustments	0.00	0.00	0.00	0.00
<b>(c) Foreign Project Reserve A/c</b>				
Opening Balance	0.00		0.00	
Add: Additions / Adjustments	0.00		0.00	
Less: Deductions / Adjustments	0.00	0.00	0.00	0.00
<b>(d) Bond Redemption Reserve</b>				
Opening Balance	0.00		0.00	
Add: Additions / Adjustments	0.00		0.00	
Less: Deductions / Adjustments	0.00	0.00	0.00	0.00
<b>(e) General Reserve</b>				
Opening Balance	0.00		0.00	
Add: Additions / Adjustments	0.00		0.00	
Less: Deductions / Adjustments	0.00	0.00	0.00	0.00
<b>Profit / Loss for the year</b>				
(Statement of Profit & Loss)	1044.17		877.56	
Balance of Profit (Loss) brought forward from last year	-26357.73		-27235.29	
Foreign Project Reserved written back	0.00		0.00	
Distribution of Income tax, Dividend etc. of last year to units	0.00		0.00	
Profit available for appropriation	-25313.56		-26357.73	
Less: Appropriation	0.00		0.00	
- Foreign Project Reserve	0.00		0.00	
-Bond Redemption Reserve	0.00		0.00	
-General Reserve	0.00		0.00	
-Dividend	0.00		0.00	
-Corporate Dividend Tax	0.00	-25313.56	0.00	-26357.73
<b>TOTAL</b>		<b>-25311.55</b>		<b>-26355.72</b>

## Note 3 : Long Term Borrowings

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
<b>SECURED</b>				
Debentures / Bonds	0.00		0.00	
Loans from State Governments	0.00		0.00	
Loans from Financial Institutions	0.00		0.00	
<b>UNSECURED</b>				
Public Deposits	0.00		0.00	
<u>Term Loans and Advances from</u>				
Govt. of India	0.00		0.00	
State Governments	0.00		0.00	
Financial Institutions	0.00		0.00	
Foreign Financial Institutions	0.00		0.00	
Long term maturities of finance lease obligations				
<b>Companies - (BHEL, Holding Company)</b>	21887.18		21754.23	
Credits for Assets taken on lease	0.00		0.00	
	<b>21887.18</b>		<b>21754.23</b>	

## Note 4 : Other Long term Liabilities

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
Trade Payables	0.00	0.00
Advances Received from customers / others	2486.70	1698.57
Deposits	35.77	56.76
<b>TOTAL</b>	<b>2522.47</b>	<b>1755.33</b>

## Note 5 : Long Term Provisions

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
Contractual Obligations	525.86	977.65
Provision for Employee Benefits	0.00	0.00
Others	0.00	0.00
	<b>525.86</b>	<b>977.65</b>

## Note 6 : Short Term Borrowings

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
<b><u>SECURED</u></b>		
<u>Loans and Advances from Banks</u>		
<b>Cash Credit (Cr Balance)</b>	<b>0.00</b>	<b>0.00</b>
(Secured by hypothecation of RM, Components, Stores&Spares, WIP, FG, Book Debts and Other current assets)		
<b>Packing Credit</b>	<b>0.00</b>	<b>0.00</b>
(Secured by hypothecation of RM, Components, WIP, FG & stores)		
<b>New Bill Market Schemes</b>	<b>0.00</b>	<b>0.00</b>
(Secured by hypothecation of RM, Components, WIP, FG, Stores and Demand Bills)		
-Companies (BHEL)	<b>0.00</b>	<b>0.00</b>
<b><u>UNSECURED</u></b>		
From Banks	<b>0.00</b>	<b>0.00</b>
Commercial Papers	<b>0.00</b>	<b>0.00</b>
Post shipment credit	<b>0.00</b>	<b>0.00</b>
Post shipment credit - EXIM Bank	<b>0.00</b>	<b>0.00</b>
<u>From Others</u>		
-from companies	<b>0.00</b>	<b>0.0</b>
-from financial institutions	<b>0.00</b>	<b>0.00</b>
Credits for Assets taken on lease	<b>0.00</b>	<b>0.00</b>
<b>Others (Old Bonds)</b>	<b>205.50</b>	<b>210.50</b>
<b>TOTAL</b>	<b>205.50</b>	<b>210.50</b>

## Note 7 : Trade Payables

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
Trade Payables	4510.19	2845.31
<b>TOTAL</b>	<b>4510.19</b>	<b>2845.31</b>

## Note 8 : Other Current Liabilities

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
Current Maturities of finance lease obligation		
Acceptances	0.00	0.00
Advances Received from Customers & Others	2815.12	3977.50
Deposits from Contractors & Others	921.06	863.15
Unclaimed Dividend	0.00	0.00
Other Payables / Liabilities	7825.62	7972.22
Interest Accrued but not due	0.00	0.00
<u>Interest Accrued &amp; due on Loans from</u>	<u>11561.80</u>	<u>12812.87</u>
State Governments	0.00	0.00
Financial Institutions, Bonds & Others (old bonds)	803.28	683.67
Packing Credit	0.00	0.00
<u>Interest Accrued &amp; due on</u>		
Post Shipment Credit	0.00	0.00
Government Loans	0.00	0.00
State Government Loans	0.00	0.00
Credit for Assets taken on Lease	0.00	0.00
Financial Institutions & Others	0.00	0.00
Foreign Financial Institutions	0.00	0.00
Public Deposits	0.00	0.00
<b>TOTAL</b>	<b>12365.08</b>	<b>13496.54</b>

## Note 9 : Short Term Provisions

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
Dividends	0.00	0.00
Corporate Dividend Tax	0.00	0.00
Contractual Obligations	752.54	143.99
Retirement Benefits	0.00	0.00
Others	1591.69	1590.64
	<b>2344.23</b>	<b>1734.63</b>

## Note 10 : Fixed Assets

(₹ in Lakh)

Particulars	As at 31.03.2012	As at 31.03.2011
<u>(i) Tangible Assets</u>		
Gross Block	8264.01	8153.47
Less: Accumulated Depreciation	7814.92	7712.57
Less: Accumulated Impairment	0.00	0.00
Less: Lease Adjustment Account		
Net Block	449.09	440.90
<u>(ii) Intangible Assets</u>		
Gross Block	0.00	0.00
Less: Accumulated Depreciation / Impairment	0.00	0.00
Net Block	0.00	0.00
<u>(iii) Capital Work in Progress</u>		
Construction Work in Progress Civil	0.00	0.00
Construction Stores (Including in Transit)	0.00	0.00
Plant & Machinery and other Equipments		
-Under Erection / Fabrication / Awaiting Erection	0.40	0.00
-In Transit	0.00	0.00
Leased Assets under Erection	0.00	0.00
Intangible Assets under development	0.00	0.00
<b>TOTAL</b>	<b>449.49</b>	<b>440.90</b>
<b>Refer to details in Note 10.1</b>		

## Note 10.1 Fixed Assets

(₹ in Lakh)

Particulars	Gross Block			Total Cost as at 31.03.2012	Depreciation		Net Block		Depn for the year
	Cost as at 31.03.2011	Additions/ adjustments during the year	Deductions/ adjustments during the year		Depn. Opening Bal. as at 01.04.2011	Accumulated Depreciation as at 31.03.2012	As at 31.03.2012	As at 31.03.2011	
<b>Factory / Office Complex</b>									
Free Hold land (incl dev exp)	16.41	0.00	0.00	16.41	0.00	0.00	16.41	16.41	0.00
Lease Hold land (incl dev exp)									
Roads, Bridges & Culverts	24.82	0.00	0.00	24.82	16.72	17.13	7.69	8.10	0.41
Buildings	979.43	0.00	0.00	979.43	870.61	880.17	99.26	108.82	9.56
Leasehold Buildings									
Drainage, sewerage, water supply	44.23	0.00	0.00	44.23	36.15	37.10	7.13	8.08	0.95
Railway siding	18.38	0.00	0.00	18.38	18.38	18.38	0.00	0.00	0.00
Locomotives & wagons	16.61	0.00	0.00	16.61	16.61	16.61	0.00	0.00	0.00
Plant & Machinery	5162.87	84.96	0.00	5247.83	4997.25	5057.36	190.47	165.62	60.11
Electronic data processing equipment	450.39	12.79	0.00	463.18	442.19	451.06	12.12	8.20	8.87
Electrical installations	151.97	0.00	0.00	151.97	151.97	151.97	0.00	0.00	0.00
Construction Equipment	442.68	0.00	0.00	442.68	442.68	442.68	0.00	0.00	0.00
Vehicles	55.86	0.00	0.00	55.86	49.66	50.68	5.18	6.20	1.02
Furniture & Fixtures	217.40	0.77	0.00	218.17	205.44	208.98	9.19	11.96	3.54
Assets taken on lease									
- Plant & Machinery									
- EDP Equipment	91.05	0.00	0.00	91.05	26.12	41.46	49.59	64.93	15.34
<b>TOTAL (A)</b>	<b>7672.11</b>	<b>98.52</b>	<b>0.00</b>	<b>7770.63</b>	<b>7273.79</b>	<b>7373.58</b>	<b>397.05</b>	<b>398.33</b>	<b>99.80</b>
<b>Township</b>									
Free Hold land (incl development exp)	7.68	0.00	0.00	7.68	0.00	0.00	7.68	7.68	0.00
Lease Hold land (incl development exp)									
Roads, Bridges & Culverts	20.05	0.00	0.00	20.05	9.93	10.25	9.80	10.12	0.32
Buildings	387.50	0.00	0.00	387.50	365.90	366.93	20.57	21.60	1.03
Leasehold Buildings									
Drainage, sewerage, water supply	21.57	0.00	0.00	21.57	18.40	18.80	2.77	3.17	0.40
Plant & Machinery									
Electronic data processing equipment									
Electrical installations	35.37	12.02	0.00	47.39	35.37	36.17	11.22	0.00	0.80
Vehicles									
Furniture & Fixtures	9.19	0.00	0.00	9.19	9.19	9.19	0.00	0.00	0.00
<b>TOTAL (B)</b>	<b>481.36</b>	<b>12.02</b>	<b>0.00</b>	<b>493.38</b>	<b>438.77</b>	<b>441.34</b>	<b>52.04</b>	<b>42.57</b>	<b>2.55</b>
<b>TOTAL (A)+(B)</b>	<b>8153.47</b>	<b>110.54</b>	<b>0.00</b>	<b>8264.01</b>	<b>7712.57</b>	<b>7814.92</b>	<b>449.09</b>	<b>440.90</b>	<b>102.35</b>
<b>Previous Year</b>	<b>8063.56</b>	<b>89.91</b>	<b>0.00</b>	<b>8153.47</b>	<b>7602.65</b>	<b>7712.57</b>	<b>440.90</b>	<b>460.91</b>	<b>109.92</b>

## Note 11 : Non Current Investments

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
<b>LONG TERM</b>				
<b>Shares</b>				
Un-quoted (fully paid up)				
<b>TRADE</b>				
490 Equity shares of ₹10/- each (fully paid up) in M/s. Engg. Projects (I) Ltd		1.26		1.26
<b>OTHER THAN TRADE</b>				
250 Shares of ₹ 10/- each (fully paid up) in BHPV Employees Consumers Coperative Stores Limited	0.02		0.02	
10 Shares of ₹ 50/- each (fully paid up) in Cuffe Parade Persopolis Premises Coocerative Soceity Ltd, Mumbai	0.01		0.01	
20 Shares of ₹ 50/- each (fullyPaid up) in Hill View Coocerative Housing Soceity Ltd, Mumbai	0.01		0.01	
Share money paid in advance to M/s Rita Enterprises, Mumbai for allotment of 50 shares of ₹ 10 each	0.01		0.01	
Share money paid in advance to M/s Asish Enterprises Mumbai for allotment of 50 shares of ₹ 10 each	0.00	0.05	0.00	0.05
<b>TOTAL</b>		<b>1.31</b>		<b>1.31</b>

## Note 12 : Deferred Tax Assets (Net)

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
Provisions	0.00		0.00	
Statutory Dues	0.00		0.00	
Modvat Adjustment	0.00		0.00	
Others	0.00	0.00	0.00	0.00
Deferrred Tax liabilities	0.00		0.00	
Depreciation	0.00		0.00	
Others	0.00	0.00	0.00	0.00
<b>NET DEFERRED TAX ASSETS</b>		<b>0.00</b>		<b>0.00</b>

## Note 13 : Long term Loans and Advances

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
Loans to Subsidiary Companies				
Advances for Capital Expenditure	0.00		0.00	
Deposits	117.33		117.48	
Advances to Employees	156.39		170.88	
Interest accrued and due on loans	0.00		0.00	
Others	0.00	273.72	0.00	288.36
<u>Advance (Recoverable in cash or kind or value to be received)</u>				
For purchases	0.00		0.00	
To Others	0.00	0.00	0.00	0.00
<u>Deposits</u>				
Balance with Customs, Port Trust, Other Govt. Authorities	0.00		0.00	
With others	0.32	0.32	0.26	0.26
Less : Provision				
<b>Sub classification:</b>				
Secured, Considered good	₹ Nil Lakh			
Unsecured, Considered good	₹ 273.72 Lakh			
Doubtful	₹ Nil Lakh			
<b>TOTAL</b>		<b>274.04</b>	0.00	288.62

## Note 14 : Other Non Current Assets

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
Long Term Trade Receivables	2315.38		2040.64	
Less: Provisions for bad and doubtful debts	0.00		0.00	
Less: Automatic Price Reduction Adjustment a/c	0.00	2315.38	0.00	2040.64
<b>Sub classification:</b>				
Secured, Considered good	₹ Nil Lakh			
Unsecured, Considered good	₹ 2315.38 Lakh			
Doubtful	₹ 0.00 Lakh			
Non Moving Inventory	1423.32		1232.25	
Less: Provision for non moving inventory	1054.29	369.03	930.06	302.19
<b>TOTAL</b>		<b>2684.41</b>		2342.83

## Note 15 : Current Investments

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
<b>CURRENT</b>				
UNQUOTED (Fully Paid up)	0.00		0.00	
OTHER THAN TRADE	0.00		0.00	
		<b>0.00</b>		0.00

## Note 16 : Inventories

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
Stores and Spares:				
-Production	407.43		290.70	
-Fuel Stores	16.01		7.13	
-Miscellaneous	241.74	665.18	211.20	509.03
Raw material & Components		3241.94		2422.81
Materials-in-transit		51.21		111.70
Materials with Fabricators/Contractors		0.00		0.00
Loose Tools		21.47		21.51
Scrap (Estimated realisable value)		337.14		308.05
Finished Goods		18.59		11.35
Inter Division Transfers in Transit		0.00		0.00
Work-in-progress (Including items with sub contractors)		1995.30		1570.45
<b>@ Valued as per Significant Accounting Policy Number 8</b>		<b>6330.83</b>		<b>4954.90</b>

## Note 17 : Current Trade Receivables

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
-Debts outstanding for a period exceeding 6 months	12096.51		10601.36	
-Other Debts	5734.34		5356.94	
	17830.85		15958.30	
Less:Provision for Doubtful Debts	6204.57		6204.57	
Less:Automatic price reduction adjustment A/c	0.00	11626.28	0.00	9753.73
Current Trade Debtors include Deferred debts ₹ 4391.22 Lakh (Previous year ₹ 2418.00Lakh)				
Current Trade Debtors include Goods dispatched pending billing ₹ Nil Lakh (Previous year ₹ Nil Lakh)				
<u>Particulars of Current Trade Receivables</u>				
Secured, Considered Good ₹ Nil Lakh				
Unsecured, Considered good ₹ 11626.01 Lakh				
Doubtful ₹ 6204.57 Lakh				
<b>TOTAL</b>		<b>11626.28</b>		<b>9753.73</b>

## Note 18 : Cash and Cash Equivalents

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
Cash and Stamps in hand		2.28		13.58
Cheques and Demand Drafts in Hand		244.05		0.00
Remittances in Transit		0.00		0.00
Balances with Scheduled Banks:				
Current A/c	294.06		447.91	
Deposit A/c	528.75		259.50	
Deposits more than 12 months maturity period	0.00	822.81	0.00	707.41
Balances with Non- Scheduled Banks				
Current A/c ₹ Nil Lakh				
Deposit A/c ₹ Nil Lakh				
Deposits more than 12 months maturity period ₹ Nil Lakh				
		1069.14		720.99

## Note 19 : Short Term Loans and Advances

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
<b>LOANS</b>				
Loans to Subsidiary Companies	0.00		0.00	
Loans to Employees	0.00		0.00	
Material Issued on Loan	0.00		0.00	
Loans to Others	0.00		0.00	
Loans to PSUs	0.00		0.00	
Interest accrued and or due on loans	0.00	0.00	0.00	0.00
<b>ADVANCES</b>				
<u>(Recoverable in cash or in kind or for value to be received)</u>				
To Subsidiaries	0.00		0.00	
To Employees	113.41		66.67	
For Purchases	2204.25		2228.01	
To Others	2905.86	5223.52	2673.25	4967.93
<b>DEPOSITS</b>				
Balance with Customs, Port Trust, Other Govt. Authorities	802.95		1986.46	
Inter Corporate Deposits / Loans	0.00		0.00	
Interest accrued on Inter Corporate Deposits / Loans	0.00		0.00	
With others	263.72		314.03	
Advance Tax / TDS (net of provision for taxation)	55.65	1122.32	362.82	2663.31
<b>Total</b>		6345.84		7631.24
Less: Provision for doubtful loans and advances		2979.50		2961.01
<b>Particulars of Loan and Advances</b>				
Secured, Considered good	₹ Nil Lakh			
Unsecured, Considered good	₹ 6345.84 Lakh			
Doubtful	₹ 2979.50 Lakh			
		3366.34		4670.23

## Note 20 : Other Current Assets

(₹ in Lakh)

Particulars	As at 31.03.2012		As at 31.03.2011	
Interest Accrued on Bank Deposits & Investments		26.90		24.74
Rent Receivable on Leased Assets	0.00		0.00	
Less: Unearned Finance Income	0.00	0.00	0.00	0.00
		26.90		24.74

## Note 21 : Revenue from Operations

(₹ in Lakh)

Particulars	For the year ended 31.03.2012	For the year ended 31.03.2011
Sales less returns	13740.14	12688.34
Income from external erection & other services	1839.94	1009.20
Revenue from works contract	0.00	0.00
Assets Given on Finance Lease	0.00	0.00
<b>TOTAL</b>	<b>15580.08</b>	<b>13697.54</b>

## Note 22 : Other Operational Income

(₹ in Lakh)

Particulars	For the year ended 31.03.2012	For the year ended 31.03.2011
Export Incentives	0.00	0.00
Rental Income on leased assets	0.00	0.00
Lease equalisation A/c	0.00	0.00
Finance income on assets given on finance lease	0.00	0.00
Scrap	211.12	78.46
Receipts from sale / transfer of surplus stock	0.00	0.00
Others	293.32	234.08
<b>TOTAL</b>	<b>504.44</b>	<b>312.54</b>

## Note 23 : Other Income

(₹ in Lakh)

Particulars	For the year ended 31.03.2012	For the year ended 31.03.2011
<u>(a) OTHER INCOME</u>		
Profit on sale of Units or Bonds	0.00	0.00
Profit from sale of fixed assets & capital stores (Net Cr)	0.00	0.00
Dividend on investments (Long term-trade)	0.01	0.01
Exchange variation (Cr Balance)	0.00	0.00
Others (including grants from GOI or R&D projects)	0.00	0.00
<u>(b) INTEREST INCOME</u>		
From customers	0.00	0.00
From employees	0.00	0.00
From banks	41.68	131.73
From Investments (Current. Other than trade)	0.00	0.00
Inter Division Transactions (Cr Balance)	0.00	0.00
Others	0.00	0.00
(TDS ₹ 1.72 Lakh (Previous Year ₹ 6.07 Lakh)		
<b>TOTAL</b>	<b>41.69</b>	<b>131.74</b>

## Note 24 : Accretion / (Decretion) to WIP & FG

(₹ in Lakh)

Particulars	For the year ended 31.03.2012		For the year ended 31.03.2011	
<b>A. Work-in-Progress</b>				
Closing balance	1995.30		1570.45	
Opening balance	1570.45	424.85	1638.20	-67.75
<b>B. Stock of Finished Goods:</b>				
Closing balance	18.59		11.35	
Opening balance	11.35	7.24	49.38	-38.03
Inter Division Transfers in transit		0.00		0.00
<b>T O T A L (A+B)</b>		<b>432.09</b>		<b>-105.78</b>

**Note:**

Element of Excise Duty in Finished Goods:

(₹ in Lakh)

Closing Stock	0.00	0.00
Opening Stock	0.00	0.00

## Note 25 : Consumption of Material, Erection and Engineering Expenses

(₹ in Lakh)

Particulars	For the year ended 31.03.2012		For the year ended 31.03.2011	
Consumption of Raw Materials & Components	7115.22		6252.17	
Less: transfer out to other divisions	0.00	7115.22	0.00	6252.17
Consumption of Stores & spares	224.42		183.34	
Less: transfer out to other divisions	0.00	224.42	0.00	183.34
Transfer in Materials		0.00		0.00
Transfer in other services		0.00		0.00
Erection & engineering Expenses - payment to sub contractors		309.39		209.37
<b>Total</b>		<b>7649.03</b>		<b>6644.88</b>

## Note 26 : Employees Remuneration & Benefits Expenses

(₹ in Lakh)

Particulars	For the year ended 31.03.2012		For the year ended 31.03.2011	
Salaries, Wages, Bonus, Allowances and Other benefits		3552.70		2959.96
Contribution to gratuity fund		189.81		776.28
Contribution to Provident Fund and Other funds		279.63		256.13
Group Insurance		0.00		0.00
Staff Welfare Expenses		765.16		668.83
<b>T O T A L</b>		<b>4787.30</b>		<b>4661.20</b>

## Note 27 : Other Expenses of Manufacture, Administration, Selling and Distribution

(₹ in Lakh)

Particulars	For the year ended 31.03.2012		For the year ended 31.03.2011	
Resident Consultant Charges		0.00		0.00
Royalty, Technical Documentation & other consul. charges		0.00		0.00
Rent : Residential		0.00		0.00
Non Residential		0.00		0.00
Excise Duty		25.17		17.84
Power & fuel		364.67		342.43
Rates & taxes		7.32		-20.63
Service Tax		0.00		0.00
Exchange Variation (Dr Balance)		0.00		6.59
Insurance		10.01		11.22
Repairs:				
Buildings		75.21		86.29
Plant & Machinery		39.70		107.55
Others		19.72		25.93
		<u>134.63</u>		<u>219.77</u>
Other expenses in connection with export orders		0.00		0.00
Loss on investments written off		0.00		0.00
Bad Debts written off during the year		0.00		0.00
Carriage outward		120.45		155.30
Travelling & Conveyance		44.86		32.04
Miscellaneous expenses		463.86		425.58
Cash Discount		0.00		0.00
Liquidated Damages charged off		0.00		0.00
Guarantee Fee		0.00		0.00
Price diff. on transfer of stores to divisions under construction		0.00		0.00
Donations		0.00		0.00
Corporate Social Responsibility		0.00		0.00
Loss / premium on redemption of bonds		0.00		0.00
Loss on sale of capital stores /fixed assets (Net Dr)		0.00		0.00
Allocation of expenses from other divisions (Dr Balance)		0.00		0.00
<b>Total</b>		<b>1170.97</b>		<b>1190.14</b>

## Note 28 : Provisions (Net)

(₹ in Lakh)

Particulars	For the year ended 31.03.2012		For the year ended 31.03.2011	
<b>Doubtful Debts, Liquidated damages and Loans &amp; Advance</b>				
Created During the year		0.00		0.00
Less: Written back during the year		0.00		143.94
		<u>0.00</u>		<u>-143.94</u>
<b>Contractual Obligations</b>				
Created During the year		311.64		895.50
Less: Written back during the year		154.88		292.77
		<u>156.76</u>		<u>602.73</u>
<b>Others</b>				
Created During the year		125.28		-222.74
Less: Written back during the year		0.00		0.00
		<u>125.28</u>		<u>-222.74</u>
<b>TOTAL</b>		<b>282.04</b>		<b>236.05</b>

## Note 29 : Finance & Other Borrowing Costs

(₹ in Lakh)

Particulars	For the year ended 31.03.2012	For the year ended 31.03.2011
Interest on:		
Bonds / Debentures / Central / State Govt. Loans	135.85	120.42
Banks / Financial Institutions / Borrowings	0.00	0.00
Deferred Credits	0.00	0.00
Inter Division Transaction (Dr Balance)	0.00	0.00
Foreign Financial Institutions	0.00	0.00
Others	4.46	19.72
Other Borrowing Costs	0.00	0.00
	<u>140.31</u>	<u>140.14</u>
Less: Borrowing Costs Capitalised	0.00	0.00
<b>T O T A L</b>	<b>140.31</b>	<b>140.14</b>

## Note 30 : Exceptional Items

(₹ in Lakh)

Particulars	For the year ended 31.03.2012	For the year ended 31.03.2011
<b>INCOME</b>		
Waiver of Interest on settlement of old bonds	16.24	774.77
<b>EXPENDITURE</b>	0.00	0.00
<b>Exceptional Items (Net)</b>	<b>16.24</b>	<b>774.77</b>

## Note 31 : Prior Period Items

(₹ in Lakh)

Particulars	For the year ended 31.03.2012	For the year ended 31.03.2011
<b>INCOME</b>		
Sales less returns	0.00	0.00
Interest Income / others	0.00	0.00
<b>EXPENDITURE</b>		
Consumption of Raw material & components	0.00	0.00
Interest	0.00	0.00
Misc. expenses	0.00	0.00
<b>Proir period adjustments (Net)</b>	<b>0.00</b>	<b>0.00</b>

## Note 32 : Tax Expense

(₹ in Lakh)

Particulars	For the year ended 31.03.2012	For the year ended 31.03.2011
<b>For Current Year</b>		
-Current Tax	0.00	0.00
-Fringe Benefit Tax	0.00	0.00
-Deferred Tax	0.00	0.00
<b>For Earlier Year</b>		
-Tax	0.00	0.00
-Deferred Tax	0.00	0.00
<b>T O T A L</b>	<b>0.00</b>	<b>0.00</b>

## Significant Accounting Policies

### 1 Basis of preparation of Financial Statements

The financial statements have been prepared as of a going concern on historical cost convention and on accrual method of accounting in accordance with the generally accepted accounting principles and the provisions of the Companies Act, 1956.

### 2 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.
- 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 utilised 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 16.07.1969, in which case the same is valued at the acquisition price of the State Government concerned, by corresponding credit to capital reserve.

### 3 FINANCE LEASE

#### A) Assets Given on Lease

- a) Assets manufactured and given on finance lease are recognised as sales at normal sale price / fair value / NPV.
- b) Finance income is recognised over the lease period.
- c) Initial direct costs are expensed at the commencement of lease.

#### B) Assets Taken on Lease on or after 1<sup>st</sup> April 2001

- a) Assets taken on lease are capitalised at fair value / NPV / contracted price.
- b) 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.

- c) Lease payments made are apportioned between finance charges and reduction of outstanding liability in relation to assets taken on lease.

### C) OPERATING LEASE

#### a) Assets Given on Lease:

Assets manufactured and given on operating lease are capitalised. Lease income arising therefrom is recognised as income over the lease period.

#### b) Assets Taken on Lease:

Lease payments made for assets taken on operating lease are recognised as expense over the lease period.

### 4 Intangible Assets

Intangible assets are capitalised at cost if

- a. it is probable that the future economic benefits that are attributable to the asset will flow to the company, and
- b. the company will have control over the assets, and
- c. the cost of these assets can be measured reliably and is more than ₹ 10,000/-.

Intangible assets are amortised over their estimated useful lives not exceeding three years in case of software and not exceeding ten years in case of others on a straight line pro-rata monthly basis.

- a. Expenditure on research including the expenditure during the research phase of Research & Development Projects is charged to profit and loss account 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.

