ANNUAL REPORT 2003-2004



Ministry of Heavy Industries and Public Enterprises Government of India

Ministry of Heavy Industries and Public Enterprises

<u>C O N T E N T S</u>

Department of Heavy Industry

Chapter Page 1. The Ministry of Heavy Industries 07 & Public Enterprises – Introduction 2. An Overview of Performance 11 of Industrial Sectors and PSEs under the Department of Heavy Industry 3. Notable Achievements 17 Individual Public Sector 20 4. Enterprises 5. Heavy Electrical Industry & 33 other Industrial Machinery Sectors Automotive Industry 6. 39 7. Technology Upgradation and R&D 44 8. Welfare of Minorities 50 Vigilance 9. 51 10. Progressive Use of Hindi 52 11. Empowerment/Welfare of Women 54 Annexures (I-X) 55 Abbreviations 70

Department of Public Enterprises

Cha	pter	Page
1.	Public Enterprises Survey	75
2.	Autonomy to PSEs and Professionalization of their Boards	77
3.	MoU System in Central Public Sector Enterprises	79
4.	Human Resources Development	83
5.	Support Services to PSEs	87
6.	Wage Policy and Manpower Rationalization	89
7.	Counselling, Retraining and Redeployment (CRR) Scheme	90
8.	Categorisation of PSEs	91
9.	Implementation of Official Language Policy	92
10.	Welfare of Women	93
	Annexures (I-VI)	94



Department of Heavy Industry

The Ministry of Heavy Industries & Public Enterprises – Introduction	07
An Overview of Performance of Industrial Sectors and PSEs under the Department of Heavy Industry	11
Notable Achievements	17
Individual Public Sector Enterprises	20
Heavy Electrical Industry & other Industrial Machinery Sectors	33
Automotive Industry	39
Technology Upgradation and R&D	44
Welfare of Minorities	50
Vigilance	51
Progressive Use of Hindi	52
Empowerment/Welfare of Women	54
Annexures (I-X)	55
Abbreviations	70
	& Public Enterprises – Introduction An Overview of Performance of Industrial Sectors and PSEs under the Department of Heavy Industry Notable Achievements Individual Public Sector Enterprises Heavy Electrical Industry & other Industrial Machinery Sectors Automotive Industry Technology Upgradation and R&D Welfare of Minorities Vigilance Progressive Use of Hindi Empowerment/Welfare of Women Annexures (I-X)

The Ministry of Heavy Industries & Public Enterprises Introduction

THE MINISTRY

1.1 The Ministry of Heavy Industries and Public Enterprises focuses on promoting the development and growth of capital goods and engineering industry in the country besides framing policy guidelines for Central Public Sector Enterprises (PSEs) and administratively dealing with 48 PSEs. The Ministry comprises of the Department of Heavy Industry and the Department of Public Enterprises.

DEPARTMENT OF HEAVY INDUSTRY (DHI)

- 1.2 The Department of Heavy Industry is concerned with the development of the heavy engineering industry, machine tool industry, heavy electrical industry, industrial machinery and auto-industry and administers 48 Central PSEs. The industries covered by this Department meet the requirements of equipment for basic industries such as steel, non-ferrous metals, fertilizers, refineries, petrochemicals, shipping, paper, cement, sugar, etc. The Department is responsible for development of a wide range of intermediate engineering products like castings, forgings, diesel engines, industrial gears and gear boxes. They cater to the need of goods and services for almost all sectors of the economy, including power, rail and road transport etc. The Department also administers a national level Laboratory called Fluid Control Research Institute at Palakkad which caters to the needs of the flow industry for standardization of calibration.
- 1.3 The Department holds regular interaction with various Industry Associations and evolves plans

for the growth of industry. The Department also assists industry through policy initiatives, resolution of problems relating to tariffs and trade, promotion of technological collaboration and up-gradation, and research & development, etc.

- 1.4 The Department of Heavy Industry is headed by a Secretary to the Government of India who is supported by an Economic Adviser and an Integrated Finance Wing. The organizational chart of the Department is given at Annexure – I.
- 1.5 The Department has close interaction with PSEs to monitor their performance. The Department also serves as an interface between these enterprises and other agencies of the Government and helps establish long term linkages to improve order book and ensure timely supplies to core sector customers.

