

# Annual Report 2008-2009





## Vision

A World-Class Engineering Enterprise Committed to Enhancing Stakeholder Value.

## Mission

To be an Indian Multinational Engineering Enterprise providing Total Business Solutions through Quality Products, Systems and Services in the fields of Energy, Industry, Transportation, Infrastructure and other potential areas.

# Values

Zeal to Excel and Zest for Change
Integrity and Fairness in all Matters
Respect for Dignity and Potential of Individuals
Strict Adherence to Commitments
Ensure Speed of Response
Foster Learning, Creativity and Team-work
Loyalty and Pride in the Company



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#### Letter to Shareholders



#### Dear Shareholders,

2008-09 was a challenging year for the globalised world. The Indian economy also experienced a slowdown in comparison with the robust growth performance witnessed in the preceding five years, largely due to the knock-on effect of the global financial crisis. Notwithstanding the global and domestic economic impacts, including the commodity price rises, BHEL has managed yet another stellar performance.

I would like to briefly take you through the results for the FY 2008-09.

Performance during 2008-09

BHEL defied the slowdown and notched up a top line growth of 31% with the turnover reaching Rs 28,033 Crore. Profit Before Tax (PBT) was Rs. 4,849 Crore, an increase of 9.5% over last fiscal and Profit After Tax (PAT) rose to Rs. 3,138 Crore, an increase of 9.8% over last year. There have been several significant achievements and these include:

- The company surpassed its own record set in 2007-08 by booking orders worth Rs 59,678 Crore. Utility orders amounted to 17,020 MW and Industry Sector order inflows crossed Rs.10,000 Crore mark for the first time.
- Maiden orders for 2x800 MW supercritical boilers for Krishnapatnam and 2x660 MW supercritical turbine generator sets for Barh-II, NTPC were received.
- First-ever order for steam generators for new rating 700 MWe Nuclear sets – moving forward to capitalize on emerging business opportunities in the Nuclear sector
- Manufacturing capacity expansion from 10,000 MW to 15,000 MW p.a. proceeding apace and further augmentation to 20,000 MW p.a. planned by 2011-12.
- BHEL's R&D spend increased to Rs.690 Crore amounting to 2.46% of the Turnover, a commendable achievement for a company operating in the Capital Goods segment.
- Economic Value Addition (EVA) reached Rs.2,008 Crore, a 11% increase over that of Rs.1810 Crore in the year before.
- Earnings per Share' on the post–bonus equity capital increased to Rs 64.11 against previous years Rs.58.41.
- A final dividend of 80% has been recommended by Board, in addition to the interim dividend of 90% for the year, making a total of 170% for the year. BHEL is maintaining the track record of paying dividends uninterruptedly since 1976-77.

While the details of performance of the company have been furnished elsewhere, I would like to focus on some important and strategic developments.

#### **Future Ready**

The challenge before the country is to move ahead with rapid expansion of its installed power generating base. Massive capacity additions have been planned for both XI and XII Plan periods. Realizing these would demand up-gradation to higher range equipment, faster capacity augmentation and shorter cycle times with better project execution cycles which is a daunting task. Several positive initiatives have been put in place by the government for creating conditions that would encourage both public and private sectors to invest in this field.

This challenge is an opportunity for your company; to grow business many fold and to serve people of this great country. With the manufacturing capacity of 10,000 MW already in place and implementation well under way for achieving 15,000 MW by December 2009, the company intends to capitalize on the opportunities. At the same time, the emerging competition due to market expansion requires your company to adopt a new paradigm. This new paradigm calls for a strategic shift that will require BHEL to build capabilities to address the stringent demands from its stakeholders.

Our ongoing thrust on capacity and capability building initiatives are intended to make your company Future Ready. BHEL has forayed into new areas like Supercritical thermal sets, 500 MW Nuclear set for Fast Breeder Reactor, Advanced-class gas turbines (Fr.9FA) etc. Company plans to increase R&D spend to at least Rs.1000 crore by 2011-12. To strengthen its human resource assets base, 4717 employees were recruited in 2008-09.

Your company is forging strategic alliances by way of JVs to leverage equipment sales in the Supercritical technology domain, JVs for technology sourcing, JVs for sourcing critical inputs, equipment, etc. Companies like NTPC, NPCIL, TNEB, KPCL, GSECL, KEL, BEL, HEC and PTC have become our esteemed partners in these ventures.