## 5 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.

## 6 Depreciation

- Depreciation on fixed assets (other than those used abroad under contract) is charged upto the total cost of the assets on straight-line method as per the rates prescribed in Schedule XIV of the Companies Act, 1956, except where depreciation is charged at rates determined on the basis of the technically assessed estimated useful lives shown hereunder:-

	Single Shift	Double Shift	Triple Shift
General Plant & Machinery	8.0%	12%	16%
Automatic/Semi-Automatic machines			
Automatic Machines	10.0%	15%	20%
Erection Equipment, Capital Tools Tackles	20.0%		
<u>Township Buildings</u>			
– Second Class	2.5%		
– Third Class	3.5%		
Railway Sidings	8.0%		
Locomotives & wagons	8.0%		
Electrical Installations	8.0%		
Office & Other equipments	8.0%		
Drainage, Sewerage & water supply	3.34%		
Electronic Data Processing Equipment	20.0%		

In respect of additions to/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

- 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 purely temporary erections, wooden structures) are so depreciated after retaining 10% as residual value.
- Purely Temporary Erection such as wooden structures are fully depreciated in the year of construction.
- 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.

## 7 Investments

- Long-term investments are carried at cost. Decline, other than temporary, in the value of such investments, is recognised and provided for.
- Current investments are carried at cost or quoted/fair value whichever is lower. Unquoted current investments are carried at cost.
- 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 & Loss Account.

## 8 Inventory Valuation

- Inventory is valued at actual/estimated cost or net realisable value, whichever is lower.
- Finished goods in Plant and work in progress involving Hydro and Thermal sets including gas based power plants, boilers, boiler auxiliaries, compressors and industrial turbo

sets are valued at actual/estimated factory cost or at 97.5% of the realisable value, whichever is lower.

- (iii) In respect of valuation of finished goods in plant and work-in-progress, cost means factory cost; actual/estimated factory cost includes excise duty payable on manufactured goods.
- (iv) In respect of raw material, components, loose tools, stores and spares cost means weighted average cost.
- (v) (a) For Construction contracts entered into on or after 01.04.2003:  
Where current estimates of cost and selling price of a contract indicates loss, the anticipated loss in respect of such contract is recognised immediately irrespective of whether or not work has commenced.
- b) For all other contracts:  
Where current estimates of cost and selling price of an individually identified project forming part of a contract indicates loss, the anticipated loss in respect of such project on which the work had commenced, is recognised.
- 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.

## 9 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 01.04.2003:  
Revenue is recognized on percentage completion method based on the percentage of actual cost incurred upto the reporting date to the total estimated cost of the contract.

B. For all other contracts:

- (i) Recognition of sales revenue in respect of long production cycle items 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.  
Percentage of completion; or the intrinsic value, reckoned at 97.5% of contract value, 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.

## 10 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.

## 11 Employee Benefits

Provident Fund and Employees' Family Pension Scheme contributions are accounted for on accrual basis. Liability for earned leave, gratuity, travel claims on retirement 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.

## 12 Claims by/against the Company

- (i) Claims for liquidated damages against the

Company are recognised in accounts based on management's assessment of the probable outcome with reference to the available information supplemented by experience of similar transactions.

- (ii) Claims for export incentives / duty drawbacks/ duty refunds and insurance claims etc. are taken into account on accrual.
- (iii) Amounts due in respect of price escalation claims and/or variations in contract work are recognised as revenue only when there are conditions in the contracts for such claims or variations and/or evidence of the acceptability of the same from customers. However, escalation is restricted to intrinsic value.

### **13 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.

### **14 Government Grants**

Government Grants are accounted when there is reasonable certainty of their realisation.

Grants related to fixed depreciable assets are adjusted against the gross cost of the relevant assets while those related to non-depreciable assets are credited to capital reserve. Grants related to revenue, unless received as compensation for expenses/losses, are recognised as revenue over the period to which these are related on the principle of matching costs to revenue.

Grants in the form of non-monetary assets are accounted for at the acquisition cost, or at nominal value if received free.

## Note : 33

### Notes Forming Part of Balance Sheet and Profit & Loss Account

1. Estimated amount of contracts, net of advances, remaining to be executed on capital account and not provided for are ₹ 1111.00 Lakh (previous year ₹132.00 Lakh). The above includes for acquisition of intangible assets.
2. Land and Buildings include 380.48 Acres of land for which formal title transfer deeds have been executed/ registered during the year 2009-10 in line with the Andhra Pradesh Government GO Nos. MS 96 Dated 30.04.2007 and 696 Dated 03.10.2008.
3. The impact of providing 100% depreciation on fixed assets costing up to ₹ 10000/- each on profit & Loss A/c is ₹ 6.74 Lakh. This includes ₹ 6.03 Lakh of depreciation provided on additions each valuing up to ₹ 10000/-.
4. Sales less returns:
  - (a) Includes based on provisional prices ₹ NIL (Previous Year ₹ NIL)
  - (b) Includes additional claim for dispatches made in earlier year in accordance with price settlement with Railways during the year ₹ NIL (Previous Year ₹ NIL).
  - (c) Escalation claims raised ₹ NIL (Previous Year ₹ NIL) and Escalation claims on accrual basis ₹ NIL (Previous Year ₹ NIL)
  - (d) Dispatches of equipment valued at ₹ 107.04 Lakh (Previous Year ₹ 1538.04 Lakh) held on behalf of customers at their request for which payment received by the company
  - (e) Excludes for price reduction (net of refund) due to delay in delivery as per the terms of the contract ₹ NIL (previous year ₹ NIL)
5. Contingent Liabilities :
 

Claims against the company not acknowledged as debts include –

  - (a) Income Tax Appeals – ₹ 31.56 Lakh department appeals relate to DTA cases pending in High Court, AP (Previous Year ₹ 31.56 Lakh) against which an amount of ₹ NIL Lakh was paid under protest / adjusted from refunds (Previous Year ₹ NIL Lakh).
  - (b) Sales Tax Demands - ₹ 1528.51 Lakh (Previous Year ₹ 1152.28 Lakh), against which ₹ 760.08 Lakh was paid under protest/ Court orders (Previous Year ₹ 646.20 Lakh)
  - (c) Excise duty demands – ₹ 10456.06 Lakh (Previous Year ₹ 10456.06 Lakh), against which an amount of ₹ 279.85 Lakh was paid under protest/ Court orders (Previous year ₹ 59.85 Lakh)
  - (d) Custom duty demands – ₹ NIL (Previous year – ₹ NIL)
  - (e) Court / Arbitration cases – ₹ 3194.66 Lakh (Previous Year ₹ – ₹ 3458.14 Lakh)
  - (f) Liquidated damages- ₹ 1084.23 Lakh (Previous year – ₹ 795.55 Lakh )
  - (g) Counter Claim by contractors – ₹ NIL (Previous year – ₹ NIL)
  - (h) Service Tax demands – ₹ 1913.71 (Previous Year ₹ 1922.23 Lakh), against which an amount of ₹ NIL Lakh was paid under protest/ Court orders (Previous year ₹ NIL Lakh)
  - (i) Others (including disputed staff cases, wage arrears of employees and English Medium School staff) – ₹ 10218.91 Lakh (Previous Year ₹ 8929.05 Lakh)
  - (j) Bank Guarantees outstanding as on 31.03.2012 – ₹ 194.79 Lakh (Previous Year ₹ 248.10 Lakh) as per AS-29 guidelines.
  - (k) Corporate guarantees outstanding as on 31.03.2012 – ₹ 1175.29 Lakh (Previous Year ₹ 2073.76 Lakh). In addition, a corporate guarantee for ₹ 957.32 Lakh given by BHEL on behalf of BHPV in favour of RCF, Thal towards performance guarantee.
6. Balances shown under debtors, creditors, contractor's advances, deposits and stock/materials lying with sub-contractors/fabricators are subject to confirmation, reconciliation & consequential adjustment, if any. The reconciliation is carried out ongoing basis & provisions wherever considered necessary have been made in line with the guidelines.
7. Details regarding rentals in respect of assets taken

on lease prior to 01.04.2001 are ₹ NIL (Previous Year ₹ NIL)

8. The amount of borrowing costs capitalized during the period are ₹ NIL Lakh (Previous Year ₹ NIL)
9. Details of assets taken on lease on or after 1<sup>st</sup> April 2001 are given below:

SL	Description	Year	Value capitalized
1	Computers/ Peripherals	2009-10	₹ 34.24 Lakh
2	Computers/ Peripherals	2010-11	₹ 56.81 Lakh
3	Computers Peripherals	2011-12	₹ NIL

10. In line with the guidance note on AS-15 (revised), the company has got the actuarial valuation of Gratuity and Leave Salary.
11. Provision / contingent liability for liquidated damages and provision for contractual obligations are provided/ withdrawn as per the advice of the Commercial Department.
12. The details of Research & Development Expenditure incurred during the year which is deductible under section 35 (2AB) of the Income Tax Act, 1961.

**Capital Expenditure**

Land	: ₹ NIL Lakh (Previous Year ₹ NIL Lakh)
Building	: ₹ NIL Lakh (Previous Year ₹ NIL Lakh)
Plant and Machinery	: ₹ NIL Lakh (Previous Year ₹ NIL Lakh)
Revenue Expenditure	
Salaries & Wages	: ₹ NIL Lakh (Previous Year ₹ NIL Lakh)
Material Consumables/spares	: ₹ NIL Lakh (Previous Year ₹ NIL Lakh)
Manufacturing & Other Expenses	: ₹ NIL Lakh (Previous Year ₹ NIL Lakh)
Total Revenue Expenditure	: ₹ NIL Lakh (Previous Year ₹ NIL Lakh)

13. Related party Transactions as per AS18 –

A) Related Parties, where control exists (Holding Company)

Name of the party: Bharat Heavy Electricals Limited.

Nature of Relationship: Holding Company

B) Other Related Parties (Key Management Personnel)

Shri A.S.Nagaraja, Managing Director, BHPV Limited (up to 30.04.2012)

Shri P.V.Sridharan, Director (HR), BHPV Limited

(₹ in Lakh)

SL	Nature of Transactions	Holding Company i.e. BHEL	Key Management Personnel
1	Purchase of goods	1906.91	-
2	Sale of goods	13759.58	-
3	Amounts Due from BHEL	5885.81	-
4	Tour Exp due from BHEL	2159.69	-
5	Advance against orders	3400.00	-
6	Loans / Advances Taken	21887.18	-

- C) As at 31.03.2012, Eight Holding Company deputed executives are working in BHPV. The salaries and other costs are borne by Holding company.

14. The company has accounted the leave encashment expenditure with 30 days a month as base for computation of encashment of leave as per specific instructions from DPE on the subject.

15. (a) Expenditure on departmental Repair & maintenance which are as under:

Plant & Machinery : ₹ NIL Lakh (Previous Year ₹ NIL Lakh)

Buildings : ₹ NIL Lakh (Previous Year ₹ NIL Lakh)

Others : ₹ NIL Lakh (Previous Year ₹ NIL Lakh)

(b) Agency Commission on exports included in expenses in connection with exports ₹ NIL Lakh (previous year ₹ NIL Lakh)

(c) Expenditure on research & development ₹ 100.07 Lakh (previous year ₹ 63.25 Lakh)

(d) Rent Residential ₹ 17.71 Lakh (previous year ₹ 11.47 Lakh)

(e) Payment to the Auditors

(₹ in Lakh)

	2011-12	2010-11
As Auditor	1.33	1.23
Taxation matters	0.25	0.25
Co. Law matters	NIL	NIL
Management services	NIL	NIL
Other services	0.28	NIL
Reimbursement of expenses	0.04	0.14

(f) Payment to Cost Auditors: ₹ NIL Lakh (previous year ₹ NIL Lakh)

(g) Expenditure on entertainment: ₹ 5.06 Lakh (previous year ₹ 6.55 Lakh)

(h) Expenditure on foreign travel

(₹ in Lakh)

	2011-12	2010-11
No. of tours	NIL	NIL
Expenditure in ₹	NIL	NIL

(i) Expenditure on Publicity and Public relations

(₹ in Lakh)

	2011-12	2010-11
Salaries allowances & other benefits	29.12	18.25
Other expenses	18.03	13.49

(j) Director's Fees : ₹ 0.22 Lakh (previous year ₹ 0.05 Lakh)

16. The disclosure related to Construction Contract received on, Contract revenue recognized for the as per revised AS-7 in respect of contract in progress at the end of the year

(a) Contract revenue recognized for the period ₹ 10203.60 Lakh (Previous Year ₹ 8731.32 Lakh)

(b) Cost incurred and recognized profit (less recognized losses) ₹ 29973.10 Lakh (Previous year ₹ 13935.54 Lakh)

(c) Amount of advance received ₹ 1569.70 Lakh (previous year ₹ 2471.16 Lakh)

(d) Amount of retentions (deferred debts) ₹ 4457.33 Lakh (Previous year ₹ 1637.82 Lakh)

(e) In respect of dues from customers after appropriate netting off

Gross amount due from customers for the contract work as an asset ₹ 6067.03 Lakh (Previous year ₹ 2008.47 Lakh)

Gross amount due to customers for the contract

work as a liability ₹ 223.47 Lakh (Previous year ₹ 1012.11 Lakh)

(f) Contingencies ₹ NIL (Previous year ₹ NIL)

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-7 (revised) Construction contracts are reviewed and updated periodically during the year by a committee and necessary adjustments are made in the current year's account. It is impracticable to quantify the amount of change in estimates.

17. Remuneration paid / payable to Directors (including Chairman and Managing Director)

Salaries & Allowances : ₹ NIL Lakh (previous year ₹ NIL Lakh)

Contribution to PF : ₹ NIL Lakh (previous year ₹ NIL Lakh)

Contribution to Gratuity fund : ₹ NIL Lakh (previous year ₹ NIL Lakh)

Others : ₹ NIL Lakh (previous year ₹ NIL Lakh)

Besides the above, the Managing Director / Director also permitted to avail Company's transport on chargeable basis for his / her private use as per rules of the company.

18. The Disclosure relating to Derivative Instruments – NIL (Previous Year NIL)

19. The disclosure relating to suppliers under Micro and Small Enterprise Development Act, 2006. The company has not received any memorandum (as required to be filled by the suppliers with the notified authority under the Micro, Small and Medium Enterprises Development Act, 2006) claiming their status as on 31<sup>st</sup> March, 2012 as micro, small or medium enterprises. Consequently, the amount paid/payable to these parties during the year is ₹ NIL Lakh.

20. The disclosure relating to Accounting Standard -29

(a)

(₹ in Lakh)

<b>Liquidated Damages (Total)</b>	<b>2011-12</b>	<b>2010-11</b>
Opening	3029.45	2962.33
Additions	295.81	67.12
Usage/ Write off/payment	7.13	0.00
Withdrawal/adjustments	0.00	0.00
Closing Balance	<b>3318.13</b>	<b>3029.45</b>
<b>Contractual Obligation (Total)</b>		
Opening	1121.64	518.91
Additions	311.64	895.50
Usage/Write off/payment	0.00	0.00
Withdrawal/adjustments	154.88	292.77
Closing Balance	<b>1278.40</b>	<b>1121.64</b>

- (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 point no. 5 of Note no. 33.
- (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.13 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.

21. Previous year's figures have been rearranged/ regrouped wherever practicable to make them comparable to current year's presentation and rounded off to the nearest thousand rupees. Further, previous year figures are given in the revised Schedule VI format as notified by the Ministry of Corporate Affairs from the current financial year 2011-12.

22. Liability due to micro and small enterprises has been determined on the basis of database of such undertakings created by units/divisions based on the responses received from suppliers/sub-contractors as to their status and is given below:

	2011-12	2010-11
	₹ Lakh	₹ Lakh
Total outstanding dues of Micro & Small Enterprises	NIL	NIL

23. Revenue recognition as per Significant accounting policy No: 9A, has been carried out in respect all relevant orders.
24. Balances shown under debtors, creditors, contractor's advances, deposits and stock/ materials lying with sub-contractors/fabricators are subject to confirmation, reconciliation and consequential adjustment, if any. The reconciliation is carried out ongoing basis & provisions wherever considered necessary have been made in line with the guidelines.

25. Disclosure requirements of Accounting Standards 3, 7(R), 15(R), 17, 20, 21, 22 & 27 and Part IV of Schedule VI of Companies Act are made at company level.

- (a) Accounting Standard 17 - The Company operates in a single primary business namely Fabrication / Erection on turnkey basis or otherwise. The components manufactured by the Company are meant for utilization in such projects only. Therefore, the Company feels no separate disclosure is required.
- (b) Accounting Standard 20 – Computation of Earnings per share (EPS) is as below:

(₹ in Lakh)			
SL No.	Description	2011-12	2010-11
1	No. of Shares	337978 Nos	337978 Nos
2	Profit / Loss before considering Extra Ordinary Items	1027.93	102.79
3	EPS before considering Extra Ordinary Items	0.003	0.0003
4	Profit / Loss after considering Extra Ordinary Items	1044.17	877.56
5	EPS after considering Extra Ordinary Items	0.0031	0.0025

- (c) Accounting Standard 22 - In the absence of certainty on the availability of future taxable income, the deferred tax asset / liability is not recognized.
- (d) Accounting Standard 27 – The Company did not have any Joint Ventures.
- (e) Accounting Standard 28 - Impairment of assets has not been carried out as per AS-28, as there is no indication of a potential loss on impairment of assets.
- (f) The disclosure requirement of Accounting Standard 5 was properly complied with.
- (g) The Company has complied with the provisions of AS 15 and operating the system of making liability for Gratuity and Leave salary based on Actuarial Valuation. An amount of ₹ 1530.27 Lakh (Previous year ₹ 1706.27 Lakh) is provided towards Gratuity and ₹ 643.74 Lakh (Previous year - ₹ 702.41 Lakh) is provided towards Leave Salary. The calculation of Gratuity and Leave Salary as per Actuarial Valuation is as follows.

(₹ in Lakh)

SL No	Details of Gratuity and Leave Salary Provisions	Gratuity	Leave Salary
1	Opening Defined Benefit Obligation	1706.27	702.41
2	Interest Cost	136.50	56.19
3	Current Service Cost	63.13	17.48
4	Benefits Paid	(365.50)	(265.98)
5	Actuarial (Gains) / Losses on Obligation	(9.83)	133.63
6	Closing Defined Benefit Obligation	1530.57	643.74

- (h) Foreign Exchange Inflow & Outflow: Foreign Exchange Inflow is ₹ NIL (Previous Year ₹ NIL). Foreign Exchange Outflow is ₹ 71.85 Lakh (Previous Year ₹ 521.24 Lakh) towards import of Raw Material.
- (i) The Company is consistently following the method of valuation of WIP. The Company is confident of controlling the future cost and containing them within the estimates.
- (j) Request for confirmations of balances were sent and reconciliations with the parties are carried out as an ongoing process. Company is making all out efforts for reconciliation and realization of long pending sundry debtors.
- (k) No amount is paid/ payable by the Company under Section 441 A of the Companies Act, 1956 (cess on turnover) since the rules

specifying the manner in which the cess shall be paid has not been notified yet by the Central Government.

26. Item of expense and income less than ₹ One lakh is not considered for booking under prior period Items.
27. In terms of GOI letter F.No.1 (11)/2004-PE (IV) DT. 07.05.2008, BHEL has infused ₹ 34 crore to BHPV as additional capital. The Authorized share capital is to be increased before issue of additional share capital of above amount. Board of directors have examined the proposal of amendments to the Clause in Memorandum of Association and Article in Articles of Association to increase Authorized Share Capital and directed to send the proposed amendments to Department of Heavy Industries for vetting. Accordingly, the documents were sent to DHI for vetting. Pending receipt of DHI clearance, the amount received from BHEL towards share capital is considered as advance and is shown under Un-secured creditors in the Balance sheet until 2010-11.

However as per the observation of Management Committee (consisting of Managing Director-BHPV, Special Director appointed by BIFR and Representative of Monitoring Agency), the amount of ₹ 34.00 crores received towards Additional Share Capital is accounted as Share Capital – Pending Allotment during the year 2011-12.

  
**A.S.S. SARMA**  
Company Secretary

  
**SUNITH SHOME**  
General Manager (Finance)

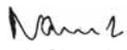
For and on behalf of Board of Directors

  
**P.V. SRIVIDYA**  
Director (HR)

  
**B.P. Rao**  
Chairman

As per our report of even date

**For GRANDHY & CO**  
FRN NO : 001007S  
Chartered Accountants

  
**Naresh Chandra GV**  
M. No : 201754  
Partner

Place: New Delhi  
Date: 17.05.2012

## Quantitative & Other Data as Classified and Certified by Management for 2011-12

### 1. Turnover, Closing and Opening Stocks

	Turnover		Closing Stock		Opening Stock	
	Tonnes(EQ)	₹ in Lakh	Tonnes(EQ)	₹ in Lakh	Tonnes (EQ)	₹ in Lakh
i) Fertilizer, Chemicals and Other Equipment	765	1134	2	11	2	11
	(5204)	(4433)	(2)	(11)	(2)	(12)
ii) Cryogenic Plant & Vessels	897	2533	0	0	0	0
	(486)	(1222)	(0)	(0)	(0)	(0)
iii) Industrial Boilers	6673	11913	32	8	0	0
	(6684)	(7092)	(0)	(0)	(85)	(37)
Total	8335	15580	34	19	2	11
	(12374)	(12747)	(2)	(11)	(87)	(49)

Note: Figures In Brackets Indicate Previous Year's Figures

### 2. Raw Material, Components and Stores & Tools Consumed

	2010-12		2010-11	
	Qty.	Value (₹ in Lakh)	Qty.	Value (₹ in Lakh)
<b>A. Raw Material and Components:</b>				
1. CS Plates (In Tonnes)	4082	2222	2823	1246
2. SS Plates (In Tonnes)	162	405	101	258
3. CS Tubes (In Meters)	123781	829	65971	450
4. SS Tubes (In Meters)	5346	150	3488	119
5. HE Tubes (In Numbers)	972	21	12161	808
6. Other Iron & Steel material including components		3487		3371
<b>Total A:</b>		7115		6252
<b>B. Stores &amp; Loose Tools</b>		224		183
<b>Total (A + B)</b>		<b>7339</b>		<b>6435</b>

	2011-12		2010-11	
<b>3. (a) Value of Imports (CIF)</b>				
1. a. Raw Materials & Components		74		532
b. Materials in Transit		6		67
2. Spares		5		16
3. Capital Goods				
<b>(b) Expenditure in Foreign Currency (including provision)</b>				
1. Royalty		0		0
2. Engineering Fees		0		0
3. Know-how		0		0
4. Other matters		0		0
<b>(c) Break-up of Imported and Indigenous Raw Materials, Components and Spare Parts consumed</b>				
1. Value of all Imported Raw Materials including Components and Spare Parts consumed during the year		61		468
2. Value of Indigenous Material including Components and Spares consumed during the year		7278		5967
		<b>7339</b>		<b>6435</b>
3. Percentage of Item (1) to Total Consumption		0.83		7.27
4. Percentage of Item (2) to Total Consumption		99.17		92.73
<b>(d) Amount remitted in foreign currencies on account of dividends</b>		nil		nil
<b>(e) Earnings in foreign Exchange</b>				
1. Supplies - (FOB)		0		0
2. Services		0		0

## BHEL Electrical Machines Limited

### Directors' Report

Dear Members,

Your Directors have pleasure in presenting before you the first Annual Report of your company. Your company was incorporated on 19.01.2011 as a subsidiary of Bharat Heavy Electricals Limited, a Navaratna Central Public Sector undertaking with Government of Kerala. As per the Joint Venture Agreement entered into by Bharat Heavy Electricals Limited with Government of Kerala, BHEL will have 51% equity shares in the capital of the company and the balance shares will be held by Government of Kerala. The company was incorporated with BHEL and Government of Kerala and their representatives holding equity shares, as envisaged in the Joint Venture Agreement. The company obtained the Certificate of Commencement of Business on 07.03.2011.

Based on the Joint Venture Agreement, all the movable and immovable assets of Kasargod unit of Kerala Electrical and Allied Engineering Company Limited was transferred to the company by Conveyance/ Sale. The consideration for the transfer of assets was satisfied partly by payment in cash and partly by allotment of shares to Kerala Electrical and Allied Engineering Company Limited. The shares allotted to M/s. Kerala Electrical and Allied Engineering Company Limited will have to be transferred to Government of Kerala as per the terms of the Joint Venture Agreement. The company has also absorbed 193 employees of Kasaragod unit of Kerala Electricals & Allied Engineering Company Limited, as envisaged in the Joint Venture Agreement.

The company could commence full commercial activities only in June, 2011 and therefore, the operations of your company reflect the activities of nine months only. As disclosed in the attached Profit & Loss Account, the company could achieve a turnover of ₹ 2113.76 Lakh and the operations have resulted in a net loss of ₹ 37.52 Lakh after providing for depreciation on fixed assets amounting to ₹ 92.93 Lakh. The loss incurred is being carried over to the balance sheet.

Your company is having ambitious future plans and the objective is to develop specialized Alternators in various

fields. Barring unforeseen circumstances, your Directors are confident that the operations of your company can be improved in the current year.

#### **DIRECTORS' RESPONSIBILITY STATEMENT:**

Your Directors hereby confirm –

That in the preparation of the Annual Accounts for the year ended 31<sup>st</sup> March, 2012, applicable accounting standards have been followed along with proper explanation relating to material departures, wherever necessary.

That the Directors have selected such accounting policies and applied them consistently and made judgements 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 loss of the company for the year ended 31<sup>st</sup> March, 2012.

That the Directors have taken proper and sufficient care for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956 for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities.

That the Directors have prepared the annual accounts on an ongoing concern basis.

As your company has not bought back any shares during the period under report, the information relating to Section 217(2B) is not applicable to the Company.

The present Board of Directors of the company consists of only three Directors, including the Chairman of the Board and Managing Director, both of whom are nominated by Bharat Heavy Electricals Limited and one Director nominated by Government of Kerala. Pending categorization and appointment of new Directors, the Audit Committee has not been constituted and the present Board functions as Audit Committee also.

#### **DIRECTORS**

During the year under report Mr. V Pandhi has ceased to be the Director of the Company. Mr. Anil Ahuja was appointed as nominee Director of BHEL during the year under report. Necessary resolution proposing his

appointment is being placed at the ensuing Annual General Meeting. Other than the above, there is no change in the constitution of the Board of Directors during the year under report.

#### **SHARE CAPITAL:**

During the year under report, the authorised and paid up capital of your company has increased to ₹ 1,500 Lakh and ₹ 1050 Lakh respectively.

#### **PERSONNEL:**

There were no employees drawing remuneration in excess of the limits specified under Section 217(2A) of the Companies Act during the year under report.

#### **AUDITORS:**

M/s. Jacob Isack & Associates, Chartered Accountants, Kanhangad, having Branch at Mangalore-575001, was appointed as Auditors of the company by the Comptroller and Auditor General of India and they will continue till the conclusion of the first Annual General Meeting. Necessary resolution for fixing their remuneration, pursuant to section 224(8)(aa) of the Companies Act, is being placed at the Annual General Meeting.

#### **CONSERVATION OF ENERGY, TECHNOLOGY UPGRADATION AND FOREIGN EXCHANGE TRANSACTION.**

Your company will not come within the list of industries which has to compulsorily disclose the steps taken for

conservation of energy, technology upgradation, etc. However, all steps are being taken to minimize and optimize the energy consumption and to reduce the cost of operation. The Research & Development wing is being strengthened so that the company can develop new products. There is no foreign exchange inflow during the period under report. The total foreign exchange outflow for purchase of raw materials was equivalent to ₹ 3558119/- during the period under report.

#### **ACKNOWLEDGEMENTS:**

Your Directors wish to place on record their sincere appreciation and thanks for the assistance rendered by the holding company, State Government and local body authorities, Banks, Company's Vendors and company's customers and all others connected with the company. The Board also places on record their sincere appreciation for the whole-hearted co-operation extended by the Officers and other staff members of the company.