PUBLIC SECTOR ENTERPRISES UNDER THE DEPARTMENT

1.6 The PSEs under the Department are engaged in manufacture of engineering/capital goods, consultancy and contracting activities. The total investment (Gross Block) in 48 Public Sector Enterprises under the Department was about Rs.8599 crore as on 31st March, 2004, (Annexure–II). The computation of investment does not include the nine PSEs which are closed. The enterprises under the Department produce a wide range of products ranging from machine tools, industrial machinery, boilers, gas/steam/hydro turbines, turbo generators, railway traction equipments, pressure vessels, AC locomotives, prime movers, electrical equipment and agricultural tractors, consumer products such as watches, papers, tyres and salt. The Department is also concerned with the affairs of Maruti Udyog Ltd., a joint sector company in the auto sector.

- 1.7 The Department undertakes and encourages restructuring of Public Sector Enterprises under its administrative control in line with the overall Public Sector Policy of the Government at the same time ensuring to protect the interest of the workers. The Department interacts with BIFR and other concerned agencies for formation of revival package in respect of sick PSEs.
- 1.8 The Department arranges financial support to the PSEs in consultation with the Ministry of Finance and Planning Commission for meeting their investment needs and providing funds to the sick/loss making PSEs for implementation of restructuring plans sanctioned by the Government/BIFR. The Department also provides financial support to the PSEs to extend benefits to the employees under the Voluntary Retirement Scheme approved by the Government for undertaking manpower rationalization in the PSEs. The total employee strength as on 31.3.2004 for PSEs under the Department of Heavy Industry was 1,00,628 as per details at Annexure-III.

CITIZENS CHARTER

- 1.9 Public Sector Enteprises function under the Indian Companies Act, 1956 and the guidelines laid down by the Department of Public Enterprises. The Department of Heavy Industry is as such committed to the goal of effective and responsive administration. Following steps have been taken in this direction:
 - (i) In an effort to streamline the system of redressal of public grievances and staff grievances, a Joint Secretary and a Director

8

in this Department are functioning as Joint Secretary (Public Grievances) and Director (Staff Grievances) respectively.

- (ii) In response to the need for professional office management, a Joint Secretary in this Department has been designated as IT manager who is also responsible for introduction of software packages and systems upgradation to improve efficiency and quality of output.
- (iii) A Nodal Officer of the rank of Director has been designated in the Department for the redressal of grievances of Pensioners.
- (iv) For the purpose of settlement of grievances of the staff (disputes in Lok Adalat) a Nodal Officer of the rank of Director has been designated in the Department in respect of officers/staff members working in the Department.
- (v) The Annual Report for 2003-04 both in English and Hindi is available on the website of the Department besides other important information.
- (vi) An officer of the rank of Director in the Department has been nominated as liaison officer for the work relating to redressal of grievances of SCs/STs in the Department and PSEs under its control.
- (vii) For redressal of complaints relating to sexual harassment of women, a committee headed by a woman officer in the rank of Under Secretary has been constituted in the Department.

DEPARTMENT OF PUBLIC ENTERPRISES (DPE)

1.10 In their 52nd Report, the Estimates Committee of 3rd Lok Sabha (1962-67) stressed the need for setting up a centralized coordinating unit, which could also make continuous appraisal of the performance of public enterprises. This led to the setting up of the Bureau of Public Enterprises (BPE) in 1965.As a result of the reorganization of the Ministries/Department of the Union Government in September 1985, BPE was made part of Ministry of Industry. In May 1990, BPE was made a full-fledged Department and is now known as the Department of Public Enterprises (DPE). Presently it is a part of Ministry of Heavy Industries & Public Enterprises.

The Department of Public Enterprises acts as a nodal agency for all central PSEs and assists in policy formulation pertaining to the role of PSEs in the economy as also in laying down policy guidelines on performance improvement and evaluation, financial accounting, personnel management and in related areas. It also collects, evaluates and maintains information on several areas in respect of PSEs. DPE also provides an interface between the administrative Ministries and the PSEs.