Diversification of the portfolio and geographic spread are important strategies to mitigate risks in future. BHEL is taking necessary steps in this direction. Routes of inorganic growth are being explored in the areas of Transmission, Transportation, Photovoltaics and Nuclear. Bharat Heavy Plate & Vessels (BHPV), which has been acquired as a 100% subsidiary is being revived with adequate managerial & financial support.

International business is being further enhanced by focusing on consolidation in existing international markets as well as entering new markets. A breakthrough was achieved with the Long term business tie-up in the form of a rate contract for 126 MW rated Gas Turbine generating sets with Petroleum Development Oman.

Financial parameters are one of the indicators of performance. Going forward, sustainable progress calls for a heightened level of creation of value in other aspects as well. BHEL has put in place Corporate CSR Policy to further build on its efforts of being a responsible corporate citizen. To cater to the concerns for climate change, BHEL is making all efforts to promote clean coal technology in the country.

#### Conclusion

Our journey to become a world-class engineering enterprise can not be achieved without acknowledging dedicated and committed efforts of each member of BHEL family. I would like to thank my fellow directors for their support and valuable input that they have provided over the past year. I am grateful to all our esteemed shareholders, our stakeholders like customers, business associates, and all others who have reposed their faith in BHEL. Various ministries of the Government of India particularly the Department of Heavy Industry have been providing continuous guidance and support in our efforts. I believe that by maintaining our strength, stability and focus, we will be able to grow our businesses and will become a positive contributor in the Nation building. I look forward to your continued support in this journey.

With best wishes,

New Delhi August 12, 2009 (K. Ravi Kumar) Chairman & Managing Director



# Board of Directors as on 30.07.2009



Shri K Ravi Kumar CMD & Director (Power)



Shri Saurabh Chandra Director



Shri Rajiv Bansal Director



Shri S Ravi Director



Shri Ashok Kumar Basu Director



Shri M A Pathan Director



Smt. Reva Nayyar Director



Shri C S Verma Director (Finance)



Shri Anil Sachdev Director (HR)



Shri B P Rao Director (IS&P)



Shri I P Singh Company Secretary





S/Shri

Standing (Left to Right) : R.K. Srivastava, L. Pundareek, G.S. Bindra, S. Gopalakrishnan, R. Krishnan, A. Chandrababu, V. Pandhi, C.K. Pani, P.R. Shriram,

A.K. Jain, Ranjan Sahi, W.V.K. Krishna Shankar

Sitting R-2 (Left to Right) : S.M. Mahajan, A.V. Krishnan, R.K. Pandey, G. Ganapathiraman, O.P. Bhutani, A.K. Gupta, R.K. Sugandhi, K.L. Vasudeva Rao,

M.K. Dube, A. Aurangabadkar

Sitting R-1 (Left to Right) : Atul Saraya, M.L. Sah, D.K. Mody, B.P. Rao, K. Ravi Kumar, C.S. Verma, Anil Sachdev, S.T.H. Rizvi



K. Ravi Kumar	- Chairman & Managing Director	A.K. Jain -	Corporate Quality
	<ul><li>Power Business</li><li>Power Sector Regions-North,</li></ul>	C.K. Pani -	Corporate Information Technology
	East, South & West - Spares & Services Business - Mergers & Acquisitions	R.K. Sugandhi -	Captive Power Plant Business Industry Sector-Project Management
C.S. Verma	- Corporate Finance	R. K. Pandey -	Transformer Plant
	<ul><li>Taxation</li><li>Financial Services</li></ul>	K.L. Vasudeva Rao -	Heavy Power Equipment Plant
	<ul><li>Internal Audit</li><li>JV-Finance</li></ul>	L. Pundareek -	Transmission Business
	<ul><li>Corporate Monitoring</li><li>Corporate Materials Management</li></ul>	A.K. Gupta -	Power Sector- Project Management
	<ul> <li>Corporate Manufacturing</li> <li>Technology &amp; Investment Planning</li> </ul>	P.R. Shriram -	Power Sector- Southern Region
Anil Sachdev	- Human Resources	A. Aurangabadkar -	Power Sector- Western Region
	<ul> <li>Human Resource Development Institute</li> <li>Corporate Information Technology</li> <li>Corporate Engg. and Product</li> <li>Development</li> </ul>	G. Ganapathiraman - -	Electronics Division Electronics Systems Division Industrial System Group
	- Corporate Communication	V. Pandhi -	Transportation Business
	<ul><li>Corporate Productivity</li><li>Corporate Health, Safety &amp; Environment</li></ul>	nction.	Industrial Products- Mechanical Industrial Products- Electrical
P.D. Doo	Industrial Customs & Dradusts Dusiness	M.K. Dube -	Heavy Electrical plant
B.P. Rao	<ul> <li>Industrial Systems &amp; Products Business including Captive Power Plant Business</li> <li>Transmission Business</li> <li>Transportation Business</li> </ul>	Atul Saraya -	Power Sector Marketing Power Sector- Eastern Region
	<ul> <li>Ceramics Business Unit</li> <li>Component Fabrication Plant</li> <li>Corporate Research &amp; Development</li> <li>Centralised Stamping Unit</li> <li>Fabrication Plant</li> <li>Regional Operations</li> </ul>	A.V. Krishnan	High Pressure Boiler Plant Seamless Steel Tube Plant Industrial Valves Plant Piping Centre Welding Research Institute
M.L. Sah	- Power Sector- Northern Region	Permanent Invitees	
S.M. Mahajan	- Central Foundry Forge Plant	Ranjan Sahi -	Corporate Manufacturing Technology & Investment Planning
S.T.H. Rizvi	<ul><li>Corporate Engg. &amp; Product</li><li>Development</li><li>Advance Research Projects</li></ul>	-	Corporate Monitoring Materials Management
	- Technology Licensing & Joint Ventures	G.S. Bindra -	Project Engineering Management
R.K. Srivastava	<ul><li>Regional Operations</li><li>Component Fabrication Plant</li></ul>	S. Gopalakrishnan -	Power Sector Marketing
	- Central Marketing Group	R. Krishnan -	Corporate Research & Development
O.P. Bhutani	- International Operations	A. Chandrababu -	Boiler Auxiliaries Plant
D.K. Mody	<ul><li>Heavy Electrical Equipment Plant</li><li>Pollution Control Research Institute</li></ul>	W.V.K. Krishna Shanka	r - Secretary, Management Committee