**For and on behalf of the Board of Directors**



**Anil Ahuja**

**Chairman**

**Place: Kasaragod**

**Date: June 18, 2012**

## AUDITORS' REPORT

### TO THE MEMBERS OF BHEL ELECTRICAL MACHINES LIMITED

We have audited the attached Balance Sheet of BHEL ELECTRICAL MACHINES LIMITED P.O. Bedradka, Kasaragod as at 31<sup>st</sup> March 2012, the Profit and loss account and also the Cash Flow Statement for the year ended on that date annexed thereto. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our Audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the Audit to obtain reasonable assurance about whether the financial statements are free of material misstatements. An Audit includes examining on a test basis, evidence supporting the amounts and disclosures in the financial statements. An Audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall financial statement presentation. We believe that our Audit provides a reasonable basis for our opinion.

1. As required by Companies (Auditor's Report) order, 2003 as amended up to date, issued by the Company Law Board in terms of Section 227 (4A) of the Companies Act, 1956, we enclose in the annexure a statement on the matters specified in paragraphs 4 and 5 of the said order.
2. Further to our comments in the Annexure referred to in paragraph (1) above:
  - a) We have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our Audit.
  - b) In our opinion, proper books of accounts as required by the law have been kept by the company, so far as appears from our examination of those books.
  - c) The Balance Sheet and Profit & Loss Account dealt with by the Report are in agreement with the books of accounts.
  - d) In our opinion, the Balance Sheet and Profit & Loss Account and Cash Flow Statement dealt with by this report comply with the Accounting Standards referred to in sub-section (3C) of Section 211 of the Companies Act, 1956.
  - e) As per the information and explanations given to us, none of the Directors of the Company is disqualified from being appointed as a director in terms of clause (g) of sub-section 274(1) of the Companies Act 1956.
3. In our opinion and to the best of our information and according to the explanations given to us, the said accounts read together with Significant Accounting Policies, Notes to Accounts thereon give the information required by the Companies Act 1956, 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 31<sup>st</sup> March 2012 and
  - b) In the case of the Profit and Loss Account of the Loss for the year ended on that date.
  - c) In the case of Cash Flow Statement of the cash flows for the year ended on that date.

**For M/s Jacob & Isack Associates**

Chartered Accountants  
FRN 007675S



K.P.Mohammad Isack  
Partner  
(M.No. 204171)

Place: Mangalore  
Date: April 28, 2012

## Annexure to the Auditors' Report

As required by the Companies (Auditor's Report) Order, 2003 as amended up to date, issued by the company Law Board in terms of section 227(4A) of the Companies Act 1956 and on the basis of such verification of books and records of the Company as were considered appropriate on the basis of the information and explanations given to us during the course of our Audit, we further state that:

- (i) a) The company has maintained fixed Assets register showing adequate particulars.
  - b) We are informed that the fixed assets have been Physically verified by the management at reasonable intervals. No material discrepancies were noticed.
  - c) Substantial part of Fixed Assets has not been disposed off during the year.
- (ii) a) The Physical Verification of Inventory has been conducted at reasonable intervals by the management.
  - b) Procedure of Physical verification of inventory followed by the management is reasonable and adequate in relation to size of the Company and the nature of its business.
  - c) The company is maintaining proper records of inventory and no material discrepancies were noticed in Physical Verification.
- (iii) a) According to the information and explanations given to us, the company has neither taken nor given any loan secured or unsecured from or to the Companies, Firms and other parties as listed in the register maintained under section 301 of the companies under the same management as defined under section 370(1-B) of the Companies Act, 1956.
  - a) Not applicable
  - b) Not applicable
  - c) Not applicable
  - d) Not applicable
  - e) Not applicable
- (iv) In our opinion and according to the information and explanations given us, there is an adequate internal control procedure commensurate with the size of the company and the nature of its business for the purchase of stores, plant and machinery equipments and other assets and for the sale of goods and services. We have not noticed any continuous failure to correct major weaknesses in the internal control system.
- (v) a) According to the information and explanations given to us there are no transactions during the year of goods and materials made in pursuance of contracts or arrangements entered in the register maintained under section 301 of the Companies Act, 1956 and aggregating during the year exceeding ₹ 5,00,000/- in value in respect of each party.
  - b) Not applicable.
- (vi) Not applicable as the company has not accepted any Deposits from the Public during the year.
- (vii) Not applicable.
- (viii) Not applicable.
- (ix) a) The company has been fairly regular in depositing statutory dues.
  - b) No undisputed amount payable for more than six months.
- x) The Company is of one year old. Hence Not Applicable.
- xi) The company is not in default in repayments of its dues to a financial institution, or bank or debenture holders.
- xii) The Company has not granted any loan during the year.

- xiii) Not applicable as the company is not a chit fund, nidhi/ mutual benefit Fund/Society.
- xiv) As per information and explanations give to us, The Company is not dealing in Shares, Securities, Debentures and other Investments.
- xv) As per the information and explanations given to us, the Company has not given any guarantee for loan taken by the others from Bank or financial institutions.
- xvi) The company has not obtained any term loan during the year.
- xvii) No such cases have been reported during the year under Audit.
- xviii) No such cases have been reported during the year under Audit
- xix) No such cases have been reported during the year under Audit.
- xx) No public issue is made.
- xxi) As per our verification of books of accounts and other records and as per the information and explanations given to us no fraud noticed during the year under Audit.

**For M/s Jacob & Isack Associates**  
Chartered Accountants  
FRN 007675S



K.P.Mohammad Isack  
Partner  
(M.No. 204171)

Place : Mangalore  
Date : April 28, 2012

## Comments of the Comptroller and Auditor General of India under section 619(4) of the Companies Act, 1956 on the Accounts of BHEL Electrical Machines Limited, Kasaragod for the year ended 31<sup>st</sup> March 2012

The preparation of financial statements of **BHEL Electrical Machines Limited, Kasaragod** for the year ended 31<sup>st</sup> March 2012 in accordance with the financial reporting framework prescribed under the Companies Act, 1956 is the responsibility of the management of the company. The statutory auditor appointed by the Comptroller and Auditor General of India under Section 619(2) of the Companies Act 1956 is responsible for expressing opinion on these financial statements under Section 227 of the Companies Act, 1956 based on independent audit in accordance with the auditing and assurance standards prescribed by their professional body, the Institute of Chartered Accountants of India. This is stated to have been done by them vide their Audit Report dated 28.04.2012.

I, on the behalf of the Comptroller and Auditor General of India, have conducted a supplementary audit under Section 619(3) (b) of the Companies Act, 1956 of the financial statements of **BHEL Electrical Machines Limited, Kasaragod** for the year ended 31<sup>st</sup> March 2012. This supplementary audit has been carried out independently without access to the working papers of the statutory auditor and is limited primarily to inquiries of the statutory auditor and Company personnel and a selective examination of some of the accounting records. On the basis of my audit, nothing significant has come to my knowledge which would give rise to any comment upon or supplement to Statutory Auditor's report under Section 619 (4) of the Companies Act, 1956.

A handwritten signature in black ink, appearing to be 'S. Rajani', is written over a diagonal line.

(S.RAJANI)

Principal Director of Commercial Audit  
& Ex-Officio Member, Audit Board, Chennai

Place: Chennai  
Date: July 30, 2012

## Balance Sheet As at March 31, 2012

(₹ in Lakh)

Particulars	Note No.	As at 31.03.2012	
<b>EQUITY AND LIABILITIES</b>			
<b>(1) Share holder's Fund</b>			
a. Share Capital	1	1050.00	
b. Reserves and Surplus	2	-37.52	1012.48
<b>(2) Non-current liabilities</b>			
(a) Long-term borrowings		-	
(b) Deferred tax liabilities (Net)		-	
(c) Other long term liabilities		-	
(d) Long term provisions	3	236.94	236.94
<b>(3) Current Liabilities</b>			
(a) Short-term borrowings	4	186.40	
(b) Trade payables	5	377.43	
(c) Other current liabilities	6	123.32	
(d) Short-term provisions			687.15
<b>TOTAL</b>			<b>1936.57</b>
<b>II. ASSETS</b>			
<b>(1) Non Current Assets</b>			
(a) Fixed Assets			
(i) Tangible assets	7	963.30	
(ii) Intangible assets		-	
(iii) Capital work-in-progress		-	963.30
<b>(2) Current assets</b>			
(a) Current investments	8	20.80	
(b) Inventories	9	382.88	
(c) Trade receivables	10	557.90	
(d) Cash and cash equivalents	11	0.29	
(e) Short term loans and advances	12	11.40	
(f) Other current assets			973.27
<b>TOTAL</b>			<b>1936.57</b>

Notes to accounts

Notes 1 to 12, notes to accounts & significant accounting policies form an integral part of the balance sheet

  
**K. Bharath Kumar Shetty**  
Manager (Finance)

For and on behalf of Board of Directors  
  
**Cdr. (Retd.) K. Shamsuddin**  
Director

  
**L. Gopalakrishnan**  
Managing Director

As per our report of even date  
**For Jacob & Isack Associates**  
Chartered Accountants  
FRN NO : 001007S

  
**K.P. Mohammad Isack**  
Partner  
M. No. : 204171

Place : Mangalore  
Date : April 28, 2012

## Statement of Profit & Loss for the year ended March 31, 2012

(₹ in Lakh)

Particulars	Note No.	As at 31.03.2012
<b>I. Revenue from operations (Gross)</b>	13	2113.76
Less: Excise duty & service tax		185.25
		<u>1928.51</u>
<b>II. Other operational income</b>	14	13.64
<b>III. Other income</b>	15	4.04
<b>TOTAL REVENUE (I to III)</b>		<u>1946.19</u>
<b>IV. Expenses</b>		
Consumption of material, erection and engineering expenses	16	1482.89
Accretion/(decretion) to WIP & FG	17	-187.54
Employee benefits expenses		498.59
Other expenses of manufacture, administration, selling and distribution	19	119.58
Provisions (net)	20	-32.50
Finance costs	21	9.76
Depreciation & amortisation expense		92.93
Less: Cost of jobs done for internal use		-
Total expenses		<u>1983.71</u>
<b>V. Profit/(loss) before prior period adjustments, exceptional items and tax</b>		<b>-37.52</b>
Less: Tax expenses		-
<b>VI. Profit (loss) for the period from continuing operations</b>		<b>-37.52</b>

Notes 13 to 21, notes on accounts and significant accounting policies form part of this Statement of Profit & Loss.

  
**K. Bharath Kumar Shetty**  
Manager (Finance)

For and on behalf of Board of Directors  
  
**Cdr. (Retd.) K. Shamsuddin**  
Director

  
**L. Gopalakrishnan**  
Managing Director

As per our report of even date  
**For Jacob & Isack Associates**  
Chartered Accountants  
FRN NO : 001007S

  
**K.P. Mohammad Isack**  
Partner  
M. No. : 204171

Place : Mangalore  
Date : April 28, 2012

## Cash Flow Statement for the year ended March 31, 2012

(₹ in Lakh)

	2010-12
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>	
Net profit (loss)	-37.52
<b>adjustment for</b>	
Depreciation	92.93
Provision for doubtful debts	-
Deferred revenue expenditure	-
Interest Expenditure	-
<b>Operating Profit</b>	<b>55.41</b>
<b>Adjustment for</b>	
(increase)/decrease in trade & other receivables	-590.10
(increase)/decrease in inventories	-382.88
Increase/(Decrease) in Trade and other payments	737.69
<b>Net Cash flow from operating activities</b>	<b>-235.29</b>
<b>B. CASH FLOW FROM INVESTING ACTIVITIES</b>	
Sale of assets	-
Interest received	-
(Purchase of fixed assets)	-6.23
<b>Net Cash from investing activities</b>	<b>-6.23</b>
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>	
Increase/(Decrease) in long term borrowing	-
Increase/(Decrease) in short term borrowing	186.40
<b>Net cash from financing activities</b>	<b>186.40</b>
<b>Total</b>	<b>0.29</b>
Opening Cash balance	-
Cash /Cash equivalents at the end of the period	0.29

For and on behalf of Board of Directors



**K. Bharath Kumar Shetty**  
Manager (Finance)



**Cdr. (Retd.) K. Shamsuddin**  
Director



**L. Gopalakrishnan**  
Managing Director

As per our report of even date  
**For Jacob & Isack Associates**  
Chartered Accountants  
FRN NO : 001007S



**K.P. Mohammad Isack**  
Partner

M. No. : 204171

Place : Mangalore  
Date : April 28, 2012

## Note 1 - Share Capital

(₹ in Lakh)

	As at 31.03.2012
<b>Authorised :</b>	
15000000 number of shares @ ₹ 10/- each	1500.00
<b>Issued, subscribed and paid up capital</b>	
10500000 shares @ 10/- fully paid up	1050.00
	<b>1050.00</b>

## Note 2 - Reserves & Surplus

(₹ in Lakh)

	As at 31.03.2012
<b>Profit / Loss for the year</b>	
(Statement of Profit & Loss)	-37.52
Balance of profit (loss) brought forward from last year	-
Foreign project reserves written back	-
Distribution of Income tax, dividend etc of last year to units	-
Profit available for appropriation	<b>-37.52</b>

## Note 3 - Long Term Provisions

(₹ in Lakh)

	As at 31.03.2012
Contractual Obligation - Long term	-
Provision for employee benefits	236.94
Other long-term provisions	-
	<b>236.94</b>

## Note 4 - Short Term Borrowings

(₹ in Lakh)

	As at 31.03.2012
<b>Secured</b>	
<b>Loans &amp; advances from banks</b>	
<b>Cash credit (Cr. balance)</b> (secured by hypothecation of raw materials, components, stores & spares, work-in-progress, finished goods, book debts and other current assets)	11.50
<b>Unsecured</b>	
- from Companies	174.90
BHEL - ₹ 170 Lakh	
KEL - ₹ 4.90 Lakh	
	<b>186.40</b>

## Note 5 - Trade Payables

(₹ in Lakh)

	As at 31.03.2012
Trade Payables	377.43
	377.43

## Note 6 - Other Current Liabilities

(₹ in Lakh)

	As at 31.03.2012
Advances received from customers & others	79.18
Deposits from Contractors & others	0.24
Other payables/ liabilities	43.90
	123.32

## Note 7 - Tangible Assets

(₹ in Lakh)

	As at 31.03.2012
<b>(i) Tangible assets</b>	
Gross block	1056.24
Less: Accumulated depreciation	92.94
Less: Accumulated impairment	-
Less: Lease adjustment account	-
Net Block	963.30
<b>Refer to details in Note 7.1</b>	

## Note 7.1

### Tangible Assets

(₹ in Lakh)

ITEM	FIXED ASSETS EXCEEDING ₹ 10000					DEPRECIATION				
	Opening balance	Less than 10000 in opening balance	Net	Addition during the year	100% Depreciated items	Gross Block	Depreciation on opening assets	Depreciation on additions	Accumulated Depreciation	Net Block
Land & Land improvement	31.15		31.15			31.15	0		0	31.15
Factory Building	254.72		254.72			254.72	8.51		8.51	246.21
Office Building	82.19		82.19			82.19	2.88		2.88	79.31
Society Building	0.52		0.52			0.52	0.02		0.02	0.5
Plant & Machinery	611.62		611.62			611.62	73.39		73.39	538.23
Electrical Installation	33.83		33.83			33.83	2.71		2.71	31.12
Patterns	17.62		17.62			17.62	2.11		2.11	15.51
Measuring Instruments	9.40		9.4			9.4	1.13		1.13	8.27
Pallet Truck	3.41		3.41			3.41	0.41		0.41	3
Office Equipments	3.36	0.23	3.14	2.32	0.19	5.27	0.25	0.06	0.31	4.96
Computer	2.15		2.15	2.51	0.10	4.56	0.43	0.24	0.67	3.89
Furniture	0.03	0.03	0	0.06	0.07	0	0	0	0	0
Guest House Equipments	0		0	0.89	0.12	0.77	0	0.05	0.05	0.72
Vehicle	0		0	0.44		0.44	0	0.01	0.01	0.43
	<b>1050.00</b>	<b>0.26</b>	<b>1049.75</b>	<b>6.22</b>	<b>0.48</b>	<b>1055.50</b>	<b>91.84</b>	<b>0.36</b>	<b>92.20</b>	<b>963.30</b>

## Note 8 - Current Investments

(₹ in Lakh)

	As at 31.03.2012
<b>Current Investments</b>	
Margin money deposits with SBI for operating	20.80
Letter of Credits	-
	20.80

## Note 9 - Inventories @

(₹ in Lakh)

	As at 31.03.2012
<b>Stores &amp; spare parts</b>	
Production	1.93
Fuel stores	-
Miscellaneous	-
	1.93
Raw material & components	187.90
Material-in-transit	5.51
Scrap (at estimated realisable value)	-
Finished goods	123.70
Work-in-progress	63.84
	382.88

@ Valued as per Significant Accounting Policy

## Note 10 - Trade Receivables

(₹ in Lakh)

	As at 31.03.2012
Debts outstanding for a period exceeding six months	30.26
Other debts	527.64
Less : Provision for bad & doubtful debts	-
Less : Automatic price reduction adjustment a/c	-
	557.90

## Note 11 - Cash & Cash Equivalents

(₹ in Lakh)

	As at 31.03.2012
Cash & Stamps on hand	0.15
Cheques, Demand Drafts on hand	-
Remittances in transit	-
<b>Balances with Scheduled Banks</b>	
Current Account	0.14
Deposit Account	-
Deposits more than 12 months maturity period	-
	0.29

## Note 12 - Short Term Loans and Advances

(₹ in Lakh)

	As at 31.03.2012	
<b>Advances</b>		
<b>(Recoverable in cash or in kind or for value to be received)</b>		
To subsidiaries	-	
To employees	10.96	
For purchases	1.06	
To Others	<u>-25.65</u>	-13.63
<b>Deposits</b>		
Balance with customs, Port Trust and other Govt Authorities	0.03	
Others	5.22	
Advance Tax/TDS (Net of Provision for Taxation)	<u>19.78</u>	25.03
<b>Particulars of Loans and advances</b>		
Secured, considered good		-
Unsecured, considered good		11.40
Doubtful		-

## Note 13 - Revenue From Operations

(₹ in Lakh)

	As at 31.03.2012	
Sales less returns	2093.60	
Income from external erection & other services	20.16	
Revenue from Works Contract	-	
Assets given on Finance lease	-	
	<u>2113.76</u>	

## Note 14 - Other Operational Income

(₹ in Lakh)

	As at 31.03.2011	
Export Incentives	-	
Rental income on leased assets	-	
Lease equalisation account	-	
Finance income on assets given on finance lease	-	
Exchange variation ( Cr. Balance)	-	
Scrap sale	13.64	
Receipt from sale/transfer of surplus stock	-	
	<u>13.64</u>	

## Note 15 - Interest Income

(₹ in Lakh)

	As at 31.03.2012	
From customers	-	
From employees	-	
From banks	4.04	
From Investments (Current- Other than trade)	-	
Inter Division Transactions (Cr. Balance)	-	
		<b>4.04</b>

## Note 16 - Cost of Material, Erection & Engineering Expenses

(₹ in Lakh)

	As at 31.03.2012	
Consumption of raw material & components	1461.24	
Less - Transfer out to other divisions	-	1461.24
Consumption of stores & spares	8.87	
Less - Transfer out to other divisions	-	8.87
Erection and Engineering exp. - payment to subcontractors		12.78
		<b>1482.89</b>

## Note 17 - Accretion/Depletion To WIP & FG

(₹ in Lakh)

	As at 31.03.2012	
<b>Work -in -progress</b>		
Closing Balance	63.84	
Opening Balance	-	63.84
<b>Finished Goods</b>		
Closing Balance	123.70	
Opening Balance	-	123.70
Element of ED on FG on closing	13.61	
		<b>187.54</b>

## Note 18 - Employee Benefits

(₹ in Lakh)

	<b>As at 31.03.2012</b>
Salaries, wages, bonus, allowances & other benefits	<b>391.86</b>
Contribution to gratuity fund	<b>5.33</b>
Contribution to provident and other funds	<b>45.22</b>
Staff welfare expenses	<b>56.18</b>
	<b>498.59</b>

## Note 19 - Other expenses of Manufacturing selling, admn

(₹ in Lakh)

	<b>As at 31.03.2012</b>
Rent: Residential	<b>1.76</b>
Excise duty (On FG and scrap)	<b>14.92</b>
Power & Fuel	<b>35.39</b>
Rates & Taxes	<b>14.41</b>
Service tax (GTA outwards)	<b>0.31</b>
Insurance	<b>1.14</b>
Repairs	<b>2.06</b>
Carriage outward	<b>13.97</b>
Travelling & conveyance	<b>12.16</b>
Miscellaneous expenses	<b>23.46</b>
	<b>119.58</b>

## Note 20 - Provisions

(₹ in Lakh)

	As at 31.03.2012	
<b>Doubtful debts ,Liquidated Damages and Loans &amp; advances</b>		
Created during the year	-	
Less written back during the year	-	-
<b>Contractual Obligations</b>		
Created during the year	-	
Less written back during the year	-	-
<b>Others</b>		
Created during the year	-	
Less written back during the year	32.50	-32.50
		<b>-32.50</b>

## Note 21 - Finance Costs

(₹ in Lakh)

	As at 31.03.2012	
Debentures/Bonds, Central and State Govt. Loan		-
Banks/financial Institutions borrowings		-
Deferred Credits		-
Others		9.76
Other Borrowing Costs	-	
Less: Borrowing Cost capitalised	-	-
		<b>9.76</b>

## Significant Accounting Policies

### 1 Basis of preparation of Financial Statements

The financial statements have been prepared as of a going concern on historical cost convention and on accrual method of accounting in accordance with the generally accepted accounting principles and the provisions of the Companies Act 1956 as adopted by the Company.

### 2 Fixed Assets

Fixed assets are carried at the cost of acquisition or construction or book value less accumulated depreciation. Fixed assets costing ₹10000/- or less or whose written down value as at the opening of the year is ₹10000/- or less, are depreciated fully.

### 3 Intangible Assets

Intangible assets are capitalized at cost if

- a. It is probable that the future economic benefits are attributable to the asset will flow to the company and
- b. The company will have control over the assets and
- c. The cost of these assets can be measured reliably and is more than ₹10000/- intangible assets are amortised over their estimated useful lives not exceeding three years in case of software and not exceeding ten years in case of others on a straight line pro-rata monthly basis.

### 4 Depreciation

Depreciation on fixed assets is charged up to total cost of the assets on straight line method as per the rates prescribed in Schedule XIV of the companies Act, 1956, except where depreciation is charged at rates determined on the basis of the technically estimated useful lives shown hereunder:

	Single Shift	Double Shift	Triple Shift
General Plant & Machinery	8%	12%	16%
Buildings (Third class)	3.5%		
Electrical installations	8%		
Office and other equipments	8%		
Electronic data processing Equipments	20%		

In respect of additions/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

### 5 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 are valued at actual/estimated factory cost or 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.

### 6 Revenue Recognition

Sales are recorded based on significant risks and rewards of ownership being transferred in favour of the customer.

### 7 Employee Benefits

Provident fund and Employees' Family pension scheme contributions are accounted for on accrual basis. Liability for Earned leave, Half pay leave, Gratuity are accounted for in accordance with actuarial valuation. The actuarial liability is determined with reference to employees at the beginning of each calendar year. Liability due towards contributory medical scheme is accounted based on the salary at the commencement of the calendar year.

### 8 Borrowing Costs

Borrowing costs are recognized as expense in the period in which they are incurred.

## Notes Forming Part of Accounts 2011-2012

1. The company is formed based on a joint venture agreement between BHEL and Government of Kerala (GOK) with an initial capital of ₹ 10 Lakh with BHEL holding 51% and GOK holding the rest of 49% shares.
2. The Company was incorporated on 19.01.2011. The first financial year of the company was adopted as the period from 19.01.2011 to 31.03.2012.
3. The company's authorized capital is enhanced to ₹15 crore in the meeting of the members held on 23.02.2011.
4. This being the first year of operations, there will be no data for the previous year i.e. 2010-2011.
5. As per the joint venture agreement, the company took over the premises and plant & machinery of KEL Kasaragod for ₹1050 Lakh, on 28.03.2011 as evaluated by the valuers' appointed by M/s BHEL. This was financed by BHEL taking 51% stake in cash and balance by issue of shares to M/s KEL.
6. 193 employees of KEL were also inducted into the services of the new company.
7. The company requested the holding company M/s BHEL for working capital support and BHEL has released an amount of ₹ 170 Lakh as short term loan @6.5% per annum. The rates of interest were enhanced to 10% p.a with effect from 14.02.2012. Interest accrued up to 31.03.2012 was fully paid.
8. Extent of land in the ownership of the company is 11 acres under R.S number 283/2 of Mogral puthur panchayat.
9. 100% Depreciation charged on ₹ 72511 assets valued less than ₹10000/- charged off in the accounting year
 

Normal Depreciation	₹ 4173
Excess amount charged	₹ 68338
10. Balances shown under debtors, creditors, contractor's advances, deposits and stock/materials lying with sub-contractors/fabricators are subject to confirmation, reconciliation & consequential

adjustment, if any. The reconciliation is carried out ongoing basis & provisions wherever considered necessary have been made in line with the guidelines.

### 11. Expenditure

- |  |                |
|--|----------------|
| a. Agency Commission paid                            | - Nil          |
| b. Expenditure on research and development           | - Nil          |
| c. Rent paid (Guest house)                           | - ₹ 1.68 Lakh  |
| d. Payment to auditors – Provision made in the books |                |
| i) Statutory audit fees                              | - ₹ 0.25 Lakh  |
| ii) Interim audit fees                               | - ₹ 0.125 Lakh |
| iii) Vat Audit                                       | - ₹ 0.04 Lakh  |
| iv) Tax audit  | - ₹ 0.025 Lakh |
| e. Expenditure on entertainment (Guest expenses)     | - ₹ 0.66 Lakh  |
| f. Details of foreign travel                         | - Nil          |

12. Disclosure as per AS 7 - Nil

13. Total outstanding due to micro and small industries - ₹ 3.02 Lakh

#### 14. Quantitative Details - Production, Sales and Closing Stock

Item	Op Stock		Production		Sales		CI Stock	
	Qty	Value	Qty (Nos)	Value	Qty (Nos)	Value	Qty (Nos)	Value
BAGP upto 110 KVA	0	0	226.00	161.17	209.00	147.87	17.00	13.30
BAGP above 110 KVA	0	0	37.00	95.06	26.00	56.59	11.00	38.47
25 KW Train lighting Alternators	0	0	421.00	865.91	410.00	849.38	11.00	16.53
320 KVA U/S D G Sets	0	0	9.00	569.15	9.00	569.15	0.00	0.00
Special Alternators	0	0	11.00	41.70	0.00	0.00	11.00	41.70
DG Sets	0	0	4.00	39.45	4.00	39.45		
Spares	0	0	0.00	89.44	0.00	89.36		0.08
Services	0	0	0.00	13.92	0.00	13.92		
Installation	0	0	0.00	10.27	0.00	10.27		
GSOS	0	0	6.00	152.52	6.00	152.52		
ED				198.87	0.00	185.25		13.62
Gross turnover				<b>2237.46</b>		<b>2113.76</b>		<b>123.70</b>

#### 15. Consumption of Import Raw Materials

Item	Unit	Purchases		Closing Stock		Consumption	
		Qty	Value	Qty	Value	Qty	Value
Lamination	Kgs	174316.50	171.12	49063.00	58.09	125253.50	113.03
Diesel Engine	Nos	10.00	282.60	0.00	0.00	10.00	282.60
Copper	Kgs	28211.90	113.64	8165.88	41.42	20046.02	72.22
Steel&Aluminium	Kgs	109444.40	48.40	31785.75	16.71	77658.65	31.69
Casting	Nos	19648.00	187.53	10552.00	12.54	9096.00	174.99
Bearings&Others	Nos	2167.00	48.93	333.00	8.30	1834.00	40.63
Alternator	Nos	6.00	12.37	0.00	0.00	6.00	12.37
Battery	Nos	3.00	0.91		0.00	3.00	0.91
Control Panel	Nos	7.00	25.27		0.00	7.00	25.27
Engine Alternator Set	Nos	3.00	18.50	0.00	0.00	3.00	18.50
Generators	Nos	12.00	122.62		0.00	12.00	122.62
Torroidal Core	Nos	1738.00	40.52		0.00	1738.00	40.52
Others			587.54	0.00	52.77	0.00	534.77
			1659.95		189.83		1470.12

## 16. Consumption of Imported and indigenous Materials

	%	₹ In Lakh
<b>Raw Materials:</b>		
Imported	2.76%	40.52
Indigenous	97.24%	1429.59
		1470.11
<b>Stores And Spare Parts</b>		
Imported		0.00
Indigenous		1.10
		0.00
<b>Cif Value Of Imports</b>		
Raw Materials		40.52
Capital Goods		0.00
Expenditure in Foreign Currency on account of Travelling		0.00
Earnings in Foreign Currency on export of goods		0.00



## CONSOLIDATED FINANCIAL STATEMENTS





## Auditors' Report to the Board of Directors on the Consolidated Financial Statements of Bharat Heavy Electricals Limited, its Subsidiaries and Joint Ventures.