MANDATE OF DPE

- 1.11 As per Allocation of Business Rules of the Govt., the following subjects have been allotted to the Department of Public Enterprises:
 - i) Bureau of Public Enterprises including Industrial Management Pool.
 - ii) Coordination of matters of general policy of non-financial nature affecting all public sector industrial and commercial undertakings.
 - iii) Matters relating to Memorandum of Understanding mechanism of improving the performance of public sector undertakings.
 - iv) Matters relating to Permanent Machinery of Arbitration for the Public Sector Undertakings.

 v) Matters relating to Counselling, Retraining and Redeployment of rationalized employees of CPSEs.

ROLE OF DPE

- 1.12 The Department of Public Enterprises acts as the nodal agency for all Central PSEs and assists in the formulation of policy pertaining to performance evaluation, autonomy and financial delegation, personnel management and related areas concerning CPSEs. DPE also collects, evaluates and maintains information on key areas in respect of CPSEs. In fulfilling its role, it coordinates with other Ministries, CPSEs and concerned organizations.
- 1.13 The important tasks of the Department are listed below:
 - The work being done by Bureau of Public Enterprises including matters relating to the officers of industrial management pool transferred to Department of Public Enterprises.
 - To bring out an Annual Public Enterprises
 Survey for submission to Parliament.
 - Wage policy.
 - Board structure, categorization, appointment of non-official Directors and training of executives of CPSEs.
 - Review of Miniratna and Navratna CPSEs
 - Matters relating to reservation of posts in CPSEs.
 - Matters relating to International Centre for Promotion of Enterprises (ICPE), Slovenia.
 - Issuance of Presidential directives and guidelines to CPSEs.
 - Delegation of powers to Board of Directors of CPSEs.
 - Signing of Memorandum of Understanding between the CPSEs and the administrative Ministries/ Departments.

- Matters relating to Purchase Preference Policy.
- Permanent Machinery of Arbitration for resolving commercial disputes (except relating to taxation and railways) between CPSEs inter se as well as between CPSEs and Central Government Ministries/ Departments.
- Matters relating to Voluntary Retirement Scheme (VRS).
- Matters relating to Counselling, Retraining and Redeployment of rationalized employees of CPSEs.

DIVISIONS OF DPE

 (i) The Financial Policy Division comprises the Public Enterprises Survey Unit, the Policy Planning Unit, Wage Cell and Purchase Preference Cell.

- (ii) The Management Policy Division comprises the Personnel Policy Unit, Navratna and Miniratna Unit, Training Unit and SC & ST Cell.
- (iii) The MOU Division comprises MOU Unit, Data Bank & Computer Cell.
- (iv) Administration & Coordination Division comprises the Administration, Library, Parliament, Coordination Wing and Hindi Cell.
- (v) The Permanent Machinery of Arbitration (PMA).
- (vi) Counseling. Retraining & Redeployment (CRR) Division.
- 1.14 The Department is headed by the Secretary and assisted by one Joint Secretary, two Directors and an establishment with an overall sanctioned strength of 121 personnel.

Organogram of DPE is at Annex-I.

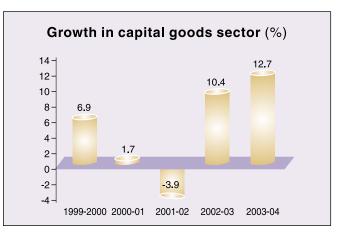
An Overview of Performance of Industrial Sectors and PSEs under the Department of Heavy Industry

2.1 Performance of Industry

- The industrial recovery witnessed during 2002-03 continued during the current year as well with overall industrial growth (measured in terms of the index of Industrial Production) at a rate of 6.9 per cent during the April – March, 2003-04 compared with 5.7 per cent achieved during the same period last year.
- During April March, 2003-04 manufacturing sector has shown even a higher growth rate of 7.2 per cent followed by 5.1 per cent and 5.0 per cent by mining & quarrying and electricity sectors respectively.
- According to the Use-Based Classification, capital goods posted a growth of 12.7 per cent during April – March, 2003-04 on top of 10.5 per cent increase during the same period last year.
- Use-Based Classification also reveals that consumer goods sector maintained the same growth rate (7.1%) as in 2002-03. The consumer durables subsector has shown a turnaround after witnessing negative growth during 2002-03. It has posted a growth of 11.6 per cent during April March of 2003-04 in contrast with a decline of 6.3 per cent during April March 2002-03. The consumer non-durables sub sector has retained its growth momentum. It posted 5.7 per cent growth in 2003-04.