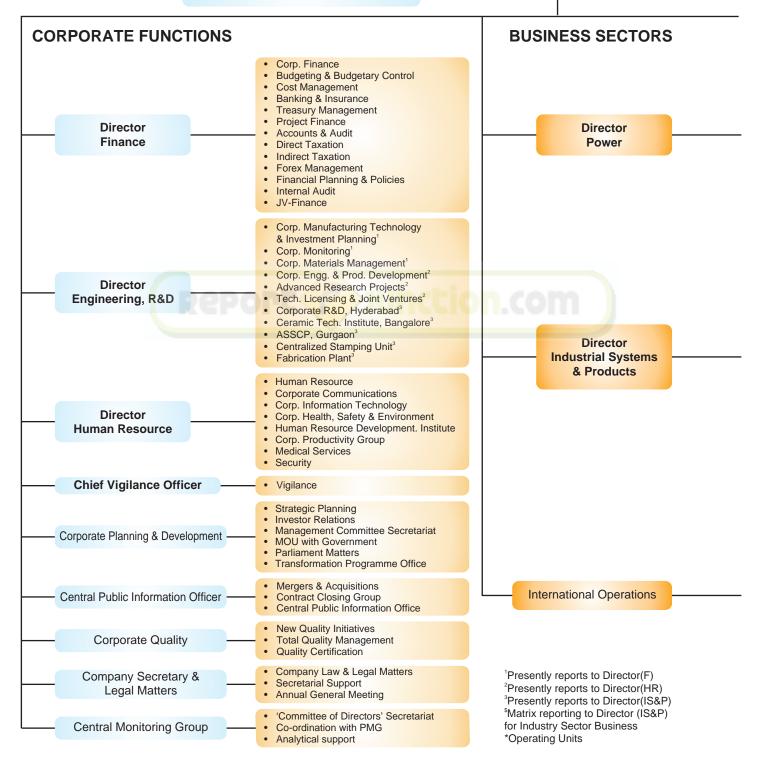


## Corporate Functional Structure (as on 15.06.2009)

BOARD OF DIRECTORS

CHAIRMAN & MANAGING DIRECTOR

#### **COMMITTEE OF DIRECTORS**





#### **MANAGEMENT COMMITTEE**

Power Sector - Marketing Power Sector - Regions (NR,ER,WR,SR) Project / System Engineering Management Project Management Technical Services Spares & Services Business Group\$ Heavy Equipment Repair Plant, Varanasi Human Resources Captive Power Plant Business Industrial Products Business (Elect & Mech.) Transmission & Distribution Business Transportation Business Defense Business Central Marketing Group for NCES Ceramic Business Unit, Bangalore Electro Porcelains Division, Bangalore\* Insulator Plant, Jagdishpur\* Component Fabrication Plant, Rudrapur \* Regional Operations Division Project Management & Customer Response Overseas Business