We have audited the attached consolidated Balance Sheet of **BHARAT HEAVY ELECTRICALS LIMITED** and its Subsidiaries and Joint Ventures (BHEL Group) as at March 31, 2012 the Consolidated Statement of Profit and Loss and also the Consolidated Cash Flow Statement for the year ended on that date annexed thereto. These financial statements are the responsibility of the Company's Management and have been prepared by the Management on the basis of separate financial statements and other financial information regarding component. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with the auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit also includes examining on test basis, evidence supporting the amounts and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimate made by the management as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

We report that:

- The audit of the following entities in BHEL group has been carried out by the other auditors whose report has been furnished to us, and our opinion, in so far as it relates to Assets, Revenue and Net cash flows for the entities, is based solely on the reports of the other auditors.

Name of the company	Assets	Revenues	(₹ in Crore)
			Net cash flows
<b>A. Subsidiary</b>			
BHARAT HEAVY PLATE AND VESSELS LTD.	258.29	161.25	3.48
BHEL ELECTRICAL MACHINES LTD.	19.86	21.31	0.01
<b>B. Joint Ventures</b>			
NTPC BHEL POWER PROJECTS LTD.	82.51	74.32	(-) 19.30
BHEL-GE GAS TURBINE SERVICES PVT LTD.	140.03	260.55	5.61
LATUR POWER COMPANY LTD.	2.68	0.15	2.38

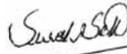
- In respect of the following Joint Ventures we did not carry out the audit. Our opinion, in so far as it relates to the assets and revenues included in respect of these Joint Ventures, is based solely on the provisional financial statements as furnished to us by the management. Since the financial statement of these joint ventures for the financial year ended 31.03.2012 were not audited, any subsequent adjustment to the balances could have consequential effects on the attached consolidated financial statements. However the size of Joint Venture in the consolidated financial position is not significant in relative terms.

Name of the Company	Assets	Revenues	(₹ in Crore)
			Share in Jointly Controlled Entities Net cash flows
UDANGUDI POWER CORPORATION LTD.	33.50	0.07	(-)3.00
DADA DHUNIWALE KHANDWA POWER LTD.	22.79	0.40	2.22
RAICHUR POWER CORPORATION LTD.	674.65	-	(-)5.04

3. The accounts of POWER PLANT PERFORMANCE IMPROVEMENTS LTD a Joint Venture of BHEL has not been consolidated as the said company are under liquidation and full amount of equity investment has been provided for diminution in the value of investment.
4. The consolidated financial statement have been prepared by the Company in accordance with the requirement of Accounting Standard (AS)-21 “Consolidated Financial Statements” and AS-27 “Financial Reporting of interests in joint ventures” issued by The Institute of Chartered Accountants of India and on the basis of the separate financial statements of Bharat Heavy Electricals Limited and its Subsidiary and Joint Venture included in the Consolidated Financial Statement.
5. We report that on the basis of the information and explanations given to us and on the consideration of the individual audited financial statement as stated in Para 1 above, and provisional financial statements as stated in Para 2 above, of the BHEL Group, we are of the opinion that the said consolidated financial statements give a true and fair view in conformity with the accounting principles generally accepted in India.
  - (i) In case of Consolidated Balance Sheet, of the state of affairs of the BHEL Group as at 31<sup>st</sup> March 2012
  - (ii) In cases of Consolidated Statement of Profit and Loss, of the profit of the BHEL Group for the year ended on that date; and
  - (iii) In case of Consolidated Cash Flow Statement, of the Cash flows of the BHEL Group for the year ended on that date.

**For S.N. Dhawan & Co.**

Chartered Accountants  
FRN - 000050N



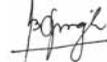
**(Suresh Seth)**

Partner

M.No. 010577

**For Gandhi Minocha & Co.**

Chartered Accountants  
FRN - 000458N



**(Bhupinder Singh)**

Partner

M.No. 092867

Date: May 23, 2012

Place: New Delhi

## Consolidated Balance Sheet As at March 31, 2012

(₹ in Crore)

Particulars	Note No.	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>I. EQUITY AND LIABILITIES</b>					
<b>(1) Shareholders' funds</b>					
(a) Share capital	1	489.52		489.52	
(b) Reserves & surplus	2	<u>24913.54</u>	<u>25403.06</u>	<u>19665.49</u>	20155.01
<b>(2) Minority Interest</b>			4.97		
<b>(3) Non-current liabilities</b>					
(a) Long-term borrowings	3	282.07		102.40	
(b) Other long term liabilities	4	7566.92		9171.02	
(c) Long term provisions	5	<u>5017.88</u>	<u>12866.87</u>	<u>4931.89</u>	14205.31
<b>(4) Current liabilities</b>					
(a) Short-term borrowings	6	86.75		94.03	
(b) Trade payables	7	10369.17		8163.07	
(c) Other current liabilities	8	16029.22		14298.67	
(d) Short-term provisions	9	<u>2670.24</u>	<u>29155.38</u>	<u>2701.70</u>	25257.47
<b>TOTAL</b>			<u>67430.28</u>		<u>59617.79</u>
<b>II. ASSETS</b>					
<b>(1) Non current assets</b>					
<b>(a) Fixed assets</b>					
(i) Tangible assets	10	4196.67		3288.15	
(ii) Intangible assets		321.98		321.56	
(iii) Capital work-in-progress		1739.20		1746.27	
(iv) Intangible assets under development		<u>24.21</u>	<u>6282.06</u>	<u>10.36</u>	5366.34
(b) Non-current investments	11	5.94		11.30	
(c) Deferred tax assets (net)	12	1549.48		2165.17	
(d) Long-term loans and advances	13	957.45		1088.06	
(e) Other non-current assets	14	<u>9544.98</u>	<u>12057.85</u>	<u>7398.47</u>	10663.00
<b>(2) Current assets</b>					
(a) Inventories	15	13525.48		10903.48	
(b) Trade receivables	16	26530.53		20252.04	
(c) Cash and cash equivalents	17	6734.33		9706.41	
(d) Short term loans and advances	18	2148.04		2416.11	
(e) Other current assets	19	<u>151.99</u>	<u>49090.37</u>	<u>310.41</u>	43588.45
<b>Total</b>			<u>67430.28</u>		<u>59617.79</u>

### Significant Accounting Policies

### Other Notes to Financial Statements

32

The Accompanying Notes 1 to 32 & Significant accounting policies form an integral part of the consolidated financial statements.



(I. P. Singh)  
Company Secretary



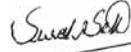
(P. K. Bajpai)  
Director (Finance)



(B. Prasada Rao)  
Chairman and Managing Director

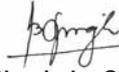
As per our report of even date attached

For S.N. Dhawan & Co.  
Chartered Accountants  
FRN-000050N



(Suresh Seth)  
Partner  
M. No. 10577

For Gandhi Minocha & Co.  
Chartered Accountants  
FRN-000458N



(Bhupinder Singh)  
Partner  
M. No. 092867

Place : New Delhi  
Date : May 23, 2012

## Consolidated Statement of Profit & Loss For the year ended March 31, 2012

(₹ in Crore)

Particulars	Note No.	Figure For the year ended	
		31.03.2012	31.03.2011
<b>I. Revenue from operations (Gross)</b>	20	<b>49897.57</b>	43635.73
Less: Excise duty & service tax		<b>2298.62</b>	1781.07
<b>Revenue from operations (Net)</b>		<b>47598.95</b>	41854.66
<b>II. Other operational income</b>	21	<b>756.27</b>	683.58
<b>III. Other income</b>	22	<b>1272.03</b>	1026.93
<b>Total revenue (I to III)</b>		<b>49627.25</b>	43565.17
<b>IV. Expenses</b>			
Cost of material consumption, erection and engineering expenses	23	<b>29132.44</b>	23366.65
Increase in work in progress & finished goods	24	<b>-829.65</b>	-126.18
Employee benefits expense	25	<b>5529.77</b>	5452.60
Finance costs	26	<b>53.07</b>	56.38
Depreciation & amortisation expense	10.1	<b>803.24</b>	546.37
Other expenses of manufacture, administration, selling and distribution	27	<b>3250.76</b>	2557.00
Provisions (net)	28	<b>1405.53</b>	2721.46
Less: Cost of jobs done for internal use		<b>104.11</b>	68.51
<b>Total expenses</b>		<b>39241.05</b>	34505.77
<b>V. Profit before prior period adjustments, exceptional items and tax</b>		<b>10386.20</b>	9059.40
<b>VI. Add/less: Prior period adjustments (net)</b>	29	<b>-19.13</b>	-1.79
<b>VII. Add/ Less : Exceptional items</b>	30	<b>0.16</b>	7.75
<b>VIII. Profit before tax for the year</b>		<b>10367.23</b>	9065.36
<b>IX. Less: Tax expense</b>	31		
a) Current tax		<b>2664.28</b>	3648.55
b) Deferred tax		<b>615.69</b>	-636.55
<b>X. Profit for the year before minority interest</b>		<b>7087.26</b>	6053.36
<b>Less: Minority interest</b>		<b>-0.18</b>	-
<b>XI. Profit after minority interest for the year</b>		<b>7087.44</b>	6053.36
Earning per share (Basic & Diluted) (Refer point no. 16 of Note 32) in ₹		<b>28.96</b>	24.73
Face Value per Share (Refer point no. 16 of Note 32) in ₹		<b>2.00</b>	2.00

### Significant Accounting Policies

#### Notes to Financial Statements 32

The accompanying notes 1 to 32 & significant accounting policies form an integral part of the consolidated financial statements.

Total Revenue includes ₹ 335.49 Crore (previous year ₹ 267.43 crore) share of jointly controlled entities.

Total Expenses includes ₹ 279.18 Crore (previous year ₹ 216.20) share of jointly controlled entities.



(I. P. Singh)  
Company Secretary



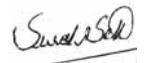
(P. K. Bajpai)  
Director (Finance)



(B. Prasada Rao)  
Chairman and Managing Director

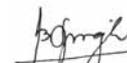
### For and on behalf of Board of Directors

As per our report of even date attached  
For S.N. Dhawan & Co.  
Chartered Accountants  
FRN-000050N



(Suresh Seth)  
Partner  
M. No. 10577

For Gandhi Minocha & Co.  
Chartered Accountants  
FRN-000458N



(Bhupinder Singh)  
Partner  
M. No. 092867

Place : New Delhi  
Date : May 23, 2012

## Consolidated Cash Flow Statement for the year ended March 31, 2012

(₹ in Crore)

	2011-12	2010-11
<b>A. CASH FLOW FROM OPERATING ACTIVITIES</b>		
Net Profit Before Tax as per Statement of Profit and Loss	<b>10367.23</b>	<b>9065.36</b>
Adjustment for		
Depreciation/Amortisation	805.91	546.69
Lease Equalisation	-3.82	-14.05
Provisions (Net)	540.70	628.04
Bad Debts & LD & investment written off	97.30	40.46
Profit on sale of Fixed assets	-4.01	-4.27
Finance costs	53.07	56.38
Interest/Dividend Income	-837.02	-647.34
Operating Profit before Working Capital changes	<b>11019.36</b>	<b>9671.27</b>
Adjustment for		
Increase/ (decrease) in Trade & Other Receivables	-8806.90	-7918.84
Increase/(decrease) in Inventories	-2615.91	-1744.55
Increase/(decrease) in Trade Payable & Advances	2899.91	5632.75
Cash generated from operations	<b>2496.46</b>	<b>5640.63</b>
Direct Taxes Paid (Net of refund)	-3197.09	-2941.54
<b>NET CASH INFLOW / (OUTFLOW) FROM OPERATING ACTIVITIES</b>	<b>-700.63</b>	<b>2699.09</b>
<b>B. CASH FROM INVESTING ACTIVITIES</b>		
Purchase of Fixed Assets	-1585.48	-2186.07
Sale and Disposal of Fixed Assets	2.07	6.50
Investment in Subsidiary & Joint Ventures	5.36	-5.36
Interest & Dividend income	996.52	745.73
<b>NET CASH USED IN INVESTING ACTIVITIES</b>	<b>581.53</b>	<b>1439.20</b>
<b>C. CASH FLOW FROM FINANCING ACTIVITIES</b>		
Borrowings	179.77	129.21
Dividend Paid (including tax on dividend )	-1818.93	-1473.81
Finance costs	-50.75	-65.30
<b>NET CASH USED IN FINANCING ACTIVITIES</b>	<b>1689.91</b>	<b>1409.90</b>
<b>D. NET DECREASE IN CASH AND CASH EQUIVALENTS</b>	<b>-2972.07</b>	<b>-150.02</b>
Opening Balance of Cash and Cash Equivalents	9706.40	9856.42
Closing Balance of Cash and Cash Equivalents	6734.33	9706.40

Note 1 : Cash & Cash Equivalents consists of cash and bank balance, margin deposit & deposits with banks.

2 : Previous year's figures have been regrouped/rearranged wherever necessary.

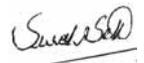
3 : Cash & Cash Equivalents includes ₹ 2.18 Crore (₹ 3.74 Crore) unclaimed dividend lying in designated bank accounts.

  
(I. P. Singh)  
Company Secretary

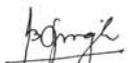
  
(P. K. Bajpai)  
Director (Finance)

  
(B. Prasada Rao)  
Chairman and Managing Director

As per our report of even date attached  
For S.N. Dhawan & Co.  
Chartered Accountants  
FRN-000050N

  
(Suresh Seth)  
Partner  
M. No. 10577

For Gandhi Minocha & Co.  
Chartered Accountants  
FRN-000458N

  
(Bhupinder Singh)  
Partner  
M. No. 092867

Place : New Delhi  
Date : May 23, 2012

## 1 - Share capital

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>Authorised</b>				
1000,00,00,000 equity shares of ₹ 2 each (previous year 200,00,00,000 equity shares of ₹ 10 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 48,95,20,000 equity shares of ₹ 10 each)				
a) Out of which 122,38,00,000 equity shares of ₹ 2 each (previous year 24,47,60,000 equity shares of ₹ 10 each) allotted as bonus shares				
b) The reconciliation of the number of equity shares outstanding is set out below:				
Shares outstanding at the beginning of the year		489520000		489520000
Shares issued during the year towards split of shares from ₹ 10 to ₹ 2 per share		1958080000		-
Shares bought back during the year				-
Shares outstanding at the end of the year		<u>2447600000</u>		<u>489520000</u>
c) 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	1657552000	67.72%	331510400	67.72%
Life Insurance Corporation of India	141433662	5.78%	-	-
Face Value per share		<u>2.00</u>		<u>10.00</u>

## 2 - Reserves & surplus

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>Capital reserve</b>				
Opening Balance	2.74		2.74	
Add: Additions	-		-	
Less: Deductions	-	2.74	-	2.74
<b>General reserve</b>				
Opening balance	18868.78		14865.91	
Add: transfer from surplus of profit & loss	5003.04		4002.87	
Less: Deductions		23871.82		18868.78
<b>Surplus from statement of profit &amp; loss</b>				
Opening balance	793.97		537.96	
Add: net profit for the year	<u>7087.44</u>		<u>6053.36</u>	
Profit available for appropriation	7881.41		6591.32	
Less: Appropriation-				
—General reserve	5003.04		4002.87	
—Dividend (including interim dividend of ₹ 681.93 crore, previous year ₹ 660.04 crore)	1582.65		1541.81	
—Corporate dividend tax (including tax on interim dividend ₹ 110.62 crore, previous year ₹ 109.63 crore)	<u>256.74</u>	<u>1038.98</u>	<u>252.67</u>	793.97
		<u>24913.54</u>		<u>19665.49</u>

### 3 - Long-term borrowings

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>Secured</b>		
Loans from Power Finance Corporation Ltd. (Secured against assets pertaining to Yerramurus thermal power project)	158.38	-
	158.38	-
<b>Unsecured</b>		
Long term maturities of finance lease obligations	123.69	102.40
	123.69	102.40
	282.07	102.40

Includes ₹ 158.64 Crore (previous year ₹ 0.26 crore) share of jointly controlled entities.

### 4 - Other long term liabilities

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Trade payables	604.42	383.62
Advances received from customers & others	6841.83	8684.91
Deposits from contractors & others	120.67	102.49
	7566.92	9171.02

Includes ₹ 18.35 Crore (previous year ₹ 11.06 crore) share of jointly controlled entities.

### 5 - Long term provisions

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Provision for employee benefits	2079.65	1992.68
Contractual Obligation	2802.19	2351.35
Other long-term provisions	136.04	126.95
Provision for Tax (Net of advance tax/TDS)	-	460.91
	5017.88	4931.89

Includes ₹. 4.54 Crore (previous year ₹ 3.82 crore) share of jointly controlled entities.

### 6 - Short-term borrowings

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>Secured</b>		
<b>Loans from banks *</b>		
Working capital demand loan	84.49	91.92
Cash credit	0.12	-
*(secured by hypothecation of raw materials, components, stores & spares, work in progress, finished goods, book debts and other current assets)	84.61	91.92
<b>Unsecured</b>		
From companies	0.08	-
From bonds	2.06	2.11
	2.14	2.11
	86.75	94.03

Includes ₹ 84.52 Crore (previous year ₹ 91.92 Crore) share of jointly controlled entities.

### 7 - Trade payables

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Trade Payables	10258.24	8120.23
Acceptances	110.93	42.84
	10369.17	8163.07

Includes ₹ 94.15 Crore (previous year ₹ 65.12 crore) share of jointly controlled entities.

## 8 - Other current liabilities

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Current maturities of finance lease obligation	62.68	55.30
Advances received from customers & others (incl. valuation adj. credit)	13181.90	11751.32
Deposits from Contractors & others	448.05	407.87
Unclaimed dividend	2.18	3.74
Other payables/ liabilities	2317.73	2067.25
Interest accrued but not due	1.50	0.25
Interest accrued and due on:		
State Government Loans	2.33	2.33
Finance lease	4.82	3.75
Bonds & others	8.03	6.86
	<b>16029.22</b>	<b>14298.67</b>

Includes ₹ 103.14 Crore (previous year ₹16.96 crore) share of jointly controlled entities.

## 9 - Short-term provisions

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Provision for employee benefits	402.30	902.71
Proposed dividend	905.48	881.77
Corporate dividend tax	146.89	143.05
Contractual obligation	1065.68	645.65
Other short-term provisions	149.89	128.52
	<b>2670.24</b>	<b>2701.70</b>

Includes ₹ 11.11 Crore (previous year ₹ 12.38 crore) share of jointly controlled entities.

## 10 - Fixed assets

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
<b>(i) Tangible assets</b>		
Gross block	9531.28	7890.43
Less: Accumulated depreciation	5338.25	4602.10
Less: Lease adjustment account	-3.64	0.18
Net Block	<u>4196.67</u>	<u>3288.15</u>
<b>(ii) Intangible assets</b>		
Gross block (including goodwill on consolidation)	485.87	453.70
Less: Accumulated depreciation	163.89	132.14
Net block	<u>321.98</u>	<u>321.56</u>
<b>(iii) Capital work in progress</b>		
Construction work-in-progress -Civil	376.51	338.19
Construction stores (including in transit)	9.99	13.13
Plant & machinery and other equipments		
- Under Erection/ Fabrication/awaiting erection	1078.62	917.58
- In transit	273.79	472.97
Leased assets under erection	0.28	4.40
	<u>1739.20</u>	<u>1746.27</u>
<b>(iv) Intangible assets under development</b>		
	24.21	10.36
	<u>24.21</u>	<u>10.36</u>
<b>Total</b>	<b>6282.06</b>	<b>5366.34</b>

Refer to details in Note 10.1

Includes ₹ 437.66 Crore (previous year ₹ 41.37 crore) share of jointly controlled entities.

## Note - 10.1

### Fixed assets - consolidated

(₹ in Crore)

	Gross Block			Cost As at 31.03.2012	Depreciation		Net Block		
	Cost as at 31.03.2011	Additions/ adjustments during the year	Deductions/ adjustments during the year		Lease adjustment Account	Depreciation/ Amortisation upto 31.03.2012	As at 31.03.2012	As at 31.03.2011	Depreciation/ Amortisation for the year
<b>Factory/ Office Complex</b>									
<b>(i) Tangible Assets</b>									
Freehold land (incl. development exp.)	30.31	1.44		31.75			31.75	30.31	
Leasehold land (incl. development exp.)	6.05			6.05		0.39	5.66	5.67	0.01
Roads, bridges and culverts	15.35	5.44		20.79		3.88	16.91	11.81	0.33
Buildings	1080.62	271.07	4.94	1346.75		480.32	866.43	697.80	101.68
Leashold buildings	3.31			3.31		1.33	1.98	2.03	0.05
Drainage, sewerage and water supply	19.19	2.66	0.05	21.80		11.50	10.30	8.22	0.52
Railway siding	11.19	3.86		15.05		8.66	6.38	3.00	0.46
Locomotives and wagons	27.90	3.23		31.13		19.36	11.77	9.70	1.15
Plant & Machinery	4918.23	1126.93	8.78	6036.38		3421.69	2614.70	2014.29	525.73
Electronic data processing equipments	139.21	1.69	-0.85	141.75		135.42	6.33	7.36	2.33
Electrical installations	199.24	82.71	2.97	278.98		103.17	175.80	111.70	14.38
Construction Equipment	189.43	29.76	1.80	217.39		138.88	78.50	75.52	26.62
Vehicles	19.91	0.67	0.48	20.10		16.59	3.51	3.35	0.50
Furniture & fixtures	32.50	13.26	0.06	45.70		13.90	31.80	20.71	2.31
Office & other equipments	110.93	37.25	0.57	147.61		73.22	74.39	44.96	7.61
Fixed assets costing upto ₹10000/-	77.43	21.61	1.41	97.63		97.63			21.61
Capital expenditure	0.44			0.44		0.44			
Assets Given on Lease	497.15			497.15	3.64	497.00	3.79	4.15	4.18
EDP Equipment taken on lease	288.59	74.62	22.08	341.13		184.55	156.58	138.83	55.63
Office & other equipment taken on lease	4.00	2.57	0.14	6.43		2.56	3.87	2.40	0.99
<b>Total Tangible Assets -factory</b>	<b>7670.98</b>	<b>1678.77</b>	<b>42.43</b>	<b>9307.32</b>	<b>3.64</b>	<b>5210.49</b>	<b>4100.45</b>	<b>3191.81</b>	<b>766.09</b>
<b>(ii) Intangible Assets</b>									
Goodwill on consolidation	185.87			185.87			185.87	185.87	
-Internally developed									
Others	18.67	11.32	0.02	29.97		14.24	15.73	11.29	6.89
-Others									
Software	114.98	4.94	0.04	119.88		110.00	9.88	16.43	11.49
Technical Know-how	125.32	15.98		141.30		30.85	110.45	107.90	13.43
Others	8.80		-0.05	8.85		8.80	0.05		
<b>Total Intangible Assets - Factory</b>	<b>453.64</b>	<b>32.24</b>	<b>0.01</b>	<b>485.87</b>		<b>163.89</b>	<b>321.98</b>	<b>321.49</b>	<b>31.81</b>
<b>Total Of Factory Assets</b>	<b>8124.62</b>	<b>1711.01</b>	<b>42.44</b>	<b>9793.19</b>	<b>3.64</b>	<b>5374.38</b>	<b>4422.43</b>	<b>3513.30</b>	<b>797.90</b>
<b>Township/ Residential</b>									
<b>(i) Tangible Assets</b>									
Freehold land (incl. development exp.)	2.17			2.17			2.17	2.17	
Leasehold land (incl. development exp.)	1.99			1.99		0.58	1.41	1.43	0.02
Roads, bridges and culverts	5.29			5.29		3.02	2.27	2.35	0.08
Buildings	134.89	0.72	0.66	134.95		65.85	69.10	70.52	2.07
Leasehold buildings	0.27			0.27		0.20	0.07	0.08	0.01
Drainage, sewerage and water supply	17.36	0.05		17.41		14.34	3.07	3.42	0.39
Plant and Machinery	16.58	1.05	0.08	17.55		11.19	6.37	6.41	1.09
Electrical installations	17.48	0.74	0.02	18.20		14.88	3.32	3.03	0.43
Vehicles	1.08			1.08		1.01	0.07	0.08	0.01
Furniture & fixtures	0.82	0.12		0.94		0.38	0.57	0.52	0.08
Office & other equipments	19.22	2.60	0.15	21.67		13.87	7.80	6.40	1.07
Fixed assets costing upto ₹ 10000/-	2.36	0.09	0.01	2.44		2.44			0.09
<b>Total Tangible Assets - Township</b>	<b>219.51</b>	<b>5.37</b>	<b>0.92</b>	<b>223.96</b>		<b>127.76</b>	<b>96.22</b>	<b>96.41</b>	<b>5.34</b>
<b>Total Of Township Assets</b>	<b>219.51</b>	<b>5.37</b>	<b>0.92</b>	<b>223.96</b>		<b>127.76</b>	<b>96.22</b>	<b>96.41</b>	<b>5.34</b>
<b>Total Tangible Assets</b>	<b>7890.49</b>	<b>1684.14</b>	<b>43.35</b>	<b>9531.28</b>	<b>3.64</b>	<b>5338.25</b>	<b>4196.67</b>	<b>3288.22</b>	<b>771.43</b>
<b>Total Intangible Assets</b>	<b>453.64</b>	<b>32.24</b>	<b>0.01</b>	<b>485.87</b>		<b>163.89</b>	<b>321.98</b>	<b>321.49</b>	<b>31.81</b>
<b>Total Of Factory &amp; Township</b>	<b>8344.13</b>	<b>1716.38</b>	<b>43.36</b>	<b>10017.15</b>	<b>3.64</b>	<b>5502.14</b>	<b>4518.65</b>	<b>3609.71</b>	<b>803.24</b>
<b>Previous Year</b>	<b>6857.57</b>	<b>1535.71</b>	<b>49.15</b>	<b>8344.13</b>	<b>-0.18</b>	<b>4734.24</b>	<b>3609.71</b>	<b>2608.81</b>	<b>546.37</b>

Gross Block as at 31.03.2012 includes assets condemned and retired from active use ₹ 59.20 Crore (Previous year ₹ 49.99 Crore)

Net Block as at 31.03.2012 includes assets condemned and retired from active use ₹ 0.18 Crore (Previous year ₹ 0.19 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.

There is no impairment loss in fixed assets during the year.

Gross Block includes ₹ 31.43 Crore (previous year ₹ 26.97 Crore) share of joint controlled entities.

Depreciation for the year includes ₹ 1.28 Crore (previous year ₹ 1.15 Crore) share of joint controlled entities.