- Basic and intermediate goods industries posted a growth of 5.4 per cent and 6.2 per cent respectively during the April March 2003-04 compared with a growth of 4.9 per cent and 3.9 per cent in the same period of the previous year.
- During the current year auto sector has done exceptionally well. Commercial vehicles and passenger cars have recorded sterling performance with volume growth of 38.4 per cent and 39.2 per cent respectively in April – March, 2003-04.





2.2 The Department of Heavy Industry deals with the following 19 industrial sub-sectors:

- (i) Boilers
- (ii) Cement Machinery Industry
- (iii) Dairy Machinery Industry
- (iv) Electrical Furnace
- (v) Freight Containers
- (vi) Material Handling Equipment Industry
- (vii) Metallurgical Machinery
- (viii) Mining Machinery
- (ix) Machine Tool Industry
- (x) Oil Field Equipment
- (xi) Printing Machinery
- (xii) Pulp and Paper Machinery
- (xiii) Rubber Machinery Industry
- (xiv) Switchgear and Control Gear
- (xv) Shunting Locomotives
- (xvi) Sugar Machinery Industry
- (xvii) Turbines & Generator sets
- (xviii) Transformers
- (xix) Textile Machinery Industry
- 2.3 The growth trends during April March2003-04 are given in the table below:

Sector-wise					
	Weight	2002-03	2003-04		
		(April – March)	(April – March)		
Overall	1000.0	5.7	6.9		
Mining & Quarrying	104.7	5.8	5.1		
Manufacturing	793.6	6.0	7.2		
Electricity	101.7	3.2	5.0		
	Use-Based Classification				
Overall	1000.0	5.7	6.9		
Basic Goods	355.6	4.9	5.4		
Capital Goods	92.5	10.5	12.7		
Intermediate Goods	265.1	3.9	6.2		
Consumer Goods	286.6	7.1	7.1		
(i) Durables	53.6	-6.3	11.6		
(ii) Non-durables	232.9	12.0	5.7		

2.4 Production and growth rates of some of the industries being dealt by the Department of Heavy Industry for the period April – March 2003-04 as compared to the April – March 2002-03 are given below:

	Unit	Production April – March 2002-03	Production April – March 2003-04	Growth Rate (%)
Industrial				
Machinery	Rs.Lakhs	178715.58	208008.25	16.4
Machine tools	Rs.Lakhs	271939.82	221740.58	1.7
Boilers	Rs.Lakhs	218747.16	215791.80	-1.4
Turbines(Steam/Hydro)	Rs.Lakhs	65721.50	79322.21	20.7
Electrical Generators	Rs. Lakhs	80790.17	114910.36	42.2
Power & Distribution	Million	74.45	60.94	-18.2
Transformers	KVA			
Telecommunication Cables	Million Mtr.	20803.31	20373.71	-2.1
Commercial Vehicles	Nos.	198827	275098	38.4
Passenger Cars	Nos.	575426	801169	39.2

2.5 PSEs under the Department of Heavy Industry

2.5.1 The PSEs under the Department are engaged in manufacturing, consultancy and contracting activities. Out of 48 PSEs, 9 PSEs have been closed/wound up. As per provisional results (2003-04), 9 PSEs have made profits and remaining 30 have made losses. 3 PSEs are non-operational. The aggregate performance of remaining 36 PSEs has been as under :

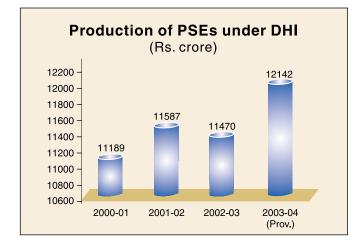
(Rs. crore)

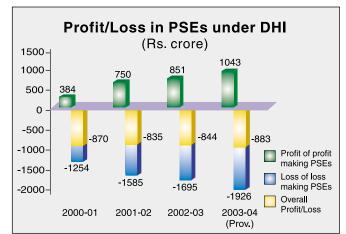
		(
	2002-03	2003-04
	(Actual)	(Prov.)
Production	11470	12142
Profit(+)/Loss(-)	(-)844	(-)883

 $\mathsf{PSE}\text{-wise}$ details are available at Annexure. IV & V respectively.