#### **OPERATIONS**

- Heavy Electrical Plant, Bhopal
- Centre for Electric Transportation, Bhopal
- EMRP, Mumbai
- Transformer Plant, Jhansi
- Heavy Electrical Equipment Plant, Haridwar
- Pollution Control Research Institute, Haridwar
- Central Foundry Forge Plant, Haridwar
- Heavy Power Equipment Plant, Hyderabad
- · Industrial Valves Plant, Goindwal
- High Pressure Boiler Plant, Trichy
- Seamless Steel Tube Plant, Trichy
- Welding Research Institute, Trichy
- Piping Center, Chennai
- Boiler Auxilliary Plant, Ranipet
- Electronics Division, Bangalore
- Electronics Systems Division, Bangalore
- Industrial Systems Group, Bangalore



#### Corporate Profile

BHEL is the largest engineering and manufacturing enterprise in India in the energy related/infrastructure sector. BHEL was established more than four decades ago ushering in the indigenous Heavy Electrical Equipment industry in India. BHEL has built over the years, a robust domestic market position by becoming the largest supplier of power plant equipment in India, and by developing strong market presence in select segments of the Industrial sector and the Railways. Currently, 80% of the Nuclear power generated in the country is through BHEL sets.

BHEL caters to core sectors of the Indian Economy viz., Power Generation and Transmission, Industry, Transportation, Renewable Energy, Defence, etc. The wide network of BHEL's 14 manufacturing divisions, 4 power sector regional centres, 8 service centres, 15 regional offices, one subsidiary co., Joint Ventures and a large number of Project Sites spread all over India and abroad enables the Company to promptly serve its customers and provide them with suitable products, systems and services - efficiently and at competitive prices.

BHEL, where Quality Systems as per ISO-9000 have taken deep roots, has now made significant achievements in Total Quality Management by adopting the CII/EFQM model for Business Excellence, BHEL became the first Public Sector Company in the country to win the coveted 'PRIZE' through its Haridwar unit under the CII Exim Award Scheme. BHEL's Bhopal & Jhansi Units and Power Sector Northern and Eastern Regions have also won the Commendations for Significant achievement/Strong Commitment to TQM during 2008-09. Also BHEL's Insulator plant at Jagdishur won the commendation by R K Bajaj Quality award. BHEL shares the growing global concern on issues related to Environment and Occupational Health and Safety. Major Units of BHEL have been accredited to ISO-14001 Environmental Management Systems and to OHSAS-18001 for Occupational Health and Safety Systems.

For the third consecutive year, BHEL's performance was recognised by the prestigious publication 'Forbes Asia', which featured BHEL in its fourth annual 'Fabulous 50' list of the best of Asia-Pacific's publicly-traded companies with revenues or market capitalisation of at least US\$ 5 billion, having highest long-term profitability and sales & earnings growth. Significantly, BHEL is the only Indian PSU to figure on the elite list, since the list was conceived. BHEL and its 4 units were awarded 'ICWAI Awards for Excellence in Cost Management' for 2008 – the highest among both public and private sector companies. BHEL won EEPC's Top Export Award for the eighteenth year in succession.

#### **POWER GENERATION**

BHEL manufactures a wide range of products and systems for thermal, nuclear, gas and hydro-based utility power plants to meet customer requirements for power generation. BHEL has proven turnkey capabilities for executing power projects from Concept to Commissioning. BHEL-built power generating sets account for nearly twothird of the overall Installed capacity and around threefourth of the power generated in India. BHEL supplies steam turbines, generators, boilers and matching auxiliaries up to 800 MW ratings including supercritical sets of 660/800 MW. BHEL has facilities to go up to 1000 MW unit size. BHEL-make steam turbines are designed to achieve higher efficiencies. 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 manufactures 220/235/500/540 MWe Nuclear turbine-generator sets. BHEL is the only Indian company capable of manufacturing large-size gasbased power plant equipment, comprising advanced-class gas turbines up to 289 MW (ISO) rating for open and combined-cycle operations. BHEL engineers and manufactures custom-built hydro power equipment. Its range covers turbines of Francis, Pelton and Kaplan type, pump turbines, bulb turbines and mini-micro hydro plants. with matching generators, for different head-discharge combinations.

The Company has proven expertise in Plant Performance Improvement through Renovation, Modernization and Uprating of a variety of power plant equipment, besides specialized know-how of residual life assessment, health diagnostics and life extension of plants. It has retained 100% share of R&M market of Thermal sets in the country in 2008-09.



159 MW Gas Turbine on assembly bed