2011-12	2010-11
30.81	30.81

## 11 - Non current investments

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>Long Term Investments (at cost)</b>				
<b>Unquoted Shares(Fully paid up):</b>				
<b>TRADE:</b>				
1402 (previous year 360) Equity shares of ₹ 10/- each (Previous year ₹ 10 each) of Engineering Projects (India) Ltd.	*		*	
490 (previous year 490) Equity shares of ₹ 10/- each (Previous year ₹ 10 each) of Engg. Projects (I) Ltd.	0.01		0.01	
728960 (previous year 728960) Equity shares of ₹ 10/- each of AP Gas Power Corporation Ltd.	0.91		0.91	
5000000 (Previous year 5000000) Equity shares of ₹ 10/- each of Neelachal Ispat Nigam Ltd.	5.00	5.92	5.00	5.93
<b>Subsidiary Companies -</b>				
5355000 (previous year 51000) Equity Shares of ₹ 10/- each of BHEL Electrical Machines Ltd.				0.05
<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		2.00	
— Nil (previous year 50000) Equity Shares of ₹ 10/- each of Barak Power Pvt. Ltd.	-		0.05	
Less: Provision for diminution in value	-		0.05	
<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	*	0.01	*	0.01
<b>Share Money paid in advance</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		*		*
To BHEL Electrical Machines Ltd. (Subsidiary Company)		-		5.31
* Value of less than ₹ 1 lakh/-				
		5.94		11.30
<b>Aggregate value of Unquoted Investments</b>		5.94		11.30
<b>Aggregate provision in diminution in value of Investments</b>		2.00		2.05

## 12 - Deferred tax assets (Net)

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Provisions	1021.00	1821.04
Statutory dues	555.64	411.99
Modvat Adjustment	75.57	45.43
Others	37.37	9.65
	<u>1689.58</u>	<u>2288.11</u>
Deferred Tax Liabilities		
Depreciation	140.10	122.94
<b>Deferred tax assets (net)</b>	<b>1549.48</b>	<b>2165.17</b>

Includes ₹ 3.24 Crore (previous year ₹ 1.62 crore) share of jointly controlled entities.

## 13 - Long term loans and advances

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Capital advance	308.52	446.20
Deposits	44.52	38.67
Loans to employees	1.68	1.87
Loans to Public Sector Undertakings	16.00	-
Loans to Others	0.01	0.02
Interest accrued and or due on loans	0.78	1.39
	<u>371.51</u>	<u>488.15</u>
<b>Advances (Recoverable in cash or in kind or for value to be received)</b>		
For purchases	402.95	469.09
To Others	118.02	137.76
	<u>520.97</u>	<u>606.85</u>
<b>Deposits</b>		
Balance with customs, Port Trust and other Govt. Authorities	38.56	34.00
Advance Tax/TDS (Net of Provision for Taxation)	71.90	-
	<u>1002.94</u>	<u>1129.00</u>
Less: Provisions	45.49	40.94
	<u>957.45</u>	<u>1088.06</u>
<b>Sub classification:-</b>		
Secured, considered good	17.81	4.12
Unsecured, considered good	939.64	1083.94
Doubtful	45.49	40.94
	<u>1002.94</u>	<u>1129.00</u>

Includes ₹ 287.61 Crore (previous year ₹ 419.78 crore) share of jointly controlled entities.

## 14 - Other non-current assets

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
Long term trade receivables	11505.74		8525.54	
Less: Provision for bad & doubtful debts	1749.90		1034.16	
Less :Automatic price reduction adjustment a/c	<u>340.58</u>	<u>9415.26</u>	<u>210.74</u>	7280.64
Non moving inventory	176.62		191.14	
Less: Provision for non-moving inventory	<u>68.70</u>	<u>107.92</u>	<u>77.13</u>	114.01
Pre-operative Expenses / Preliminary expenses		<u>21.80</u>		<u>3.82</u>
		<u>9544.98</u>		<u>7398.47</u>
<b>Sub classification: Long term trade receivables</b>				
Secured, considered good		-		-
Unsecured, considered good		9415.26		7280.64
Doubtful		2090.48		1244.90
		<u>11505.74</u>		<u>8525.54</u>

Long term trade receivables include deferred debts - ₹ 8194.77 crore (previous year ₹ 6810.73 crore)  
Includes ₹ 1.41 Crore (previous year ₹ 9.11 crore) share of jointly controlled entities.

## 15 - Inventories

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
Raw material & components	4971.92		3724.06	
Material-in-transit	<u>1859.24</u>	<u>6831.16</u>	<u>1447.39</u>	5171.45
Work-in-progress (including items with sub-contractors)		<u>4841.46</u>		4142.29
Finished goods	953.79		856.40	
Inter division transfers in transit	<u>199.60</u>	<u>1153.39</u>	<u>176.29</u>	1032.69
Stores & spare parts				
Production	214.56		168.94	
Fuel stores	15.19		20.64	
Miscellaneous	<u>38.29</u>	<u>268.04</u>	<u>27.64</u>	217.22
Materials with fabricators/contractors		<u>316.70</u>		237.07
Loose tools		<u>46.38</u>		29.46
Scrap (at estimated realisable value)		<u>68.35</u>		73.30
Refer to Significant Accounting Policy No. 8 regarding mode of valuation		<u>13525.48</u>		<u>10903.48</u>

Includes ₹ 13.84 Crore (previous year ₹ 1.96 crore) share of jointly controlled entities.

## 16 - Trade receivables

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Debts outstanding for a period exceeding six months	10426.34	9367.53
Other debts	16924.51	11753.65
	<u>27350.85</u>	<u>21121.18</u>
Less : Provision for bad & doubtful debts & automatic price reduction adjustment	820.32	869.14
	<u>26530.53</u>	<u>20252.04</u>
Trade receivables include deferred debts - ₹ 6100.13 crore (previous year ₹ 4090.74 crore)		
Trade receivables include goods despatched pending billing - ₹ 1717.07 crore (previous year ₹ 1828.39 crore)		
<b>Particulars of current trade receivables :</b>		
Secured, considered good	-	-
Unsecured, considered good	26530.53	20252.04
Doubtful	820.32	869.14
	<u>27350.85</u>	<u>21121.18</u>

Includes ₹ 117.73 Crore (previous year ₹ 76.94 crore) share of jointly controlled entities.

## 17 - Cash & cash equivalents

(₹ in Crore)

	Figures as at 31.03.2012	Figures as at 31.03.2011
Balances with Banks *	6367.06	9262.22
Cheques, Demand Drafts on hand	365.79	433.95
Cash & Stamps in on hand	1.27	1.60
Remittances in transit	-	8.64
Margin money deposit	0.21	-
	<u>6734.33</u>	<u>9706.41</u>
<b>*Includes</b>		
Earmarked against unclaimed dividend	2.18	3.74
Non-repatriable account	19.28	21.79

Includes ₹ 51.44 Crore (previous year ₹ 69.04 crore) share of jointly controlled entities.

## 18 - Short term loans and advances

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
<b>Loans</b>				
Loans to Employees	0.16		0.15	
Materials Issued on loan	9.74		10.05	
Loans to others	0.01		10.60	
Loans to Public Sector Undertakings	4.00		-	
Interest accrued and or due on loans	1.59	15.50	2.06	22.86
<b>Advances (Recoverable in cash or in kind or for value to be received)</b>				
To employees	32.21		30.95	
For purchases	963.03		1039.18	
To Others	889.59	1884.83	942.17	2012.30
<b>Deposits</b>				
Balance with customs, Port Trust and other Govt Authorities		295.01		264.47
Others		40.35		199.00
		2235.69		2498.63
<b>Less: Provision for doubtful loans &amp; advances</b>		87.65		82.52
		2148.04		2416.11
<b>Particulars of Loans and advances:-</b>				
Secured, considered good		4.25		-
Unsecured, considered good		2143.79		2416.11
Doubtful		87.65		82.52
		2235.69		2498.63
Includes:				
Due from Directors		-		*
Due from Officers		0.15		0.21

\* value less than ₹ 1 lakh

Includes ₹ 18.55 Crore (previous year ₹ 13.72 crore) share of jointly controlled entities.

## 19 - Other current assets

(₹ in Crore)

	Figures as at 31.03.2012		Figures as at 31.03.2011	
Interest Accrued on Banks Deposits and investments		151.37		310.41
Rent Receivable on leased Assets		0.62		-
		151.99		310.41

Includes ₹ 1.11 Crore (previous year ₹ 0.54 crore) share of jointly controlled entities.

## 20 - Revenue from operations

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
Sales less returns		44408.37		38542.01
Income from external erection & other services & revenue from works contract		5489.20		5093.72
		49897.57		43635.73

Includes ₹ 329.41 Crore (previous year ₹ 262.42 crore) share of jointly controlled entities.

## 21 - Other operational income

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
Export Incentives		11.95		42.89
Rental income on leased assets	0.93		0.93	
Lease equalisation account	3.82	4.75	14.05	14.98
Scrap sale		309.83		272.46
Receipt from sale/transfer of surplus stock		0.17		0.05
Others		429.57		353.20
		756.27		683.58

Includes ₹ 0.06 Crore (previous year ₹ nil) share of jointly controlled entities.

## 22 - Other income

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>A. Other income</b>				
Profit from sale of fixed assets & capital stores (net)		4.01		4.27
Dividend on Investment (Long term-Trade)		16.98		14.99
Exchange variation (net)		99.32		100.33
Others (including grants of ₹ 0.33 crore (prev year ₹ 0.33 crore) from Govt. of India for R & D Projects)		331.46		274.99
<b>Total (A)</b>		451.77		394.58
<b>B. Interest Income</b>				
From customers		2.56		0.01
From employees		0.00		0.01
From banks		792.82		614.76
Others		24.88		17.57
<b>Total (B)</b>		820.26		632.35
<b>Total Other Income</b>	<b>Total (A+B)</b>	1272.03		1026.93

Includes ₹ 6.02 Crore (previous year ₹ 5.03 crore) share of jointly controlled entities.

## 23 - Cost of material consumption, erection and engineering expenses

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
Consumption of raw material & components		24697.56		19542.83
Consumption of stores & spares		569.04		473.81
Erection and Engineering exp. - payment to subcontractors		3865.84		3350.01
		29132.44		23366.65

Includes ₹ 251.96 Crore (previous year ₹ 191.89 crore) share of jointly controlled entities.

## 24 - Increase in work in progress & finished goods

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>Work -in -progress</b>				
Closing Balance	<b>4842.25</b>		4142.64	
Opening Balance	<b>4142.64</b>	<b>699.61</b>	<u>4338.11</u>	-195.47
<b>Finished Goods</b>				
Closing Balance	<b>954.27</b>		858.93	
Opening Balance	<b>859.13</b>	<b>95.14</b>	<u>600.32</u>	258.61
<b>Inter-division transfer in transit</b>		<b>34.90</b>		63.04
		<b>829.65</b>		<u>126.18</u>
<b>NOTE:</b>				
<b>Element of Excise duty in Finished Goods</b>				
Closing Balance		<b>99.97</b>		81.96
Opening Balance		<b>81.96</b>		53.06

Includes ₹ 0.26 Crore (previous year ₹ 0.11 crore) share of jointly controlled entities.

## 25 - Employee benefits expenses

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
Salaries, wages, bonus, allowances & other benefits		<b>4643.66</b>		4577.84
Contribution to gratuity fund		<b>152.79</b>		224.85
Contribution to provident and other funds		<b>279.44</b>		272.25
Group insurance		<b>12.15</b>		9.90
Staff welfare expenses		<b>441.73</b>		367.76
		<b>5529.77</b>		<u>5452.60</u>

Includes ₹ 11.08 Crore (previous year ₹ 9.28 crore) share of jointly controlled entities.

## 26 - Finance costs

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
Interest on				
Banks/financial institutions borrowings		<b>26.70</b>		31.91
Other Borrowing Costs		<b>26.37</b>		<u>24.47</u>
		<b>53.07</b>		56.38
Less: Borrowing Cost capitalised		<b>0.00</b>		0.00
		<b>53.07</b>		<u>56.38</u>

Includes ₹ 0.29 Crore (previous year ₹ 0.25 crore) share of jointly controlled entities.

## 27 - Other expenses of manufacture, administration, selling & distribution

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
Royalty, technical, Resident consultant's charges & other consultancy charges	81.67	135.38
Rent	96.54	81.51
Excise duty	248.70	209.31
Power & Fuel	515.10	407.00
Rates & taxes	46.34	38.63
Service tax	15.16	12.21
Insurance	133.60	109.36
Repairs:		
Buildings	80.39	54.87
Plant & machinery	36.51	29.37
Others	138.91	119.96
Other expenses in connection with exports	26.79	33.14
Loss on investments written off	0.09	
Bad debts written off	22.68	20.95
Carriage outward	624.41	359.55
Travelling & conveyance	185.51	166.69
Miscellaneous expenses	887.19	737.84
Liquidated damages charged off	74.53	19.50
Donations	0.17	0.18
Corporate social responsibility & sustainability development expenses	36.47	21.55
	<b>3250.76</b>	<b>2557.00</b>

Includes ₹15.28 Crore (previous year Rs. 8.96 crore) share of jointly controlled entities.

## 28 - Provisions (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2012	Figures for the previous year ended 31.03.2011
<b>Doubtful debts ,Liquidated Damages and Loans &amp; advances</b>		
Created during the year	973.61	730.86
Less: written back during the year	345.30	242.14
	<b>628.31</b>	<b>488.72</b>
<b>Contractual Obligations</b>		
Created during the year	1198.64	2699.41
Less: written back during the year	333.81	605.99
	<b>864.83</b>	<b>2093.42</b>
<b>Others</b>		
Created during the year	53.81	166.14
Less: written back during the year	141.42	26.82
	<b>-87.61</b>	<b>139.32</b>
	<b>1405.53</b>	<b>2721.46</b>

Includes ₹ 0.46 Crore (previous year Rs. 3.98 crore) share of jointly controlled entities.

## 29 - Prior period adjustments (net)

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>INCOME</b>				
Sales less returns	-19.32		-1.74	
Other operational income	0.30		-	
Other income	0.17		-	
Interest income	-0.21	-19.06	-	-1.74
<b>EXPENDITURE</b>				
Consumption of Raw material & components	1.64		0.24	
Depreciation	2.67		0.32	
Misc. Expenses	-4.24	0.07	-0.51	0.05
		-19.13		-1.79

Includes ₹ 0.13 Crore (previous year ₹ nil) share of jointly controlled entities.

## 30 - Exceptional items

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>EXPENDITURE</b>				
Waiver of interest		-0.16		-7.75
		-0.16		-7.75

Includes ₹ Nil Crore (previous year ₹ nil) share of jointly controlled entities.

## 31 - Tax expense

(₹ in Crore)

	Figures for the current year ended 31.03.2012		Figures for the previous year ended 31.03.2011	
<b>a) Current tax</b>				
for current year	3296.26		3730.00	
excess provision created in earlier years written back	-631.98	2664.28	-81.45	3648.55
<b>b) Deferred tax charge / (credit)</b>		615.69		-636.55
		3279.97		3012.00

Includes ₹ 17.34 Crore (previous year ₹ 17.85 Crore) share of jointly controlled entities.

## Significant Accounting Policies (Consolidated Financial Statement)

### 1 Basis of preparation of Financial Statements

The financial statements have been prepared as of a going concern on historical cost convention and on accrual method of accounting in accordance with the generally accepted accounting principles and the provisions of the Companies Act, 1956 as adopted consistently by the Company.

### 2 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.
- (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.

### 3 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

##### 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.

##### Assets Taken on Lease:

Lease payments made for assets taken on operating lease are recognized as expense over the lease period.

### 4 Intangible Assets

#### A. Intangible assets are capitalized at cost if

- a. It is probable that the future economic benefits that are attributable to the asset will flow to the company, and
- b. The company will have control over the assets, and
- c. The cost of these assets can be measured reliably and is more than ₹ 10,000/-.

Intangible assets are 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 profit and loss account 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 capitalized.

### 5 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.

## 6 Depreciation

- (i) Depreciation on fixed assets (other than those used abroad under contract) is charged up to the total cost of the assets on straight-line method as per the rates prescribed in Schedule XIV of the Companies Act, 1956, except where depreciation is charged at rates determined on the basis of the technically assessed estimated useful lives shown hereunder:-

	Single Shift	Double Shift	Triple Shift
General Plant & Machinery	8%	12%	16%
Automatic/Semi-Automatic Machines	10%	15%	20%
Erection Equipment, Capital Tools Tackles	20%		
Township Buildings			
–Second Class	2.5%		
–Third Class	3.5%		
Railway Sidings	8%		
Locomotives & Wagons	8%		
Electrical Installations	8%		
Office & Other Equipments	8%		
Drainage, Sewerage & Water supply	3.34%		
Electronic Data Processing Equipment	20%		

In respect of additions to/deductions from the fixed assets, depreciation is charged on pro-rata monthly basis.

- (ii) Fixed assets used outside India pursuant to long term contracts are depreciated over the duration of the initial contract.
- (iii) Fixed assets costing ₹10,000/- or less and those whose written down value as at the beginning of the year is ₹10,000/- or less, are depreciated fully. In so far as township buildings are concerned, the cost per tenement is the basis for the limit of ₹10,000/-.
- (iv) At erection/project sites: The cost of roads, bridges and culverts is fully amortized over the tenure of the contract, while sheds, railway sidings, electrical installations and other similar

enabling works (other than purely temporary erections, wooden structures) are so depreciated after retaining 10% as residual value.

- (v) Purely Temporary Erection such as wooden structures are fully depreciated in the year of construction.
- (vi) Leasehold Land and Buildings are amortized over the period of lease. Buildings constructed on land taken on lease are depreciated over their useful life or the lease period, whichever is earlier.

### In the case of BGGTS (50% JV)

Depreciation on fixed assets is provided using the straight line method over the useful life of the assets as estimated by the management. The rates of depreciation prescribed in Schedule XIV to the Companies Act, 1956 are considered the minimum rates. If the management's estimate of the useful life of a fixed asset at the time of acquisition of the asset or of the remaining useful life on a subsequent review is shorter than the envisaged in the aforesaid schedule, depreciation is provided at a higher rate based on the management's estimate of the useful life / remaining useful life. Pursuant to this policy, depreciation on assets has been provided at the rates based on the following useful lives of fixed assets as estimated by management.

Asset category	Estimated useful life
Plant and machinery	2-15
Electrical Installations	3-10
Civil Structures	5-10
Furniture and fixtures	1-8
Computers	3
Office equipment	3-5

Depreciation is calculated on a pro-rata basis from / up to the month the assets are purchased / sold. Individual assets costing less than ₹ 5,000/- each are depreciated in full in the year of purchase.

### In the case of RAICHUR POWER CORPORATION LIMITED (46% JV)

Depreciation is provided on straight line method at the rates prescribed in the Electricity Supply Act 1948. In respect of assets for which rates are not specified in the Electricity Supply Act 1956, depreciation is provided at the rates specified under schedule XIV of the Companies Act 1956.

Assets are depreciated to the extent of 90% of the cost and 10% is retained as residual value.

Depreciation on additions to assets is provided for the full year irrespective of the date of addition.

**In the case of NTPC BHEL POWER PROJECTS PVT LTD.**

Depreciation on fixed assets is charged upto the total cost of the assets on a straight line method as per the rates prescribed in Schedule XIV of the Companies Act, 1956.

**In the case of UDANGUDI POWER CORPORATION LTD.**

Depreciation on some assets is provided on the straight line method based on useful life of assets as estimated by management. Depreciation on other assets is provided on Straight line method as per the rates and in the manner prescribed under Schedule XIV of the Companies Act, 1956. Depreciation for assets purchased/sold during the period is proportionately charged. 100% depreciation is charged on assets acquired for price up to ₹ 5000/-, Management estimates useful life of assets as follows

- |                           |         |
|---------------------------|---------|
| 1. Temporary Shed         | 1 Year  |
| 2. Computer & Accessories | 5 Years |

**7 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 Profit & Loss Account.

**8 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 (50% JV)**

Traded stock is valued at the lower of cost and net realizable value. Cost is determined under the first-in-first-out method.

**9 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 01.04.2003:

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.

#### 10 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.

#### 11 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 Profit & Loss Account.

#### In the case of BGGTS (50% JV)

Forward contracts are entered into to hedge the foreign currency risk of the underlying outstanding at the year end. The premium or discount on all such contracts arising at the inception of each contract is amortised as expense or income over the life of the contract. The exchange differences on such a forward contract is the difference between (i) the foreign currency amount of the contract translated at the exchange rate on the reporting date, or the settlement date where the transaction is settled during the period and (ii) the same foreign currency amount translated at the latter of the date of inception of the forward exchange contract or the last reporting date. Any profit or loss arising on such cancellation or renewal of such a forward contract is recognised as income or expense for the year.

#### 12 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.

#### 13 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.

#### 14 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.

#### 15 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.

## 32 Other notes to consolidated financial statements

1 The Consolidated Financial Statements relate to Bharat Heavy Electricals Limited (the company), its Subsidiaries and its interest in Joint Venture entities. The consolidated Financial Statements have been prepared on the following basis:-  
Basis of Accounting:

i) The financial statements of the subsidiary companies and interest in joint ventures in the consolidation are drawn upto the same reporting date as of the parent company.

ii) The consolidated financial statements have been prepared in accordance with Accounting Standard -21 on “Consolidated Financial Statements” and Accounting Standard - 27 on “Financial Reporting of interest in Joint Ventures”.

Principles of Consolidation:

- (a) The Financial Statements of the Parent Company and its Subsidiary companies 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”.
- (b) The financial statements of Joint Venture entities have been combined by applying proportionate consolidation method on a line by line basis on items of assets, liabilities, income and expenses in accordance with Accounting Standard- 27 on “Financial Reporting of Interests in Joint Ventures”.
- (c) The consolidated financial statements have been prepared using uniform accounting policies for like transactions and other events in similar circumstances and are presented to the extent possible, in the same manner as the Parent Company’s separate financial statements except as otherwise stated in the Significant Accounting Policies.
- (d) The difference between the costs of investments in the subsidiary over the net assets at the time of acquisition of shares in the Subsidiary is recognized in the Financial Statements as Goodwill or Capital Reserve as the case may be.

(e) Minority interest’ share of net loss of consolidated subsidiary for the year is adjusted against the income of the group in order to arrive at the net income attributable to shareholder of the company.

(f) Minority interest share of net liabilities of consolidated subsidiary is identified and presented in consolidated balance sheet separate from assets/liabilities & equities of the company shareholder.

2 The Consolidated Financial Statements includes the result of following entities:

Name of Company	Country of Incorporation	Proportion(%) of Shareholding as on 31.03.2012	Proportion(%) of Shareholding as on 31.03.2011
<b>Subsidiary Company</b>			
1) Bharat Heavy Plate and Vessels Ltd. (BHPV)	India	100	100
2) BHEL Electrical Machines Ltd. (BHEL EML)	India	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) Udangudi Power Corporation Ltd.	India	50	50
4) Dada Dhuniwale Khandwa Project	India	50	50
5) Raichur Power Corporation Ltd.	India	46	50
6) Latur Power company Ltd.	India	50	50

(a) The financial statements of BHPV and BHEL EML are consolidated based on the audited financial statement for the year ended on 31.03.2012. The first accounts of BHEL EML are made from 19.01.2011 to 31.03.2012 and accordingly the same has been considered for consolidation.

(b) The interest in Joint Venture Companies in respect of BHEL-GE Gas Turbine Services Ltd., and NTPC-BHEL Power Projects Pvt. Ltd. is considered based on audited financial statements for the year ended as on 31.03.2012.

- (c) The interest in Joint Venture in respect of Power Plant Performance Improvement Ltd. (PPIL) have not been considered in preparation of Consolidated Financial Statements as the companies are under liquidation and full amount of equity investment has been provided for diminution in the value of investment.
- (d) The interest in Joint Venture in respect of Barak Power Pvt. Ltd. have not been considered in preparation of Consolidated Financial Statements as the company was under liquidation. The investment in Barak Power Pvt. Ltd. has been written off due to same has been wound up w.e.f. 11.10.2011.
- (e) The interest in Joint Venture in respect of Udangudi Power Corporation Ltd., Raichur Power Corporation Ltd. and Dada Dhuniwale Khandwa is considered based on unaudited financial statements for the year ended on 31.03.2012.
- (f) Latur Power Company Ltd., a Joint venture company of BHEL and MPGCL, was incorporated on 06.04.2011. The first accounts of the company are made from the period 06.04.2011 to 31.03.2012. Accordingly, the interest in JV is considered in the Consolidated Financial Investment based on audited financial statements for the period from 06.04.2011 to 31.03.2012.

		2011-2012	2010-2011	
<b>3</b>	Estimated amount of contracts, net of advances, remaining to be executed on capital account and not provided for	₹ Crore	<b>640.57</b>	1361.91
	The above includes for acquisition of intangible assets	₹ Crore	<b>13.84</b>	5.11
	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>4</b>	Land and buildings includes			
a)	(i) Acres of land for which formal transfer/ lease deed have not been executed	Acres	<b>9042.75</b>	9039.33
	(ii) Number of flats for which formal transfer/ lease deed have not been executed	Nos	<b>12</b>	12
	(iii) Number of buildings for which formal transfer/ lease deed have not been executed	Nos	<b>1</b>	1
	(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	<b>91.52</b>	91.52
	b) Acres of land leased to Ministry of Defence, Govt. of India Departments & others	Acres	<b>28.77</b>	28.77
	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 is under adverse possession.	Acres	<b>122.94</b>	97.25
<b>5</b>	The impact on the profit of providing 100 percent depreciation on fixed assets upto ₹10,000/- each, without considering such impact of earlier years, is as under :			
	100% depreciation on assets upto ₹10,000/- charged off in the accounting year.	₹ Crore	<b>23.06</b>	10.10
	Normal depreciation on above.	₹ Crore	<b>5.79</b>	2.99
	Excess amount charged.	₹ Crore	<b>17.27</b>	7.11

<b>6</b>	<b>Sales less returns</b>			
	a Includes based on provisional prices	₹ Crore	<b>242.89</b>	0.70
	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;	₹ Crore	<b>2156.26</b>	1388.54
	c includes despatches of equipment held on behalf of customers at their request for which payment has been received by Company; and	₹ Crore	<b>31.95</b>	112.37
	d excludes for price reduction (net of refund) due to delay in delivery as per the terms of the contract .	₹ Crore	<b>263.79</b>	13.94
<b>7</b>	<b>Contingent liabilities :</b>			
	Claims against the company not acknowledged as debt :			
	i) a Income Tax Pending Appeals	₹ Crore	<b>48.86</b>	35.59
	b Against which paid under protest included under the head "deposit others"	₹ Crore	<b>0.00</b>	2.65
	ii) a Sales Tax Demand	₹ Crore	<b>748.23</b>	521.61
	b Against which paid under protest included under the head "Advances Recoverable"	₹ Crore	<b>105.99</b>	99.43
	iii) a Excise Duty demands	₹ Crore	<b>424.64</b>	339.92
	b Against which paid under protest included under the head "Advances Recoverable"	₹ Crore	<b>10.64</b>	9.01
	iv) a Custom Duty demands	₹ Crore	<b>2.66</b>	0.21
	b Against which paid under protest included under the head "Advances Recoverable"	₹ Crore	<b>0.06</b>	0.06
	v) Court & Arbitration cases	₹ Crore	<b>591.18</b>	409.66
	vi) a Liquidated Damages	₹ Crore	<b>2299.28</b>	1401.11
	b Amount deducted by customers towards LD included in vi)a	₹ Crore	<b>1579.19</b>	825.70
	vii) Counter Claim by contractors	₹ Crore	<b>0.61</b>	0.61
	viii) a Service Tax Demand	₹ Crore	<b>151.31</b>	216.57
	b Against which paid under protest	₹ Crore	<b>0.00</b>	0.22
	ix) Others	₹ Crore	<b>208.53</b>	209.87
	x) Corporate Guarantee given on behalf of subsidiary company (BHPV)	₹ Crore	<b>9.57</b>	-

(In view of the various court cases and litigations and claims disputed by the company financial impact as to outflow of resources is not ascertainable at this stage).

- 8** Cash credit limit from banks aggregating to ₹ 3000 crore (previous year ₹ 600 crore) and Company's counter guarantee / indemnity obligations in regard to bank guarantee / letters of credit limit aggregating to ₹ 52000 Crore (previous year ₹ 49400 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, book debts and other current assets both present and future. The outstanding bank guarantees as at 31.03.2012 is ₹ 38200 Crore (previous year ₹ 37474 Crore) and Corporate Guarantee as on 31.03.2012 is ₹ 4448.14 Crore (Previous year ₹ 4192 Crore).

9 Balances shown under debtors, creditors, contractor's advances, deposits and stock/materials lying with sub-contractors/fabricators are subject to confirmation, reconciliation & consequential adjustment, if any. The reconciliation is carried out ongoing basis as the company is in the business of long term construction contracts & provisions wherever considered necessary have been made in line with the guidelines.