- 2.5.2 The loss is attributed to the shortfall in production in some major enterprises owing to decline in demand, shortage of working capital, surplus manpower, obsolete plant and machinery, besides increase in the cost of inputs etc.
- 2.5.3 PSEs have characteristics of large work force and huge overheads far above the industry norms. In this context salary/wage bill and social overheads as percentage of turnover is given at Annexure – VI.
- 2.5.4 The order book in majority of the PSEs has been gradually reducing except in case of BHEL where order book has substantially improved from a level of Rs.10,000 -Rs.12,000 crore to Rs.23,000 crore. Details of order book in individual PSEs is given at Annexure-VII.
- 2.5.5 There are only a few companies which have been able to export their products.Major exporting PSEs are BHEL and HMT.Details of export performance of PSEs under DHI are given at Annexure-VIII.

2.5.6. Government's investment in terms of equity in these PSEs is Rs 3850 crore. Many of the PSEs, have been making losses for last few years eroding their net worth substantially. Details of Government equity, net worth and accumulated loss/profit of PSEs are given at Annexure-IX.





2.6 Strategies for Restructuring of PSEs under DHI

- 2.6.1 As per the earlier policy the Department has been pursuing revival of potentially viable PSEs, closing down PSEs which cannot be revived, bring down Government equity in all non-strategic PSEs to 26% or lower, if necessary, and fully protect the interests of the workers. In this process, following actions for restructuring of PSEs are listed;
 - Revival of PSEs through the BIFR;
 - Financial restructuring wherever appropriate;

- Joint Venture formation to have continuous access to technology, finance, marketing, management etc.
- Manpower rationalisation

2.7 PSEs referred to BIFR

2.7.1 19 out of 48 PSEs, stand referred to BIFR. Present status of these PSEs before BIFR is as under -

(i)	Cases where BIFR had sanctioned scheme for revival.	8 i) iii) iv) v) vi) vii) viii)	Bharat Pumps & Compressors Ltd. Burn Standard Co.Ltd. Braithwaite & Co.Ltd. Heavy Engineering Corpn., Ltd. Instrumentation Ltd., National Instruments Ltd. Richardson & Cruddas Ltd. Triveni Structurals Ltd.,
(ii)	Cases where BIFR has recommended winding up.	3 i) ii) iii)	Bharat Ophthalmic Glass Ltd. Hindustan Photo Films Ltd. Nagaland Pulp & Paper Mills Ltd.
(iii)	Final recommendations of BIFR awaited.	8 i) ii) iv) v) vi) vii) viii)	0

2.8 Restructuring of other PSEs

- 2.8.1 Apart from revival plans sanctioned by BIFR, Govt. on its own have approved restructuring plans in case of following 7 PSEs. The restructuring plans include financial, business and organisational restructuring involving fresh infusion of Rs. 531 crore and financial restructuring of Rs. 1443 crore.
 - (i) Andrew Yule & Co.Ltd. (AY & Co.)
 - (ii) Engineering Projects (India) Ltd. (EPI)
 - (iii) Hindustan Cables Ltd. (HCL)
 - (iv) HMT Ltd. (HMT)
 - (v) Hindustan Paper Corporation Ltd. (HPC)

- (vi) Nepa Ltd. (Nepa)
- (vii) Praga Tools Ltd. (PTL)

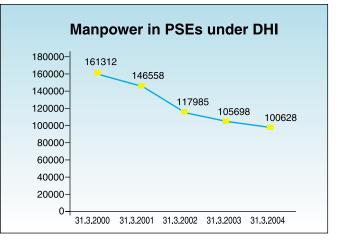
2.9 Joint Venture formation / Disinvestment

- 2.9.1 Some of the restructuring initiatives already taken include;
 - Conversion of Belting Division of Andrew Yule & Co. in the year 1999 into a Joint Venture company (Phoenix Yule & Co.) with M/s Phoenix of Germany as the partner holding 74% of the equity with balance of 26% with AY & Co.
 - Conversion of Lagan Jute Machinery Co. Ltd. (LJMC), a subsidiary of BBUNL into a JV and transfer of management of the company to JV partner in July, 2000.
 - Conversion of Jessop & Co. Ltd. (Jessop), a subsidiary of BBUNL into a JV and transfer of management of the company to JV partner in August, 2003.
- 2.9.2 26 PSEs have been taken up for disinvestment/JV formation out of which 14 cases are being dealt in the Ministry of Disinvestment and remaining 12 subsidiary PSEs are being dealt in the Department of Heavy Industry.