10 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)

	2011-12	2010-11
Contract revenue recognised for the year	42170.73	37254.81
In respect of Contract in progress at the end of year :		
Cost incurred and recognised profits (less recognised losses)	166825.51	126691.73
Amount of advance received	10257.22	10971.55
Amount of retentions (deferred debts)	13533.88	9716.66
In respect of dues from customers after appropriate netting off		
Gross amount due from customer for the contract work as an asset	2728.40	4974.15
Gross amount due to customer for the contract work as a liability	4030.50	3418.65
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 company has accounted for leave encashment expenditure with 30 days a month as base for computation of encashment of leave as per specific instructions from Department of Public Enterprises (DPE) on the subject. This is against the earlier formula of computation of leave encashment on 26 days a month as base. The impact due to this change, is increase in Profit before tax by ₹ 180.46 crore for the year 2011-12. However, in some of the units the workers union has filed an appeal against the change and court has given interim stay order. The consequentail impact, if any, will be accounted for in the year of settlement.

12 The disclosure relating to derivative instruments:

a) The derivative instruments that are hedged and outstanding as on 31.03.2012 is Nil (previous year Nil).  
b) The foreign currency exposures that are not hedged by a derivative instrument or otherwise are as under:

		2011-12	2010-11
a) Assets / Receivables (i.e. Debtors)			
<b>in foreign currency</b>			
in US \$	in Crore	55.72	34.85
in EURO	in Crore	46.69	34.32
in LYD	in Crore	0.87	0.94
in RO	in Crore	0.03	0.19
<b>In Indian currency</b>			
in US \$	₹ Crore	2779.88	1553.17
in EURO	₹ Crore	3123.98	2127.66
in LYD	₹ Crore	35.60	34.39
in RO	₹ Crore	4.48	22.05
in Others	₹ Crore	43.59	38.92

b) Liabilities (i.e. Advances from customers / creditors)			
<b>in foreign currency</b>			
in US \$	in Crore	<b>36.17</b>	29.92
in EURO	in Crore	<b>34.17</b>	32.26
in LYD	in Crore	<b>1.49</b>	1.46
<b>in Indian currency</b>			
in US \$	₹ Crore	<b>1818.06</b>	1349.37
in EURO	₹ Crore	<b>2347.33</b>	2064.51
in LYD	₹ Crore	<b>62.18</b>	54.78
in Others	₹ Crore	<b>230.31</b>	115.28
<b>13 a)</b>	Expenditure on departmental Repair & maintenance which are as under :		
		<b>2011-12</b>	<b>2010-11</b>
	Plant & Machinery	<b>178.30</b>	157.27
	Buildings	<b>54.93</b>	45.54
	Others	<b>36.75</b>	30.33
b)	Agency Commission on exports included in expenses in connection with exports	<b>17.54</b>	21.84
c)	Expenditure on research & development	<b>321.26</b>	361.47
d)	Rent Residential	<b>74.68</b>	67.22
e)	Payment to Auditors		
	As Auditors	<b>0.52</b>	0.45
	includes paid abroad	<b>0.04</b>	0.01
	Reimbursement of expenses	<b>0.16</b>	0.18
	Taxation matters(including certification)	<b>0.14</b>	0.11
	includes paid abroad	<b>0.02</b>	0.01
	Other services	<b>0.34</b>	0.26
f)	Payment to Cost Auditors	<b>0.01</b>	0.01
g)	Expenditure on entertainment	<b>8.05</b>	6.52
h)	Expenditure on foreign travel	<b>17.20</b>	17.43
i)	Expenditure on Publicity and Public relations		
	Salaries allowances & other benefits	<b>10.69</b>	10.07
	Other expenses	<b>15.29</b>	16.21
j)	Director's Fees	<b>0.25</b>	0.16
<b>14</b>	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 Udangudi Power Corporation Ltd.
  - 5 Latur Power company Ltd.
  - 6 Raichur Power Corporation Ltd.
  - 7 Dada Dhuniwale Khandwa Power Ltd.
- ii) Key Management Personnel  
S/Shri

B.P. Rao, Anil Sachdev (upto 31.03.2012), Atul Saraya, O. P. Bhutani, M.K. Dube (w.e.f. 25.06.2011) and P. K. Bajpai (w.e.f. 01.07.2011), A.S. Nagaraja, P.V. Sridharan, L. Gopalakrishnan, K. Shamsuddin, Anand K. Bansal, P. Ashoka Verma, C.P. Singh, P.K. Verma, Anil gupta, A.K. Goswamy, C.V. Rajagopalan, B.S. Rao, Rajiv Ranjan, G. Rajgopal, T. Jeyaseelan, M.R. Kamble, H.N. Narayan Prasad, R. Nagaraja, Mohd. Suleman, Vijendra Nanavati, M.G. Waghmode, J.K. Srinivasan, V.S. Patil and Y.K. Rastogi.

iii) Details of Transactions

<b>Joint Ventures</b>		<b>2011-12</b>	<b>2010-11</b>
Purchase of Goods and Services	₹ Crore	<b>98.14</b>	76.06
Sales of Goods and services	₹ Crore	<b>654.23</b>	67.28
Receiving of Services	₹ Crore	<b>97.52</b>	25.24
Rendering of Services	₹ Crore	<b>46.98</b>	101.18
Dividend income	₹ Crore	<b>16.96</b>	14.99
Royalty income	₹ Crore	<b>0.63</b>	0.78
Purchase of shares	₹ Crore	<b>22.50</b>	354.02
Amounts due to BHEL at the end of the year	₹ Crore	<b>595.06</b>	59.68
Amounts due from BHEL at the end of the year	₹ Crore	<b>1022.24</b>	145.01
Advance deposit towards issue of shares	₹ Crore	-	-
Provision for Doubtful debts	₹ Crore	<b>0.76</b>	0.02
Advances given	₹ Crore	<b>8.36</b>	27.04

**Note :** Majority of transactions are with BGGTS, NBPPL and Raichur power corporation Ltd.

**Key Management Personnel (KMP)**

Payment of Salaries	₹ Crore	<b>2.90</b>	2.02
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**Relatives of KMP**

Amounts due to BHEL at the end of the year	₹ Crore	<b>0.00</b>	0.00
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Payment of Salaries	₹ Crore	<b>0.20</b>	0.20
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**15 Lease**

Details of assets taken on lease on or after 1<sup>st</sup> April 2001 are as under:

i) **Finance Lease:**

		<b>2011-12</b>	<b>2010-11</b>
a. Outstanding balance of Minimum Lease payments			
not later than one year	₹ Crore	<b>82.04</b>	65.70
later than one year and not later than five years	₹ Crore	<b>144.24</b>	120.63

later than five years	₹ Crore	0.00	0.00
Total minimum lease payments at the balance sheet date	₹ Crore	226.28	186.33
<b>b. Present Value of (a) above</b>			
not later than one year	₹ Crore	62.68	55.30
later than one year and not later than five years	₹ Crore	123.69	102.40
later than five years	₹ Crore	0.00	0.00
Total of Present Value at the balance sheet date	₹ Crore	186.37	157.70
c 1 Finance charges	₹ Crore	39.91	28.63
c. 2 Present value of Residual value, if any	₹ Crore	0.01	0.01
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..			
<b>iii) Operating Lease</b>		<b>2011-12</b>	<b>2010-11</b>
The future minimum lease payments under non-cancellable operating lease are as under			
not later than one year	₹ Crore	5.10	5.24
later than one year and not later than five years	₹ Crore	5.80	9.85
later than five years	₹ Crore	1.49	1.55
iv) Details regarding rentals in respect of assets taken on lease prior to 01.04.2001 are as given below:			
Cost of Assets			
Land & Buildings	₹ Crore	0.01	0.01
Computers & peripherals	₹ Crore	0.00	0.00
Rentals payable over unexpired period of lease			
Land & buildings	₹ Crore	0.02	0.02
Computers & peripherals	₹ Crore	0.00	0.00
<b>16 Earnings per Share:</b>		<b>2011-12</b>	<b>2010-11</b>
Weighted average number of Equity Shares			
outstanding during the year (A)	Nos. in Crore	244.760	48.952
Nominal Value of Equity Share	(₹)	2.00	10.00
Net Profit for the year after adjusting minority interest (B)	(₹ in Crore)	7087.44	6053.36
Basic and Diluted Earnings Per Share (B)/(A)	(₹)	28.96	123.66
Basic and Diluted Earnings Per Share (B)/(A) - Restated	(₹)	28.96	24.73
a) During the year company has sub-divided existing equity shares of face value of ₹10/- into 5 equity shares of face value of ₹ 2/- each and the record date was fixed 04.10. 2011. Hence, previous year Basic and Diluted earning per share has been restated accordingly.			
17 The company has filed Draft Red Herring Prospectus (DRHP) dated 28.09.2011 with Securities and Exchange Board of India (SEBI) on 30.09.2011 for disinvestment of 5% of the paid up equity capital out of Government of India's shareholding. Consequent upon the receipt of 'no-objection' for withdrawal of DRHP for FPO, from Department of Heavy Industry/ Department of Disinvestment, the Board of Directors in its meeting held on 03.04.2012 has approved the withdrawal of DRHP filed by the company with SEBI.			

## 18 The disclosure relating to Accounting Standard -29

(₹ in Crore)

	2011-12	2010-11
<b>a) Liquidated Damages</b>		
Opening	697.96	483.25
Additions	558.82	282.61
Usage/ Write off/payment	-74.53	-20.03
Withdrawal/adjustments	-11.63	-47.87
Closing Balance	1170.62	697.96
<b>Contractual Obligation</b>		
Opening	2997.00	901.36
Additions	1198.64	2699.41
Usage/ Write off/payment	-133.48	-99.09
Withdrawal/adjustments	-194.29	-504.68
Closing Balance	3867.87	2997.00

b) Liquidated damages are provided in line with the Accounting Policy of the company and the same is dealt suitably in the accounts on settlement or otherwise. Contingent liability relating to liquidated damages is shown in item No. 7 of Note - 32.

c) The provision for contractual obligation is made at the rate of 2.5% of the contract revenue in line with significant Accounting Policy No.14 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.

19 Item of expense and income less than ₹ one Lakh are not considered for booking under Prior Period Items.

20 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 schedules of annual account by way of a note.

21 The consolidated financial statements have been prepared in line with the requirements of Revised Schedule VI of Companies Act, 1956 as introduced by the Ministry of Corporate Affairs from financial year ended on 31<sup>st</sup> March 2012. Accordingly, assets and liabilities are classified between current and non-current considering 12 months period as operating cycle. The adoption of Revised Schedule VI does not impact recognition and measurement principles followed for preparation of consolidated financial statements. However, it has significant impact on presentation and disclosures made in the financial statements, consequently, the company has re-classified previous year figures to conform to this year classification.

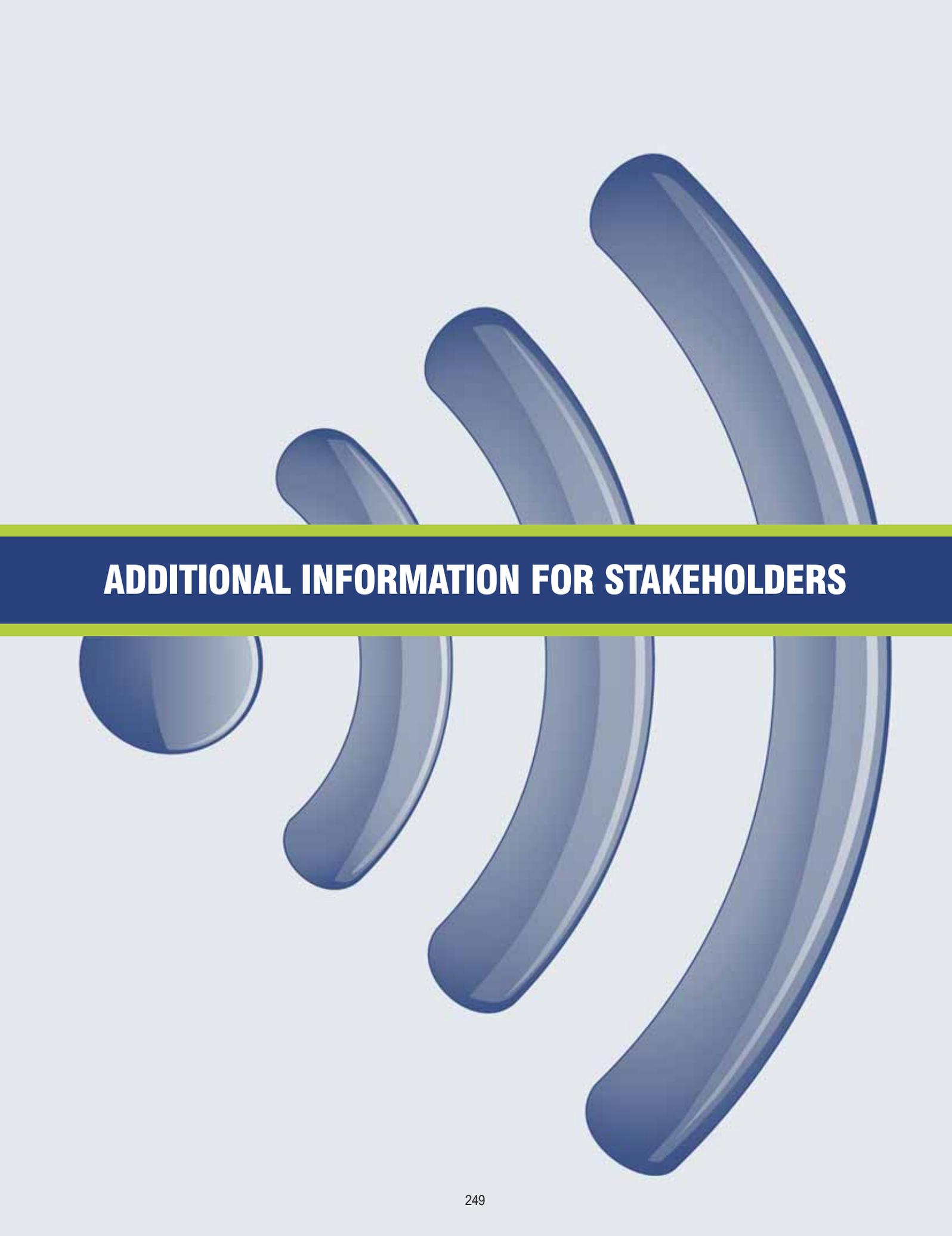
## 22 - SEGMENT INFORMATION - CONSOLIDATED

(₹ in Crore)

	For the year ended 31.03.2012			For the year ended 31.03.2011		
<b>A. PRIMARY SEGMENT-BUSINESS SEGMENTS</b>	<b>Power</b>	<b>Industry</b>	<b>Total</b>	<b>Power</b>	<b>Industry</b>	<b>Total</b>
<b>I. SEGMENT REVENUE</b>						
a. Segment Revenue	38191.81	11717.71	<b>49909.52</b>	33427.96	10250.67	43678.63
b. Inter-Segment Revenue	-	-	-	-	-	-
c. Operating Revenue-External (a) - (b)	38191.81	11717.71	<b>49909.52</b>	33427.96	10250.67	43678.63
<b>II. SEGMENT RESULTS</b>						
a. Segment Results	8238.79	3353.99	<b>11592.78</b>	7986.57	2292.39	10278.96
b. Unallocated expenses (Net of income)			<b>1172.48</b>			1157.22
c. Profit before Interest, DRE & Incometax (a) - (b)			<b>10420.30</b>			9121.74
d. Interest			<b>53.07</b>			56.38
e. Net Profit before Income Tax (c) - (d)			<b>10367.23</b>			9065.36
f. Income Tax			<b>3279.97</b>			3012.00
g. Net Profit after Income Tax			<b>7087.26</b>			6053.36
<b>III ASSETS &amp; LIABILITIES</b>						
a. Segment Assets	45063.97	13592.64	<b>58656.61</b>	35609.99	11147.75	46757.74
b. Unallocated Assets			<b>8773.65</b>			12870.85
c. Total Assets			<b>67430.26</b>			59628.59
d. Segment Liabilities	32447.46	8226.30	<b>40673.76</b>	29602.88	7342.43	36945.31
e. Unallocated Liabilities			<b>1348.49</b>			2528.32
f. Total Liabilities			<b>42022.25</b>			39473.63
<b>IV OTHER INFORMATION</b>						
a. Cost incurred during the period to acquire fixed assets (Incl. CWIP)	1118.02	446.61		1645.25	456.88	
b. Depreciation	599.74	152.70		409.34	123.15	
c. Non Cash Expenses (other than depreciation)	1397.25	122.87		2256.87	415.34	
<b>B. SECONDARY SEGMENT - GEOGRAPHICAL SEGMENTS</b>	<b>Within India</b>	<b>Outside India</b>	<b>Total</b>	<b>Within India</b>	<b>Outside India</b>	<b>Total</b>
1. Net Sales / Income from Operations	48431.98	1477.54	<b>49909.52</b>	42262.67	1415.96	43678.63
2. Total Assets	66948.38	481.88	<b>67430.26</b>	59226.55	402.05	59628.59
3. Cost incurred during the period to acquire Fixed Assets	1600.42	0.15	<b>1600.57</b>	2140.05	1.42	2141.47

**Notes:**

1. The primary segments have been identified as 'Power and Industry' based on the orders booked by the respective business sectors. The order booked by International operation group is taken to Power or Industry as the case may be.
2. BGGTS (JV) is in the business of sale of parts and components of gas turbines, Engineering services, repair services and uprate repairs and other joint ventures are in setting up power projects or under power business the same has been considered under 'Power Segment'.
3. BHPV (Subsidiary Co.) is in the business of fabrication/ erection on industrial boiler, fertilizer, chemicals and other equipment and BHEL EML (Subsidiary Co.) manufacturing of rotating electrical machines, considered under 'Industry segment'.



# **ADDITIONAL INFORMATION FOR STAKEHOLDERS**



## Ten Years Summary

(₹ in Crore)

	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04	2002-03
<b>I EARNINGS/OUTGOINGS</b>										
<b>Earnings</b>										
Turnover (Gross)	49510	43337	34154	28033	21401	18739	14525	10336	8662	7482
Revenue from Operations (Net)	47228	41566	32861	26212	19305	17237	13374	9527	8019	6930
Other Operational Income	751	680	493	514	422	379	277	420	313	334
Other Income	1266	1021	1155	983	1023	445	280	236	200	167
<b>Total Earnings</b>	<b>49245</b>	<b>43267</b>	<b>34509</b>	<b>27709</b>	<b>20750</b>	<b>18061</b>	<b>13931</b>	<b>10183</b>	<b>8532</b>	<b>7431</b>
<b>Outgoings</b>										
Cost of material consumption, Erection & Engg. Exp.	28908	23209	20672	17620	11821	10182	8145	5871	4230	3607
(Increase)/Decrease in work in progress & Finished Goods	(823)	(127)	(787)	(1152)	(827)	(181)	(386)	(540)	31	47
Employee benefit expenses	5466	5397	6540	2984	2608	2369	1879	1650	1640	1505
Other expenses of Mfg., Admn., selling and dist.(Incl. prior period items)	3242	2537	2057	1823	1644	1496	1177	1212	1363	1157
Provisions (Net)	1403	2715	-934	1281	778	172	283	126	21	91
Less : Cost of job done for internal use	104	68	121	61	38	28	36	19	24	18
<b>Outgoings before finance cost &amp; depreciation</b>	<b>38092</b>	<b>33663</b>	<b>27427</b>	<b>22495</b>	<b>15986</b>	<b>14009</b>	<b>11062</b>	<b>8301</b>	<b>7260</b>	<b>6389</b>
Profit before depreciation, finance cost & tax	11153	9604	7082	5214	4763	4052	2869	1882	1272	1042
Depreciation	800	544	458	334	297	273	246	219	198	185
<b>Gross Profit</b>	<b>10353</b>	<b>9060</b>	<b>6624</b>	<b>4880</b>	<b>4466</b>	<b>3779</b>	<b>2623</b>	<b>1663</b>	<b>1074</b>	<b>857</b>
Finance Cost	51	55	33	31	36	43	59	81	60	55
<b>Profit before tax</b>	<b>10302</b>	<b>9005</b>	<b>6591</b>	<b>4849</b>	<b>4430</b>	<b>3736</b>	<b>2564</b>	<b>1582</b>	<b>1014</b>	<b>802</b>
Tax Expense (Net)	3262	2994	2280	1711	1571	1321	885	628	357	358
<b>Profit after tax</b>	<b>7040</b>	<b>6011</b>	<b>4311</b>	<b>3138</b>	<b>2859</b>	<b>2415</b>	<b>1679</b>	<b>953</b>	<b>657</b>	<b>444</b>
Dividend	1567	1525	1141	832	746	600	355	196	147	98
Corporate Dividend Tax	254	249	191	141	127	93	50	27	19	13
<b>Retained Profit</b>	<b>5219</b>	<b>4237</b>	<b>2979</b>	<b>2165</b>	<b>1986</b>	<b>1722</b>	<b>1274</b>	<b>731</b>	<b>491</b>	<b>333</b>
<b>II WHAT THE COMPANY OWNED</b>										
<b>Fixed Assets</b>										
Gross Block	9707	8050	6580	5225	4443	4135	3822	3629	3460	3349
Less: Accumulated Depreciation & Lease Adj.	5410	4649	4165	3754	3462	3146	2840	2585	2365	2179
<b>Net Block</b>	<b>4297</b>	<b>3401</b>	<b>2415</b>	<b>1471</b>	<b>981</b>	<b>989</b>	<b>982</b>	<b>1044</b>	<b>1095</b>	<b>1170</b>
Capital WIP incl. Intangible Assets under development	1348	1733	1530	1157	658	302	185	95	108	59
Non-Current Investments	462	439	80	52	8	8	8	9	29	10
Deferred Tax Assets (Net)	1546	2164	1527	1840	1338	935	674	518	498	407
Current Assets, Loans & Advances and other non current assets	59123	51523	42915	36901	27906	20980	16331	13343	10425	8348
<b>Total assets</b>	<b>66776</b>	<b>59260</b>	<b>48467</b>	<b>41421</b>	<b>30892</b>	<b>23214</b>	<b>18180</b>	<b>15010</b>	<b>12155</b>	<b>9994</b>

## Ten Years Summary (Contd.)

(₹ in Crore)

	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04	2002-03
<b>III WHAT THE COMPANY OWED</b>										
Long Term Borrowings	123	102	81	105	61	58	539	524	528	523
Liabilities & Provisions	41280	39004	32489	28377	20056	14368	10340	8459	6349	4764
Total liabilities	41403	39106	32570	28482	20117	14426	10879	8983	6877	5287
<b>IV NET WORTH OF THE COMPANY</b>										
Share Capital	490	490	490	490	490	245	245	245	245	245
Reserves & Surplus	24883	19664	15427	12449	10285	8544	7057	5782	5051	4559
Less : Deferred Revenue Expenditure	-	-	-	-	-	-	-	-	18	96
Net Worth	25373	20154	15917	12939	10775	8788	7301	6027	5278	4708
<b>V NET WORKING CAPITAL</b>	17892	12551	10426	8524	7850	6612	5991	4884	4076	3584
<b>VI CAPITAL EMPLOYED</b>	22651	16391	12968	10091	8873	7640	7001	5950	5212	4772
<b>VII VALUE ADDED</b>	19098	18476	13171	9894	8323	7182	5683	4254	3680	3248
<b>VIII RATIOS</b>										
PBDIT to total assets (%) #	17.7%	17.8%	15.8%	14.4%	17.6%	19.6%	17.3%	13.9%	11.5%	10.8%
Gross profit to capital employed (%) #	53.0%	61.7%	57.5%	51.5%	54.1%	51.6%	40.5%	29.8%	21.5%	18.4%
Turnover/ gross block †	5.1	5.4	5.2	5.4	4.8	4.5	3.8	2.8	2.5	2.2
Earnings per share (₹) †	28.76	24.56	17.61	12.82	11.68	9.86	6.86	3.90	2.69	1.81
Net worth per share (₹)	103.67	82.34	65.03	52.86	44.02	35.90	29.83	24.62	21.56	19.24
Current Ratio	1.43	1.32	1.32	1.30	1.40	1.50	1.60	1.58	1.65	1.76
Total Debt / Equity	0.01	0.01	0.01	0.01	0.01	0.01	0.08	0.09	0.10	0.11
Return on Net Worth	27.7%	29.8%	27.1%	24.3%	26.5%	27.5%	23.0%	15.8%	12.5%	9.4%
Gross profit margin	20.9%	20.9%	19.4%	17.4%	20.9%	20.2%	18.1%	16.1%	12.4%	11.4%
Net profit margin	14.2%	13.9%	12.6%	11.2%	13.4%	12.9%	11.6%	9.2%	7.6%	5.9%

# On the basis of average net assets and capital employed

† Figures are restated on post-split made in 2011-12 and bonus issue of 1:1 in 2007-08

## Reconciliation of Profit (Standalone) determined under Indian GAAP with Net Income in accordance with US GAAP for the year 2011-12

	Notes	₹ Crore	US \$ (Million)
<b>Profit after tax (Standalone) determined under Indian GAAP</b>		<b>7039.96</b>	<b>1376.07</b>
Adjustment to conform with US GAAP			
Rental Income (Lease)	1	(4.18)	(0.82)
Income from investment in Joint Ventures & Subsidiary Companies	2	30.61	5.98
Employee benefits expense	3	(11.96)	(2.34)
Research & Development Expenses	4	(23.50)	(4.59)
Depreciation & amortisation expense	5	27.68	5.41
Prior period items (incl. provision for taxation/ deferred tax ₹ (-)21.83 crore)	6	(2.58)	(0.50)
Income Tax adjustments	7	(2.37)	(0.46)
<b>Net income in accordance with US GAAP</b>		<b>7053.66</b>	<b>1378.75</b>

1 US \$ = ₹ 51.16 (Closing Exchange rate )

### Notes to Reconciliation of Net Profit determined under Indian GAAP with Net Income in accordance with US GAAP

The following notes show the difference between Indian GAAP and US GAAP and necessary adjustment to arrive at Net Income under the US GAAP.

1. Rental Income (Lease)

As per Indian GAAP assets given on lease classified as finance lease prior to 01.04.2001 are capitalised at the normal sale price/fair value/contracted price and depreciation on the same has been charged. Lease rental income is recognised after adjusting lease equalisation. Under US GAAP assets given on finance lease, finance income is only recognised over the lease period.

2. Income from Investment in Joint Ventures & Subsidiary Companies

As per Indian GAAP dividend income from joint ventures / subsidiary companies is recognised and provision for diminution in value, if any, is made for the investment in joint ventures. Under US GAAP share of income/ loss generated by Joint Ventures / Subsidiary Companies is recognised in the income statement in proportion to holding.

3. Employee benefits expense

As per Indian GAAP Provision for leave encashment (compensated absences) is accounted for on actuarial basis. Under US GAAP compensated absences is accounted on accrual basis.

4. Research & Development Expenses

As per Indian GAAP R&D expenses in the nature of development are capitalised and amortised over the estimated useful life and shown under depreciation / amortisation. Under US GAAP amortisation of R&D assets is charged as R&D expenses.

5. Depreciation & amortisation expense

As per Indian GAAP depreciation is charged to Income statement on assets given on finance lease prior to 01.04.2001. Under US GAAP assets given on finance lease, finance income is recognised. As per Indian GAAP

amortisation of R&D assets is shown under depreciation / amortisation. Under US GAAP amortisation of R&D assets is charged as R&D expenses to income statement.

6. Prior period items

As per Indian GAAP prior period items are reported separately in the income statement for the year. Under US GAAP prior period items are accounted by adjustment to prior years under retained profits.

7. Income Tax adjustments

Income tax adjustments have been made on US GAAP adjustments.

As per our report of even date

For Gandhi Minocha & Co.

Chartered Accountants

FRN 000458N



(Manoj Bhardwaj)

Partner

M.No. 098606



(P.K. Bajpai)

Director(Finance)

Date : 27.07.2012

Place: New Delhi

## Auditor's Report on US GAAP Reconciliation

We have audited the Reconciliation of Net Profit of Bharat Heavy Electricals Limited for the year ended 31<sup>st</sup> March, 2012 under Indian GAAP to Net Income in accordance with US GAAP ("The Reconciliation").

The Reconciliation is the responsibility of the Company's management. Our responsibility is to express an opinion based on our audit. In our opinion, such Reconciliation, when considered in relation to the basic financial statements taken as a whole, presents fairly in all material respects, the information set forth therein.

For Gandhi Minocha & Co.

Chartered Accountants

FRN 000458N



(Manoj Bhardwaj)

Partner

M.No. 098606

Date : 27.07.2012

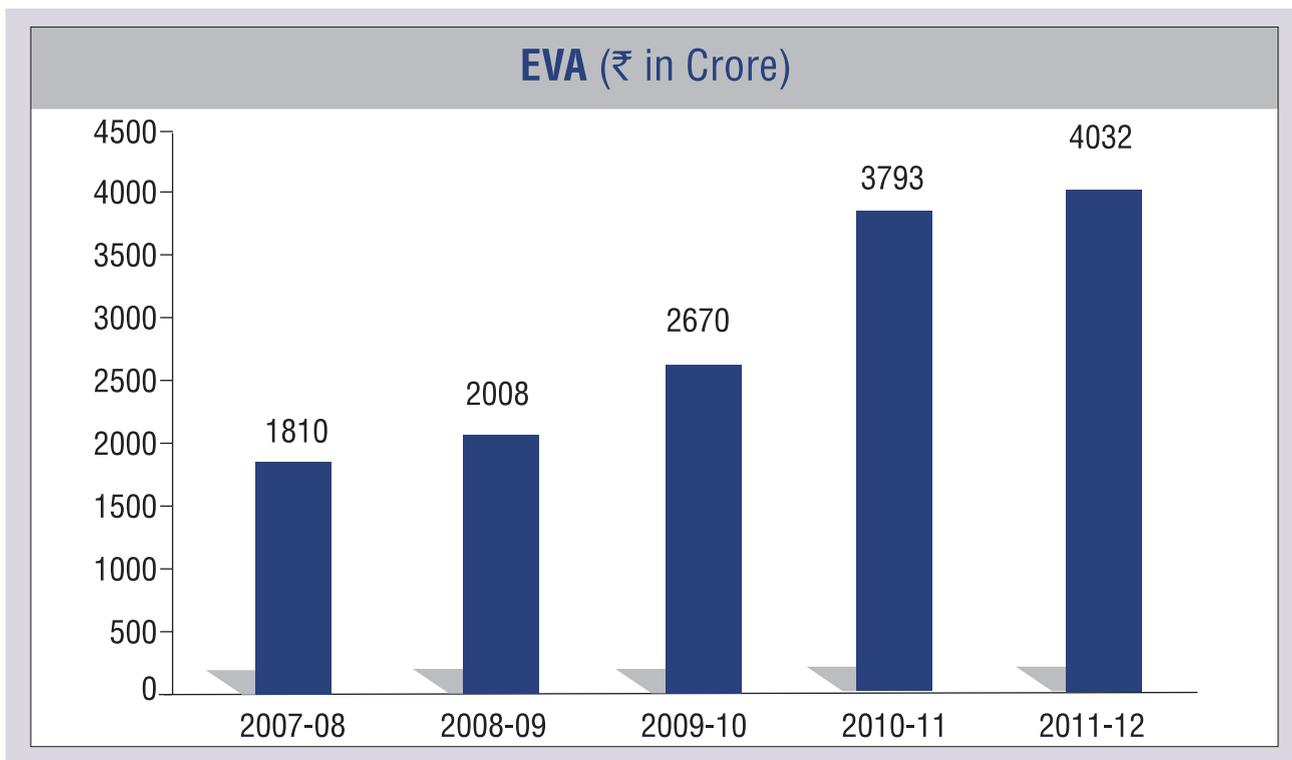
Place: New Delhi

## Economic Value Added (EVA)

EVA is the relevant yardstick for measuring “economic profits”. EVA is the company’s net operating profit after tax, after deducting the cost of capital. Companies, which earn returns higher than the cost of capital, create wealth for the shareholders and on the other hand companies earning returns lower than the cost of capital, destroy shareholders wealth.

₹ Crore except as otherwise stated

		2011-12	2010-11	2009-10	2008-09	2007-08
<b>Cost of capital</b>						
Cost of equity	(%)	14.9	14.0	13.3	13.4	14.4
Weighted average cost of capital (WACC)	(%)	15.0	14.1	13.3	13.4	14.4
Average capital employed		19521	14680	11540	7751	6467
<b>Economic Value added</b>						
NOPAT		6953	5867	4206	3047	2739
Less: Cost of capital		2921	2074	1536	1039	929
Economic value added		4032	3793	2670	2008	1810
<b>Enterprise Value</b>						
Market Value of equity		62940	100971	117027	73944	100907
Add: Debt		193	163	128	149	95
Less: Cash and cash equivalents		6672	9630	9790	10315	8386
Enterprise value		56461	91504	107365	63778	92616



## VALUE ADDITION STATEMENT

(₹ in Crore)

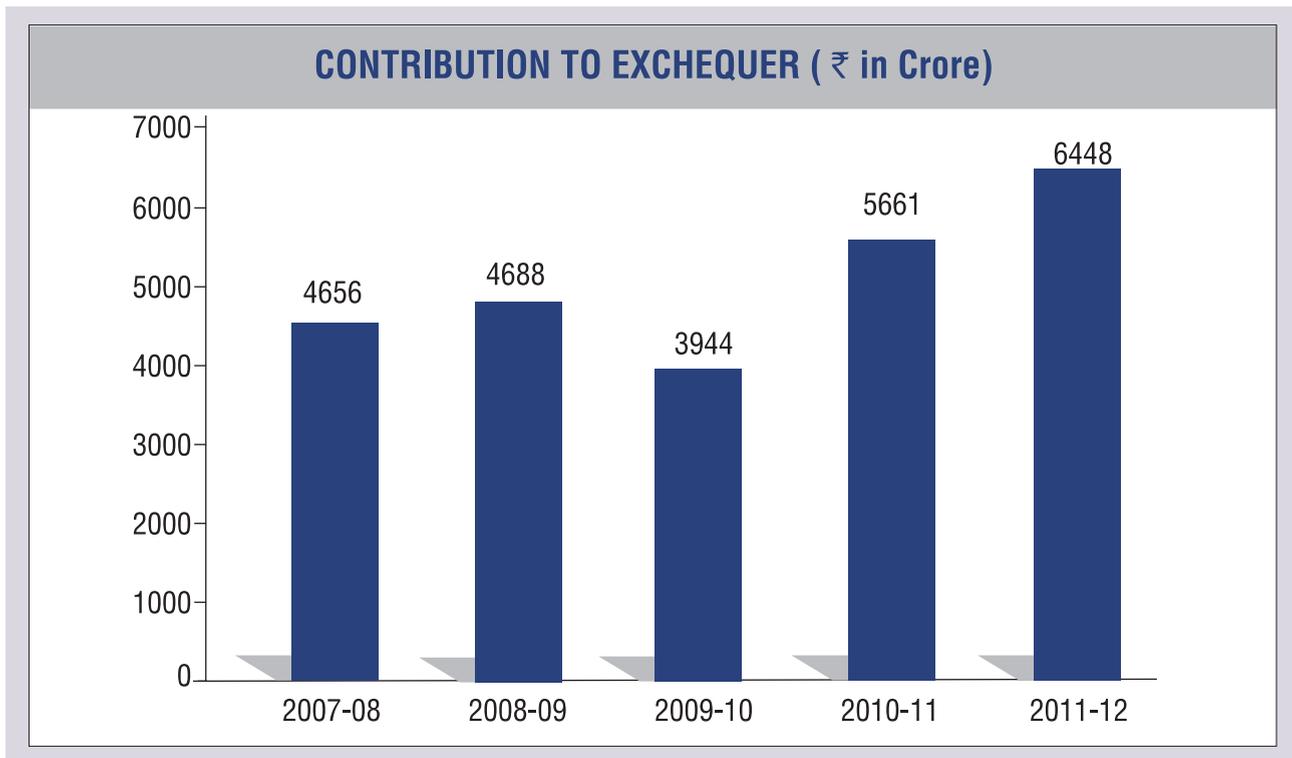
Description	2011-12	2010-11	2009-10	2008-09	2007-08
<b>A. Generation of Value Addition</b>					
Value of Production (less excise duty)	47815	41527	33598	27351	20090
Less- Direct Material, Power & Fuel and Payments to Contractors	28717	23051	20427	17458	11767
Value Added	19098	18476	13171	9894	8323
Less - Other Operating Exp (Net of income)	2479	3461	845	567	415
Net Value Addition	16619	15015	12326	9327	7908
% to value of production	34.76%	36.16%	36.69%	34.10%	39.36%
<b>B. Application of Value Addition</b>					
Employees payments	5466	5410	5243	4113	3146
% to net value addition	32.89%	36.03%	42.54%	44.10%	39.78%
Depreciation	800	544	458	334	297
% to net value addition	4.81%	3.62%	3.72%	3.58%	3.76%
Financing charges :					
- Interest on borrowings	51	55	34	31	35
% to net value addition	0.31%	0.36%	0.27%	0.33%	0.44%
Tax Provision (Income Tax., Def. tax, FBT & Prior Period)	3262	2994	2280	1711	1571
% to net value addition	19.63%	19.94%	18.50%	18.34%	19.87%
Dividend (incl. dividend tax)	1821	1775	1332	974	873
% to net value addition	10.95%	11.82%	10.81%	10.43%	11.04%
Retained Profit	5219	4237	2979	2164	1986
% to net value addition	31.41%	28.22%	24.17%	23.21%	25.11%

## Performance Annual Plan 2011-12

(₹ in Crore)

Category of Investment	2011-12	2010-11
Schemes	805	1204
Modernisation & Rationalization others	69	123
Science and Technology	8	45
Customer Project Related Capital Investment	240	283
<b>TOTAL</b>	<b>1122</b>	<b>1655</b>

## Contribution to Exchequer



## Product Profile

### THERMAL POWER PLANTS

- Steam Generators, Steam Turbines, Turbo Generators along with regenerative feed cycle up to 800 MW capacities for fossil-fuel, and combined-cycle applications, capability to design and manufacture Steam Generators, steam turbines with supercritical steam cycle parameters and matching Turbo Generators of up to 1000 MW unit size.
- Condensers, Condensate Extraction Pumps, Boiler Feed Pumps, Valves and Heat Exchangers meeting above requirement of TG Sets up to 1000 MW.

### NUCLEAR POWER PLANTS

- Steam generator & Turbines and matching Turbo-Generators, Condensers up to 700 MW capacity.
- Heat exchangers
- Pressure vessel
- Reactor vessels

### GAS-BASED POWER PLANTS

- Gas turbines and matching generators ranging from 25 to 292 MW (ISO) rating.
- Gas turbine-based co-generation and combined cycle systems for industry and utility applications.

### HYDRO POWER PLANTS

- Custom-built conventional hydro turbines of Kaplan, Francis and Pelton types with matching generators, pump turbines with matching motor-generators upto 300 MW, Bulb turbine with matching generators up to 10 MW
- High capacity pumps along with matching motors for Lift Irrigation Schemes (up to 150 MW)
- Electro Hydraulic Microprocessor based Digital Governor for conventional turbines
- Microprocessor based Digital Controller for lift irrigation pumps
- Mini / micro hydro sets with PLC based compact Digital Governor up to 15 MW
- Static excitation systems for Hydro generators & motors
- Brushless exciter for Hydro generators & motors
- Special purpose Motor Generator sets
- Spherical (rotary) valves, butterfly valves and auxiliaries for hydro stations

### DG POWER PLANTS

- HSD, LDO, FO, LSHS, natural gas based diesel generator power plants, unit rating of up to 20 MW and voltage up to 11 kV, for emergency, peaking as

well as base load operations on turnkey basis

### INDUSTRIAL SETS

- Industrial turbo-sets of rating from 7 to 150 MW.
- Industrial steam turbines and gas turbines for drive applications and co-generation applications.
- Reheat steam turbines and matching generators ranging from 120 to 150MW.

### CASTINGS AND FORGINGS

- Sophisticated heavy castings and forgings of creep resistant alloy steels, stainless steel and other grades of alloy steels meeting stringent international specifications for components of sub critical, supercritical and ultra super critical technology.

### BOILERS

- Steam generators for utilities, ranging from 30 to 800 MW capacity, using coal, lignite, oil, natural gas or a combination of these fuels; capability to manufacture boilers with supercritical parameters up to 1000 MW unit size
- Steam generators for industrial applications, ranging from 40 to 450 t/hour capacity, using coal, natural gas, industrial gases, biomass, lignite, oil, Bagasse or a combination of these fuels.
  - Pulverized fuel fired boilers.
  - Stoker boilers
  - Bubbling fluidized bed combustion (BFBC)boilers.
  - Circulating fluidized bed combustion (CFBC)boilers.
  - Heat-recovery steam generators (HRSG).
  - Chemical recovery boilers for paper industry, ranging from capacity of 100 to 1000 t/day of dry solids.

### BOILER AUXILIARIES

- Fans
  - Axial reaction fans of single stage and double stage for clean air application and dust laden hot gases applications up to 200°C, with capacity ranging from 40 to 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 18 t/ hour to 110 t/hour catering to 67.5 MW to 800 MW thermal power stations.
- ❑ Tube mills for pulverizing low-grade coal with high ash content from 30 t/hour to 110 t/ hour catering to 110 MW to 500 MW thermal power stations.

- **Electrostatic Precipitators (ESP)**

- ❑ Electrostatic precipitators of any capacity with outlet emission as low as 17 mg/Nm<sup>3</sup> (efficiency up to 99.97%) for utility and industrial applications including Bio mass fired boilers, cement plants, steel plants, soda recovery boilers etc.

- **Guillotine Gates & Dampers**

- ❑ Guillotine gates with electric / pneumatic actuator. Sizes up to 6.5m height & 7m width (with split). 100%leak proof with seal air.
- ❑ Bi-plane dampers with electric actuator. Sizes up to 7m height & 4.5m width. 100% leak proof with seal air.
- ❑ Louver dampers (Open /close) with electric / pneumatic actuator. Sizes up to 7m height & 4.5m width.
- ❑ Control dampers (Regulating) with pneumatic actuator. Sizes up to 7m height & 4.5m width.

- Bag Filters for Utility and Industrial applications.
- Flue gas desulphurization (FGD) systems with sea water/ limestone slurry scrubber.
- Steel Chimneys for Heat Recovery Steam Generators (HRSG), Industrial Boilers ,auxiliary boilers and other flue gas exhaust applications.

### SOOT BLOWERS

- Long retractable soot blowers (LRSB) for travel upto12.2m.
- Furnace temperature probe (FTP) for travel length6.9m 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 turbine 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 900 mm diameter, maximum pressure class 4500 (791 kg/cm<sup>2</sup>) and 650 °C temperature.
- Hot re-heat and cold re-heat isolating devices up to 900 mm maximum class 1500 and 650°C temperature.
- High-capacity Spring Loaded safety valves for set pressure up to 317 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 to421 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 800 mm diameter, 105 kg/cm<sup>2</sup> pressure and 540°C temperature.

### PIPING SYSTEMS

- Power cycle piping, Constant load Hangers, Variable spring Hangers, Hanger components, Low Pressure piping including Circulating Water Piping for power stations up to 1000 MW capacity including Super Critical sets.
- Piping systems for Nuclear Power Stations, Combined Cycle Power Plants & Industrial boilers and for power plants in Process Industries.

## SEAMLESS STEEL TUBES

- Hot-finished and cold-drawn seamless steel tubes with a range varying from outer diameter of 21.3 to 133 mm and wall thickness of 2 to 12.5 mm, in carbon steel and low-alloy steels to suit ASTM/API and other international specifications.
- Rifled tubes
- Spiral finned tubes

## HEAT EXCHANGERS AND PRESSURE VESSELS

- CS/AS/SS/Non-ferrous shell and tube heat exchangers and pressure vessels.
- Air-cooled heat exchangers.
- Steam jet air ejectors.
- Deaerators.
- Gland steam condensers.
- Drain coolers.
- LP & HP feed water heaters.
- Gas coolers, Oil coolers, Air coolers.

## CONDENSER AND HEAT EXCHANGERS

- Surface Condenser:
  - 12.5 MW Marine
  - 20 to 500 MW Thermal
  - 236 MW Nuclear
  - Industrial Condensers
- Feed Water Heaters :
  - 20 to 500 MW Thermal
  - 236 MW, 500 MW and 700 MW Nuclear
- Moisture Separator and Re-Heaters:
  - 236 MW, 500 MW & 700 MW Nuclear
- 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.

## PUMPS

- Pumps for various applications to suit utilities up to a capacity of 1000 MW.
- Boiler feed pumps (motor or steam turbine driven).
- Boiler feed pumps.
- Condensate extraction pumps.
- Cooling water Pumps
- Booster Pumps

## DESALINATION AND WATER TREATMENT PLANTS

- Reverse Osmosis (RO) based Desalination Plants for treating brackish water, high Brackish water and seawater for domestic and industrial applications.
- Reverse Osmosis based Demineralization (RO-DM) Plants (Standard DM plants and Electro De Ionization (EDI) systems) for Power Plants to generate Water for Service / Potable / Boiler Feed Make-up requirements.
- Various types of Pre-Treatment (Membrane based / Conventional) Systems to condition raw-water suitable for RO Application.
- Sewage & effluent treatment plants for water re-use and re-cycling\
- Operation & Maintenance of plants

## AUTOMATION AND CONTROL SYSTEMS

- Steam Generator/ Boiler Controls
- Steam Turbine Controls
- Boiler Feed Pump (BFP) Drive Turbine Control
- Offsite/Off base controls/ Balance of Plant Controls
- Ash handling
- Coal Handling
- Water System
- Mill Reject System
- Condensate on-line tube cleaning system
- Gas Booster Compressor
- Hydro Power Plant Control System
- Gas Turbine Control System
- Nuclear Power Plant Turbine & Secondary Cycle control system
- Power block of solar thermal power plant
- Industrial Automation
- Sub-Station Automation (SAS) and Supervisory Control & data Acquisition System (SCADA)
- Electrical Control System (ECS) for Refineries
- Energy Management System (EMS) for Power Plant

## POWER ELECTRONICS

- Excitation system
- AC Drive System
- Static Staerters
- Induction Heating Equipment

## TRANSMISSION SYSTEM CONTROL

- High Voltage Direct Current (HVDC) system
- Flexible AC Transmission system (FACTS)
  - Fixed series compensation (FCS)/ Thyristor controlled series compensation (TCSC)
  - Static VAR Compensator (SVC) System
  - Controlled Shunt Reactor (CSR)
  - Static Compensator (STATCOM)

## TRACTION DRIVE SYSTEM

Traction Drive system comprising traction converter, auxiliary converter and vehicle control electronics for:

- 6000HP GTO/ IGBT based AC Locomotives
- 1600 HP AC Electrical Multiple Unit (EMUs)
- 1400 HP Diesel Electrical Multiple Units (DEMUs)

## POWER SEMICONDUCTOR DEVICES

- Diodes- Ranging from 1400-4400V/250-2000A
- Thyristors- Ranging from 1400-7000V/150-4950A

## SOLAR PHOTOVOLTAICS

- Mono/ Multi Crystalline Cells (125 and 156 mm)
- Mono/ Multi Crystalline Modules (37 to 270 Wp)
- PV Systems: Grid Interactive, Hybrid and stand alone PV power plants
- Space grade solar panels
- Space Grade Batteries

## DEFENCE ELECTRONICS

- Integrated Platform Management system (IPMS)
- Integrated Bridge System (IBS)
- Machinery Control Room (MCR) Simulator
- Training Simulator for Vehicles, platforms, radars, weapons, missiles and CBT for all defence and Para military forces
- Wepon Fire control system, Avionics, radio communication Products, Electronic warfare system and early warning systems.

## SOFTWARE SYSTEM SOLUTION

- Merit Order rating
- Performance Analysis, Diagnostics & Optimization (PADO)
- Performance Calculation & optimization system
- OPC connectivity from DCS to Third Party systems

- Enterprise Asset Management System (EAMS)
- Enterprise Resource Planning (ERP)
- Operator Training Simulator
- Power House intranet software
- Alarm Analysis system
- Real Time Performance Data Monitoring system
- Historical Replay System

## SWITCHGEAR

Medium Voltage Vacuum Switchgear of various types for indoor and outdoor applications for voltage ratings up to 36 kV and Gas insulated switchgears (36 KV -145 kV)

- Indoor switchgears up to 12 kV, 50 kA, 3500 Amp. for thermal, nuclear, hydro and combined cycle Power Plant Projects
- Indoor switchgears up to 36 kV, 31.5 kA, 2500 Amp. for Industries and refineries
- Indoor Vacuum circuit breakers 12 kV, 25 kA, 1250 Amp. for distribution system
- Outdoor Vacuum circuit breakers 36 kV, 25 kA, 2000 Amp. for transmission and distribution segment
- Outdoor Vacuum circuit breakers 12 kV, 25 kA, 1250 Amp. for distribution segment
- Outdoor pole mounted 1 Ph, Vacuum circuit breaker 25 kV, 25 kA, 1600 Amp. for trackside railway application
- Outdoor pole mounted Autorecloser / sectionaliser / capacitor switch for 12 kV rural segment
- Gas insulated switchgears 36 kV, 25 kA, 1600 Amp. for refineries, urban s/s
- Gas insulated switchgears 145 kV, 40 kA, 2500 Amp. for transmission segment
- SF6 circuit breakers ( 145 kV - 800 kV)

## BUS DUCTS

- Bus-ducts with associated equipment to suit generator power output of utilities of up to 800 MW capacity.

## TRANSFORMERS

- Power transformers for voltage upto 1200 kV
- Generator transformers (up to 500 MVA, 400 kV, 3 Ph / 400 MVA, 400 kV, 1 Ph)
- Auto transformers (up to 1000 MVA, 400 kV, 3 Ph / 600 MVA, 400 kV, 1 Ph / 1000 MVA, 765 kV, 1 Ph / 1000 MVA, 1200 kV, 1 Ph)
- Converter Transformers / Smoothing Reactors (up to 600 MVA,  $\pm 500$  kV/upto 254 MVA,  $\pm 500$  kV)
- Shunt Reactors (up to 150 MVA, 420 kV, 3 Ph / 110 MVA, 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)
- Instrument transformers
  - Current transformers upto 400 kV
  - Electro-magnetic voltage transformers upto 220 kV
  - Capacitor voltage transformers upto 400 kV
- Special Transformers
  - Rectifier transformer upto 132 kV, 66 kA
  - Furnace transformer upto 33 kV, 100 MVA
- Traction Transformer
  - Freight loco transformer upto 25 kV, 7475 kVA for 3 phase drive locomotives
  - ACEMU transformer upto 25 kV, 1550 kVA.
- ESP (HVR) Transformer 100 kV 1400 mA.
- Rectifier Transformers – Upto 120 K Amp, 132 kV Class
- Dry type transformer upto 15000 kVA
  - Smoothing reactors upto 3.3 mH , 2700 Amp.
  - Dry Type reactor upto 300 mH , 120 Amp.
  - DC Choke upto 0.5 mH , 4600 Amp.
- Cast resin dry type transformers up to 15 MVA 33 kV.

Special transformers for: earthing, furnace, rectifier, electrostatic precipitator, freight loco, AC EMU and traction.

#### INSULATORS

- High-tension ceramic insulators.
  - Disc insulators for AC/DC applications, ranging from 45 to 420 kN electro-mechanical strength, for clean and polluted atmospheres. Suitable for 800kV AC & DC application.
  - Pin insulators up to 33 kV including radio free design.
  - Hollow porcelains up to 800 kV for Transformers, SF6 circuit breakers.
  - Solid core insulators up to 400 kV for Bus Post & Isolators for substation applications.
  - Solid core porcelain insulators for 25 kV Railway Traction.
  - Composite Insulators for 25 kV Railway Traction and up to 400 kV transmission lines.
- Wear Resistant Material (Ceralin)
  - Ceramic Liners for Wear Resistant Application in Thermal Power Station and other various applications.

#### 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.

#### CONTROL PANEL

- LT Switchgear, SCAP, Thyristor, RAPCON and STATCON Panels.

#### CAPACITORS

- H.T. Capacitors for Power factor correction (Motor Capacitors) 3.3 to 11 kV delta connected Capacitor banks
- H.T. Capacitors for Shunt, Series & SVC (Static VAR compensation), Harmonic filter & HVDC applications
- Capacitor Divider for CVT
- Coupling Capacitor for PLCC
- Surge Capacitor for protection of Generators & Transformers
- Roof Capacitor for traction locomotive

#### BUSHINGS

- 52 to 400 kV OIP condenser bushings for transformer applications
- 25 kV Locomotive bushings
- Special application bushings like cable box and wall bushing

#### ON LOAD TAP CHANGERS (OLTC)

On Load Tap Changer for various application like Power Transformer, Furnace Transformer, Station Transformer, Rectifier Transformer etc.

- On Load Tap Changer up to 300 kV, 1800 A , 35 position in single phase/ three phase design
- On Load Tap Changer for neutral side of 400 kV Class Transformer
- Off Circuit Tap Switch up to 300 kV

#### 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.

- 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
- Industrial Alternators (Steam turbine, Gas turbine and Diesel engine driven)
  - ❑ 3000 kVA to 25000 kVA
- Induction Generators
  - ❑ 300 kVA to 6000 kVA
- Voltage, Frequency & Enclosure
  - ❑ Voltage - AC - 415 V to 13800 V
  - ❑ Frequency - 50 Hz & 60 Hz
  - ❑ Enclosure - SPDP, TETV, CACW, CACA & Duct Ventilated
- 2 Pole Gas Turbine driven Generators up to 160 MW and matching Exciters.
- 4 Pole Gas Turbine driven Generators up to 33 MW and matching Exciters.
- 2 Pole Steam Turbine driven Generators up to 160 MW and matching Exciters.
- 4 Pole Steam Turbine driven Generators up to 33 MW and matching Exciters
- Gas Turbine generators up to 270MW

## COMPRESSORS

- Centrifugal compressors of varying sizes, driven by steam turbine/gas turbine/motor, for various industrial applications handling almost all types of gases required for fertilizers, petrochemicals, pipeline and steel industry ; range covers up to maximum discharge pressure of 350 bar and capacity upto 900,000 Nm<sup>3</sup>/hour.

## CONTROL GEAR

- **Industrial Control Gear**
  - ❑ Electronic controllers for ESP
  - ❑ Excitation control system for Alternators & Motors
  - ❑ Large current rectifiers with PLC Based digital controls
  - ❑ Digital AVR and governors
  - ❑ Control panels and cubicles for applications in steel, aluminium, cement, paper, rubber, mining, sugar and petrochemical industries
- **Oil Rig Controls**
  - ❑ AC power control room
  - ❑ DC power control room
  - ❑ Power Pack (DG sets)
  - ❑ AC Control Module
  - ❑ DC Control Module
  - ❑ Driller's Console
- **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
- **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
  - ❑ Dynamic braking resistors
  - ❑ Control cubicles
  - ❑ Excitation control & Voltage regulator panels for DE Locos
  - ❑ Rectifiers
  - ❑ Aux converters
- **Control and Relay Panels**
  - ❑ Control & Protection panels for EHV Transmission Projects for voltages upto 400 kV
  - ❑ Synchronizing Trolley / Swing Panels
  - ❑ Protection panels for large Generators up to 600 MW for thermal, nuclear, hydro and combined cycle Power Plant Projects
  - ❑ Remote Control and relay panels for MV Switchgear
  - ❑ Turbine gauge panels for hydro sets

- Outdoor type control panels and marshalling kiosks
- Remote Transformer Tap-Changer Control panels
- LT Switch Gear, SCAP & Thyristor Panel

#### TRANSPORTATION EQUIPMENT

##### ● Traction Machines

- AC traction motors for all ranges of locos & EMUs
- DC traction motors for all ranges of locos & EMUs
- AC traction alternators for all ranges of DE locos & EMUs
- DC traction generators up to 2000 KW
- Motor generator sets for all type of requirements
- Auxiliary generators and exciters for all type of requirements
- Eddy current clutch for radiator fan
- DC blower motors for dynamic braking system
- Traction grade gears and pinions

##### ● Transportation Systems

- Traction systems
- Urban transportation systems
- AC electric locomotives
- AC-DC dual voltage electric locomotives
- Diesel-electric & Diesel hydraulic locomotives
- Battery powered locomotive
- OHE recording-cum-test car
- Bogies
- Dynamic track stabilizers
- Well wagon
- Rail cum Road vehicle
- Utility vehicle
- Ballast cleaning machines

#### 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 m, complete with matching draw-works and hoisting equipment including:
  - Mast and substructure
  - Rotating equipment
  - Mud System including pumps
  - Power packs and rig electrics
  - Rig instrumentation
  - Rig utilities and accessories
  - Refurbishment and up gradation of BHEL and

Non BHEL make Oil Rigs

- DC Oil rig motors of all required ranges
- Oil rig alternators of all required ranges

##### ● Oil Field Equipments

- 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.