2.10 Manpower Rationalisation

- 2.10.1 Voluntary Retirement Scheme (VRS) has been introduced in a number of PSEs of this Department to shed surplus manpower without causing undue hardship to the workers. About 81,000 employees have opted for VRS during the last twelve years period 1992-93 to 2003-04 involving an expenditure of about Rs.2400 crore.
- 2.10.2 The Department has also been encouraging issue of bonds by PSEs to the FIs/Banks/ Institutions/Public against Govt. guarantee

for meeting the expenditure on VRS for which interest subsidy is also being provided by Government.



- 2.11 Introduction of Voluntary Separation Scheme (VSS) for employees of sick/ unviable PSEs:
- 2.11.1 While the Government have been supporting viable and credible revival plans, some PSEs were considered unviable by BIFR/Expert Agency and following PSEs have been closed :
 - (i) Bharat Process Mechanical Engineers Ltd. (BPME)
 - (ii) Bharat Brakes & Valves Limited (BBVL)
 - (iii) Cycle Corporation of India Ltd. (CCIL)
 - (iv) National Bicycle Corpn. of India Ltd. (NBCIL)
 - (v) Mining and Allied Machinery Corpn.Ltd. (MAMC)
 - (vi) Rehabilitation Industries Corp. Ltd.(RIC)
 - (vii) RBL Limited (RBL)
 - (viii) Tannery & Footwear Corpn. Ltd. (TAFCO)
 - (ix) Weighbird India Ltd. (WIL)
- 2.11.2 Besides the nine PSEs mentioned above, four unviable units of HMT Ltd. (Watch Case Division, Lamp Division, Central

Metal Forming Institute all at Hyderabad and Miniature Battery Unit in Guwahati), loss making refractory units and Jellingham Yard of Burn Standard Co.Ltd. (BSCL), Tangra Unit of Tyre Corporation of India Ltd.(TCIL) have been closed consequent upon the permission granted by the Appropriate Authority.

2.12 New policy of the Government on Public Sector

As per the policy enunciated under the National Common Minimum Programme:

- successful profit making PSEs operating in competitive environment would be given full managerial and commercial autonomy.
- generally profit making companies will not be privatized.
- all privatization will be considered on a transparent and consultative manner on a case to case basis.
- while every effort will be made to modernize and restructure sick PSEs and revive sick industry, chronically loss making PSEs will either be sold off or closed after all workers have got their legitimate dues and compensation.
- Care will be taken to ensure that the process of privatization helps increase competition.
- 2.12.1 In view of this policy it may be necessary to examine each case thoroughly while taking a final view on the future of the PSE. This exercise has been initiated and estimate of support required from the Government is being examined.

2.13 Autonomy to PSEs/Navratnas and Miniratnas

2.13.1 BHEL is one of the Navratnas. The Board

of the Company has been strengthened by induction of qualified professionals. Greater freedom has been given in respect of capital expenditure, formation of strategic alliances and formulation of HRD policies.

2.13.2 Besides, BHEL, three PSEs namely REIL, HNL and HMT(I) have been declared as Miniratanas.

2.14 Memorandum of Understanding (MOU)

- 2.14.1 With a view to giving greater autonomy to the public sector enterprises, at the same time making them accountable for achievement of their objectives, for the year 2004-05, MOU has been signed by following 5 PSEs, with Government of India.
 - (i) Bharat Heavy Electricals Limited.(BHEL)
 - (ii) Engineering Projects (India) Limited. (EPI)
 - (iii) Hindustan Paper Corporation Limited. (HPC)
 - (iv) Hindustan News Print Limited (Subs. of HPC)
 - (v) Rajasthan Electronics & Instruments Ltd., Jaipur.(Subs. of ILK)

2.15 North Eastern Region

- 2.15.1 Out of the 48 Public Sector Enterprises under the administrative control of the Department of Heavy Industry, the following PSEs/Units are situated in the North Eastern Region :-
 - (i) Hindustan Paper Corporation Ltd.(HPC) (Nagaon & Cachar Paper Mills), Assam.
 - (ii) Nagaland Pulp & Paper Company Ltd. (NPPC) Nagaland.