#### DISTRIBUTED POWER GENERATION AND SMALL HYDRO PLANTS

- Wind electric generator of up to 600 kW rating.
- Small hydro power plants up to 25 MW station capacity.

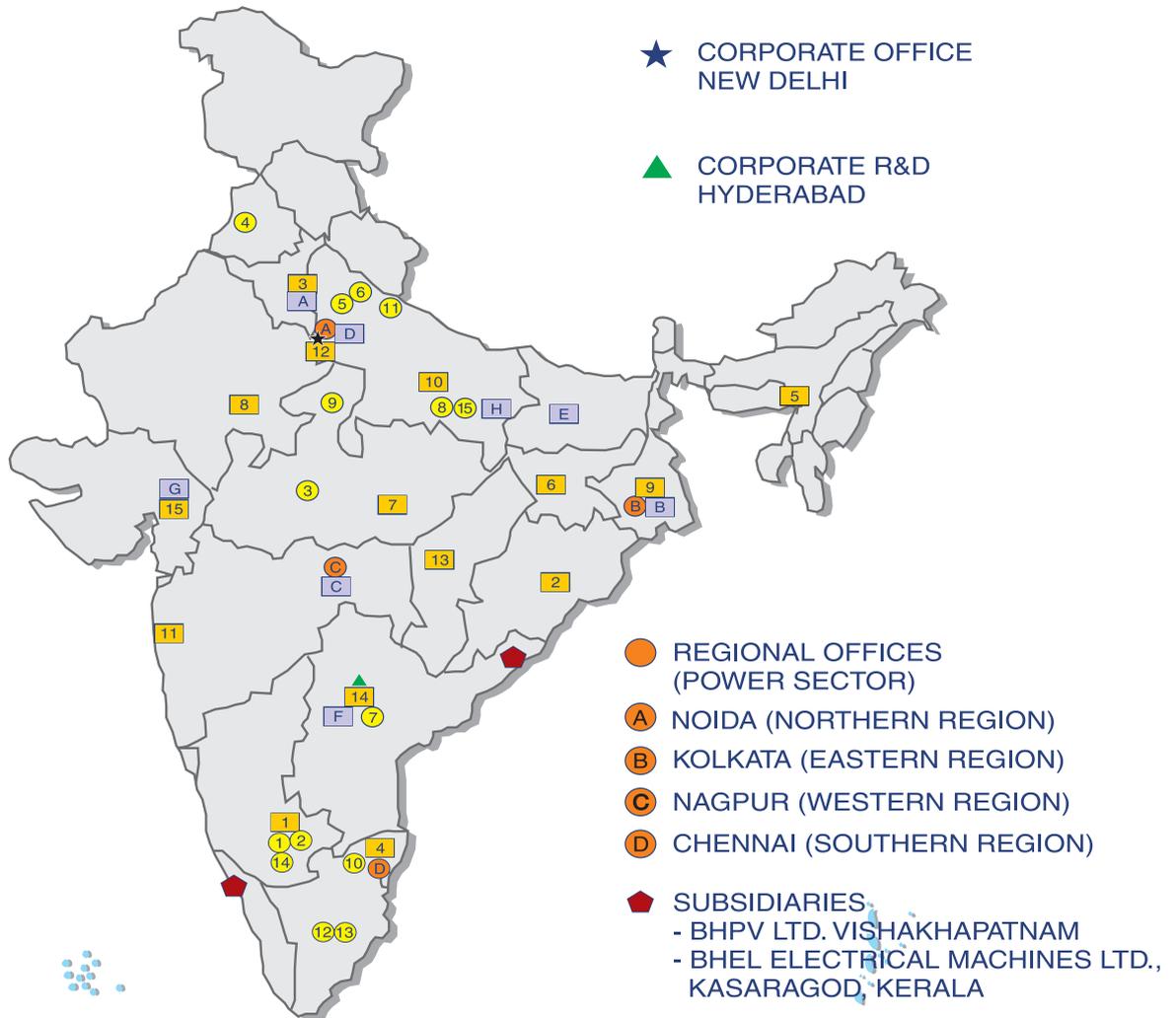
#### SYSTEMS AND SERVICES

- Power Generation Systems
- Turnkey power stations/ EPC contracts.
- Combined-cycle power plants.
- Cogeneration systems.
- Captive power plants.
- Modernization and renovation of power stations and RLA studies.
- Software packages including simulators for utilities.
- Erection, commissioning, support services, spares management and consultancy services for all the above systems.
- Transmission Systems
  - Sub-stations/switchyards.
  - Shunt and Series compensation systems.
  - Power system analysis and controls.
  - HVDC transmission systems.

#### INDUSTRIAL SYSTEMS

- Complete Coal Handling Plant and Ash Handling Plant including Civil & Structural, Mechanical, Electrical works and Automation systems
- Complete Mine Winder Systems\
- Complete Electrics, Drives, Controls & Automation Systems for Processing & Compacting of Raw Materials, Iron Making, Primary & Secondary Steel Making, Casters & steel Finishing like Mills & process Lines for both long products & flat products
- Complete Raw Material Handling System including Civil & Structural, Mechanical, Electrical and Automation systems for Steel and other industries
- Complete Electrics & Automation Systems for High Current Rectifiers for Aluminium Smelters and Processing Mills for Aluminium Plants
- Automated Storage & Retrieval Systems (ASRS)
- Balance of Plant (BOP) for Hydro power plants

# BHEL in India



■ BUSINESS OFFICES	● MANUFACTURING UNITS	■ SERVICE CENTRES
1 BENGALURU	14 1 2 BENGALURU	A CHANDIGARH
2 BHUBANESWAR	3 BHOPAL	B KOLKATA
3 CHANDIGARH	4 GOINDWAL	C NAGPUR
4 CHENNAI	5 6 HARIDWAR	D NOIDA
5 GUWAHATI	7 HYDERABAD	E PATNA
6 RANCHI	15 8 JAGDISHPUR	F SECUNDERABAD
7 JABALPUR	9 JHANSI	G VADODARA
8 JAIPUR	10 RANIPET	H VARANASI
9 KOLKATA	11 RUDRAPUR	
	12 13 TIRUCHIRAPPALLI	

# Global Business







# Bharat Heavy Electricals Limited

Regd. Office : BHEL House, Siri Fort, New Delhi - 110 049

## NOTICE

Notice is hereby given that the 48<sup>th</sup> Annual General Meeting of the Members of BHARAT HEAVY ELECTRICALS LIMITED will be held on Wednesday, the 19<sup>th</sup> September, 2012 at 10 A.M. at FICCI Auditorium, Barakhamba Road (Tansen Marg), New Delhi-110001, to transact the following businesses:-

### ORDINARY BUSINESS

1. To receive, consider and adopt the Audited Balance Sheet of the Company as at 31<sup>st</sup> March, 2012 and the Profit & Loss Account for the financial year ended on that date together with the Directors' Report and Auditors' Report thereon.
2. To declare dividend for the year 2011-12.
3. To appoint a Director in place of Shri V.K. Jairath, who retires by rotation and being eligible, offers himself for re-appointment.
4. To appoint a Director in place of Shri O.P. Bhutani, who retires by rotation and being eligible, offers himself for re-appointment.
5. To appoint a Director in place of Shri S. Ravi, who retires by rotation and being eligible, offers himself for re-appointment.
6. To authorize the board to fix the remuneration of the Auditors for the year 2012-13.

### SPECIAL BUSINESS

7. To consider and, if thought fit, to pass with or without modification, the following resolution as an **Ordinary Resolution:**  
  
"RESOLVED THAT Shri Trimbakdas S. Zanwar, who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of

Association of the Company read with Section 260 of the Companies Act, 1956 w.e.f. 11<sup>th</sup> October, 2011 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing from a Member, pursuant to the provisions of Section 257 of the Companies Act, 1956, be and is hereby appointed as a Director of the Company, liable to retire by rotation."

8. To consider and, if thought fit, to pass with or without modification, the following resolution as an **Ordinary Resolution:**

"RESOLVED THAT Shri R. Krishnan, who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Section 260 of the Companies Act, 1956 w.e.f. 1<sup>st</sup> April, 2012 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing from a Member, pursuant to the provisions of Section 257 of the Companies Act, 1956, be and is hereby appointed as a Director of the Company, liable to retire by rotation."

9. To consider and, if thought fit, to pass with or without modification, the following resolution as an **Ordinary Resolution:**

"RESOLVED THAT Shri Vijay Shankar Madan, who was appointed as an Additional Director pursuant to Article 67(iv) of the Articles of Association of the Company read with Section 260 of the Companies Act, 1956 w.e.f. 19<sup>th</sup> July, 2012 to hold Office upto the date of this Annual General Meeting and in respect of whom, the Company has received a notice in writing from a Member, pursuant to the

provisions of Section 257 of the Companies Act, 1956, be and is hereby appointed as a Director of the Company.”

By order of the Board of Directors



(I.P. Singh)

Company Secretary

Place : New Delhi

Dated: August 13, 2012

## NOTES:-

1. A MEMBER ENTITLED TO ATTEND AND VOTE AT THE MEETING IS ENTITLED TO APPOINT A PROXY TO ATTEND AND VOTE INSTEAD OF HIMSELF AND THE PROXY NEED NOT BE A MEMBER OF THE COMPANY. PROXY FORM DULY COMPLETED SHOULD BE DEPOSITED AT THE REGISTERED OFFICE OF THE COMPANY NOT LESS THAN FORTY-EIGHT HOURS (48 HOURS) BEFORE THE SCHEDULED TIME OF THE ANNUAL GENERAL MEETING. BLANK PROXY FORM IS ENCLOSED.
2. Relevant Explanatory Statement pursuant to Section 173(2) of the Companies Act, 1956, in respect of Special Business, as set out above is annexed hereto.
3. Brief resume of each of the Directors proposed for appointment and re-appointment is given at Annexure-II to the Directors' Report.
4. S/Shri V.K. Jairath, O.P. Bhutani and S. Ravi, Directors, retire by rotation and being eligible, offer themselves for re-appointment. However, as per the terms of their appointment, the tenure of S/Shri V.K. Jairath, O.P. Bhutani and S. Ravi as Directors of the company will expire on 11<sup>th</sup> November, 2012 31<sup>st</sup> May, 2013 and 9<sup>th</sup> March, 2014 respectively.
5. The Register of Members and Share Transfer books of the Company shall remain closed from 10<sup>th</sup> September, 2012 to 19<sup>th</sup> September, 2012 (both days inclusive) for the purpose of payment of final dividend, if any, approved by the Members.
6. Members are advised to submit their National Electronic Clearing Service/Electronic Clearing Service (NECS/ECS) mandate in the form (given elsewhere in the Annual Report) duly filled in and signed, to enable the Company to make remittance by means of NECS/ECS.
7. The Board of Directors has recommended a final dividend of 184% on the Paid-up Equity Share Capital (₹ 3.68 per share) of the Company besides an interim dividend of 136% (₹ 2.72 per Share) already paid during the year 2011-12.
8. The final dividend on the Equity Shares as recommended by the Board of Directors for the year ended 31<sup>st</sup> March, 2012, if approved by the shareholders at the Annual General Meeting, will be payable within 30 days from the date of declaration of dividend i.e. on or before 18<sup>th</sup> October, 2012, to those shareholders whose name appear: -
  - a. As Beneficial Owners of shares as at the closure of business hours on 9<sup>th</sup> September, 2012 as per the list to be furnished by NSDL/ CDSL in respect of the shares held in the Electronic mode; and
  - b. As Members in the Register of Members of the Company after giving effect to all valid share transfer requests in physical form which are lodged with the Company/RTA on or before the close of business hours on 9<sup>th</sup> September, 2012.
9. Pursuant to section 205A(5) read with Section 205C of the Companies Act, 1956, as amended, the dividend amounts which remain unpaid / unclaimed for a period of 7 years, are required to be transferred to the "Investor Education and Protection Fund" constituted by the Central Government. After that, there remains no claim of the members whatsoever on the said amount. Accordingly, the final dividend for the Financial Year 2004-05, interim dividend for Financial Year 2005-06 and special interim dividend for the Financial Year 2005-06, which remains unclaimed are proposed to be transferred to the said account on 28<sup>th</sup> October, 2012, 5<sup>th</sup> January, 2013 and 5<sup>th</sup> April, 2013 respectively.
 

Members who have not claimed / encashed their Dividend so far for the financial year ended 31<sup>st</sup> March, 2005 or any subsequent financial year(s) may approach the Company for obtaining payments thereof before expiry of the stipulated 7 years period.
10. Members may avail facility of nomination in terms of section 109A of the Companies Act, 1956, by nominating in Form-2B (enclosed with the Annual Report) any person to whom their shares in the Company shall vest in the event of their death.
11. Pursuant to Section 619(2) read with Section 224 (8) (aa) of the Companies Act, 1956, the Auditors of a Government Company are appointed or re-appointed by the Comptroller and Auditor General (C&AG) of India and their remuneration is fixed by the Company in the Annual General Meeting. The

General Meeting may, authorize the Board to fix up an appropriate remuneration of Auditors for the year 2012-13 as may be deemed fit by the Board.

12. Corporate Members are requested to send a duly certified copy of the Board Resolution/Power of Attorney authorizing their representative to attend and vote on their behalf at the Annual General Meeting.
13. Members are requested to notify immediately any change of address:-
  - i. to their Depository Participants (DPs) in respect of their electronic share accounts, and
  - ii. to the Company at its Registered office or the Registrar & Share Transfer Agent (M/s. Karvy Computershare Private Ltd.) in respect of their physical shares, if any, quoting their folio number, Banker's name and account number to ensure prompt and safe receipt of dividend warrants.
14. Members who hold shares in dematerialised form are requested to write their Client ID and DP ID Numbers and those who hold shares in physical

form are requested to write their Folio Number in the attendance slip for attending the Meeting. However, entry to the Auditorium will be strictly on the basis of entry slip available at the counters at the venue and to be exchanged with attendance slip.

15. Members are requested :-
  - (i) to bring their Attendance Slip duly completed and signed at the venue of the meeting.
  - (ii) to quote their Folio/DP & Client ID Nos. in all correspondence.
  - (iii) to note that no briefcase or bag will be allowed to be taken inside the auditorium for security reasons.
  - (iv) to note that no gifts will be distributed at the AGM.

By order of the Board of Directors



Place : New Delhi  
Dated: August 13, 2012

(I.P. Singh)  
Company Secretary

## ANNEXURE TO THE NOTICE

### EXPLANATORY STATEMENT PURSUANT TO SECTION 173 (2) OF THE COMPANIES ACT, 1956

The following explanatory statement sets out the material facts relating to the business mentioned in Item Nos. 7,8 and 9 of the accompanying Notice dated August 13, 2012.

#### ITEM NO. 7

**Shri Trimbakdas S. Zanwar**, aged 58 years holds a degree in Law. As per the direction of the Govt. of India, Shri Trimbakdas S. Zanwar was re-appointed as an Additional Director of the Company w.e.f. 11<sup>th</sup> October, 2011 to hold the Office upto 11<sup>th</sup> November, 2013 or until further orders, whichever is earlier. Having being so appointed, Shri Trimbakdas S. Zanwar holds office till the date of ensuing Annual General Meeting by virtue of Section 260 of the Companies Act, 1956 read with Article 67 (iv) of the Articles of Association of the Company and is eligible for appointment.

In terms of Section 257 of the Companies Act, 1956, the Company has received a Notice in writing from a

Member along with a deposit of ₹ 500/-, proposing candidature of Shri Trimbakdas S. Zanwar for the Office of Director of the Company.

None of the Directors of the Company except Shri Trimbakdas S. Zanwar is, in any way, concerned or interested in the resolution.

The Board of Directors commends the resolution for approval of the Shareholders.

#### ITEM NO. 8

**Shri R. Krishnan**, aged 57 years, is an Electrical and Electronics Engineer from REC, Trichy (now NIT) and a Post Graduate in Design & Production of Heavy Electrical Equipment from MACT (now MANIT), Bhopal. As per the direction of the Govt. of India, Shri R. Krishnan was appointed as an Additional Director of the Company w.e.f. 1<sup>st</sup> April, 2012 to hold the Office for a period of five years or till the date of his superannuation or until further orders, whichever is earlier. Having been so appointed, Shri R. Krishnan holds office till the date of ensuing Annual General

Meeting by virtue of Section 260 of the Companies Act, 1956 read with Article 67(iv) of the Articles of Association of the Company and is eligible for appointment.

In terms of Section 257 of the Companies Act, 1956, the Company has received a Notice in writing from a Member along with a deposit of ₹ 500/-, proposing candidature of Shri R. Krishnan for the Office of Director of the Company.

None of the Directors of the Company except Shri R. Krishnan is, in any way, concerned or interested in the resolution.

The Board of Directors commends the resolution for approval of the Shareholders.

#### ITEM NO. 9

**Shri Vijay Shankar Madan**, aged 55 years is Additional Secretary & Financial Advisor (AS&FA) Department of Industrial Policy and Promotion (DIPP), Ministry of Commerce & Industry. As per the direction of the Govt. of India, Shri Vijay Shankar Madan was appointed as an Additional Director of the Company w.e.f. 19<sup>th</sup> July, 2012. Having been so appointed, Shri Vijay Shankar Madan holds office till the date of ensuing Annual General Meeting by virtue of Section 260 of

the Companies Act, 1956 read with Article 67(iv) of the Articles of Association of the Company and is eligible for appointment.

In terms of Section 257 of the Companies Act, 1956, the Company has received a Notice in writing from a Member along with a deposit of ₹ 500/-, proposing candidature of Shri Vijay Shankar Madan for the Office of Director of the Company.

None of the Directors of the Company except Shri Vijay Shankar Madan is, in any way, concerned or interested in the resolution.

The Board of Directors commends the resolution for approval of the Shareholders.

By order of the Board of Directors



(I.P. Singh)

Place : New Delhi

Dated : August 13, 2012

Company Secretary



# Bharat Heavy Electricals Limited

Regd. Office : BHEL House, Siri Fort, New Delhi - 110 049

## FORM OF PROXY

FOLIO/CLIENT ID NO.

NO. OF SHARES

I/We.....  
of.....  
in the District of.....being a member/  
members of the **Bharat Heavy Electricals Ltd.**, hereby appoint ..... of  
.....in the District of ..... or  
failing him/her.....of .....  
in the District of .....as my/our proxy to vote for  
me/us on my/our behalf at the 48<sup>th</sup> Annual General Meeting of the Company to be held on 19<sup>th</sup> September  
2012 and at any adjournment thereof.  
Signed this .....day of.....2012.

Please  
Affix  
revenue  
stamp

- Notes : a) The form should be signed across the stamp as per specimen signature registered with the Company.  
b) The form should be deposited at the Registered Office of the Company forty-eight hours before the time fixed for holding the Meeting.

TEAR HERE



# Bharat Heavy Electricals Limited

Regd. Office : BHEL House, Siri Fort, New Delhi - 110 049

## ATTENDANCE SLIP

### 48<sup>th</sup> ANNUAL GENERAL MEETING

to be held on Wednesday, the 19<sup>th</sup> day of September, 2012  
at 10.00 AM at FICCI Auditorium, Barakhamba Road (Tansen Marg), New Delhi - 110 001.

NAME OF THE ATTENDING MEMBER  
(IN BLOCK LETTERS)

Folio. / ID No.

No. of shares held

NAME OF PROXY

(IN BLOCK LETTERS, TO BE FILLED IN IF THE PROXY ATTENDS INSTEAD OF THE MEMBER)

I hereby record my presence at the 48<sup>th</sup> Annual General Meeting on 19<sup>th</sup> September, 2012.

Signature of Member/Proxy

THIS ATTENDANCE SLIP DULY FILLED TO BE HANDED OVER AT THE ENTRANCE OF THE MEETING HALL





**Bharat Heavy Electricals Limited**  
Regd. Office : BHEL House, Siri Fort, New Delhi - 110 049

Dear Shareholder(s),

**Re: Payment of dividend through National Electronic Clearing Services (NECS)/Electronic Clearing Services (ECS)**

In case you have not already sent the NECS/ECS/Bank Account particulars to our Registrars, viz. M/s Karvy Computershare Pvt. Ltd. or to your Depository Participant (DP) (in case of **demat holding**), we would request you to provide the said particulars in the format given below to facilitate prompt, safe & correct payment of dividend if declared in the 48<sup>th</sup> Annual General Meeting of the company to be held on 19<sup>th</sup> September 2012.

Please ensure that the details submitted by you to the Registrars / Depository Participant are correct as any error therein could result in the dividend amount being credited to wrong account.

Payment of dividend through NECS/ECS will help to prevent fraudulent encashment of dividend warrants.

Kindly help us in this endeavour to serve you better.

Yours faithfully

(I. P. Singh)  
Company Secretary

**P.S. In case you are holding shares in demat form, kindly advise your Depository Participant to take note of your Bank account particulars / NECS/ECS mandate.**

**FORM FOR NECS/ECS MANDATE/BANK ACCOUNT PARTICULARS**

I / We..... do hereby authorise BHEL / my Depository Participant to :

- Print the following details on my / our dividend warrant
- Credit my dividend amount to my Bank account by NECS/ECS

(Strike out whichever is not applicable)

My / our Folio No ..... or DP ID No.....Client A/c No.....

Particulars of Bank Account :

- A. Bank Name : .....
- B. Branch Name : .....  
(Address for Mandate only) .....
- C. 9 digit code number of the bank & branch as : .....  
appearing on the MICR cheque
- D. IFSC Code
- E. Account Type (Saving / Current) : .....
- F. Account No. as appearing on the cheque book : .....
- G. STD code & Telephone No. of Shareholder : .....

**I / we shall not hold the Company responsible if the NECS/ECS could not be implemented or the Bank discontinues the NECS/ECS, for any reason.**



**M/s Karvy Computershare Pvt. Ltd.**  
UNIT: BHEL  
17-24, Vittal Rao Nagar,  
Madhapur, Hyderabad-500 081

.....  
Signature of the Shareholder

TEAR HERE

Please attach (i) photocopy of a cheque or a blank cancelled cheque issued by your bank relating to your above account for verifying the accuracy of the 9 digit code number AND (ii) a copy of your **PAN card** with this form.



TEAR HERE

# Form 2B

[See rules 4CCC and 5D of Companies (Central Govt.'s) General Rules & Forms, 1956]

## NOMINATION FORM

(To be filled in by individual (s) applying singly or jointly)

I/We.....and.....and.....the holders of Shares, DP ID.....Client ID...../ Folio No..... bearing number (s) ..... of **Bharat Heavy Electricals Limited** wish to make a nomination and do hereby nominate the following person (s) in whom all rights of transfer and/or amount payable in respect of shares shall vest in the event of my or our death.

### Name (s) and Address (es) of Nominee (s)

Name: .....

Address:.....

Date of Birth\* : .....

(\*to be furnished in case the nominee is a minor)

\*\* The Nominee is a minor whose guardian is.....

Name and Address.....

(\*\* to be deleted if not applicable)

Signature : .....

Name : .....

Address : .....

Date : .....

Signature : .....

Name : .....

Address : .....

Date : .....

Signature : .....

Name : .....

Address : .....

Date : .....

### Address, Name and Signature of two witnesses:

Name and Address

Signature with date

1.

2.

### Instructions :

- The Nomination can be made by individuals only applying/holding shares on their own behalf singly or jointly, Non-individuals including society, trust, body corporate, partnership firm, Karta of Hindu Undivided Family, holder of power of attorney cannot nominate. If the shares are held jointly, all joint holders will sign the nomination form. Space is provided as a specimen, if there are more joint holders, more sheets can be added for signatures of holders of shares and witness.
- A minor can be nominated by a holder of shares and in that event the name and address of the Guardian shall be given by the holder.
- The nominee shall not be a Trust, Society, Body corporate, Partnership firm, Karta of Hindu Undivided Family or a Power of Attorney holder. A non-resident Indian can be a nominee on repatriable basis.
- Nomination stands rescinded upon transfer of share.
- Transfer of share in favour of a nominee shall be valid discharge by a Company against the legal heir.
- The intimation regarding Nomination/Nomination Form shall be filed in duplicate with Company/Registrar and Share Transfer Agent of the Company who will return one copy thereof to the shareholder.
- In case you are holding shares in demat form, kindly advice your Depository Participant to take note of nomination details.**



## Corporate Social Responsibility



*Cancer check-up camp organised by BHEL at Noida*



*Akshayapatra's mid-day meal van in Assam funded by BHEL as part of CSR initiatives*



*Vocational training workshop organised by BHEL for rural women at Jhansi*



*Hindi Nibandh Pratiyogita conducted by BHEL at Rashtriya Inter College, Aurangabad village, Haridwar*

## Corporate Social Responsibility



Medical camp organised by BHEL at Gujjar Basti, Pathri



RO Systems donated by BHEL to Akshayapatra's mid-day meal scheme at six locations across India



Sewing machines being donated by BHEL, Tiruchirappalli



School building constructed by BHEL at Devarayaneri village, Tiruchirappalli

## 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 Limited  
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

## Share Transfer Agent

M/s. Karvy Computershare Private Ltd.

UNIT : BHEL

**Delhi** : 105-108, Arunachal Building,  
: 19, Barakhamba Road,  
: [New Delhi-110001](#)  
: Tel. : 011-23324401, 43681700/01/02/21  
: Fax : 011-23730743  
: e-mail : [ksbidelhi@karvy.com](mailto:ksbidelhi@karvy.com)

**Hyderabad Address**

UNIT : BHEL

: 17-24, Vittal Rao Nagar,  
Madhapur,  
Hyderabad-500 081  
Tel. : 040-44655000  
Fax : 040-44655024  
Email : [madhusudhan@karvy.com](mailto:madhusudhan@karvy.com)  
[einward.ris@karvy.com](mailto:einward.ris@karvy.com)  
Web : [www.karvycomputershare.com](http://www.karvycomputershare.com)

## Auditors

S.N.Dhawan & Co., New Delhi  
Gandhi Minocha & Co., New Delhi  
Vinay Kumar & Co., Allahabad  
Jawahar & Associates, Hyderabad  
V Narayanan & Co., Trichy  
Patel Mohan Ramesh & Co., Bangalore  
S.L. Chhajed & Co., Bhopal  
P S Moorthy Associates, Arcot

## Cost Auditors

K. L. Jaisingh and Co.  
(for Electric Motors at HEP Bhopal)

Geeyes & Co.  
(for Steel Tubes & Pipes at SSTP Trichy)

Cost Audit Report

Financial Year	Due date of filing Cost Audit Report	Actual date of filing Cost Audit Report
2010-11	27.09.11	18.08.11
2011-12	31.12.12	Will be filed before the due date

## Registered Office

BHEL House, Siri Fort,  
New Delhi-110049 (India)  
Phone : 66337000 (15 Lines)  
Fax : 011-66337533  
<http://www.bhel.com>



**Bharat Heavy Electricals Limited**  
Registered Office : BHEL House Siri Fort, New Delhi-110049, India.  
Website : [www.bhel.com](http://www.bhel.com)