- (iii)Cement Corporation of India Ltd. (CCI) (Bokajan Unit), Assam.
- (iv) Andrew Yule & Company Ltd. (AYCL) (Tea Gardens), Assam.
- 2.15.2 These PSEs/Units are engaged in the manufacture of paper, cement and tea. As per the policy of the Government, 10% of the budget of this Department is being allocated for the development of North Eastern Region. Some of the major schemes undertaken during the last three years include modernization of paper units of Hindustan Paper Corporation Ltd. (HPC), D.G.Set for power generation and installation of overhead crane at Bokajan

Unit of Cement Corporation of India Ltd. (CCI) and rejuvenation of tea plantation of Andrew Yule & Company Ltd. (AYCL) in Assam. The Government budgetary support provided for capital investments made in the North East Region during the last three years i.e. 2001-02, 2002-03 and 2003-04 have been Rs.7.12 crore, Rs.4.34 crore and Rs.5.84 crore respectively.

2.16 Audit observations of Comptroller & Auditor General of India (CAG)

As per the requirement stipulated by the CAG, summary of audit observations of CAG of India are given in Annexure – X on the working of the Department of Heavy Industry.

Notable Achievements

- 3.1 A Conference of Chief Executives of Central Public Sector Enterprises (CPSEs) was inaugurated by the President of India on 5.4.2003. MOU and SCOPE awards were distributed in the conference.
- 3.2 Jessop & Co.Ltd. was converted into a Joint Venture company by disinvestment. Transaction documents were signed on 29th August, 2003 for transferring 72% of its equity held by Bharat Bhari Udyog Nigam Ltd. – the holding company to the strategic partner.
- 3.3 Fluid Control Research Institute (FCRI) an autonomous institution under this Department was granted accreditation for the "Closed Loop Air Test Facility (CLATF)" as per ISO/IES 17025: 1999 norms by the Group of leading flow experts from the Netherlands Measurement Institute (NMI), Dordrecht, Netherlands.
- 3.4 An International Conference was held on "Hydro-Carbon Flow Measurement" between 22-24 September, 2003 at Fluid Control Research Institute (FCRI) Palakkad. Flow experts from hydrocarbon sector, from India and abroad participated in the technical sessions. An exhibition was also held simultaneously on flow products.
- 3.5 FCRI signed an MOU with BARC and Board of Research in Nuclear Science (BRNS)for sponsorship of a project proposal amounting to Rs.74.30 lakh for design and development of High Pressure, High Temperature Multiphase flow meter for transient measurement.
- 3.6 Major highlights relating to Bharat Heavy Electricals Ltd. (BHEL) are as under :

- (i) won 4 PM's Shram Awards out of 17 PM's Shram Awards announced on the eve of Republic Day.
- signed MOU with a leading International EPC contractor SKODAEXPORT for setting up Power Generation, Power Transmission and Transportation Projects outside India.
- (iii) bagged an order valued at Rs.100 crore from Indian Oil Corporation (IOC) for setting up an energy efficient and environment friendly co-generation power plant at Mathura Refinery Complex.
- (iv) secured a contract valued at Rs.1700 crore against stiff competition from Chinese companies for setting up the 500 MW Korba (East) Thermal Power Project (TPP) in Chhatisgarh, comprising two units of 250 MW each.
- (v) exhibited its capabilities in providing "Total Solutions from a Single Source" in its various business areas viz. Power, Industry, Transmission, Transportation, Telecom, Oil & Gas and Renewable Energy Sources, in India Infrastructure Show – IITF 2003 held in New Delhi from 5th to 8th February, 2003.
- (vi) bagged a Mega contract for 2 x 500 MWNTPC Vindhyachal STPS valued at Rs.2125 crore.
- (vii) received an order valued at Rs.1589 crore for setting up 500 MW unit at Birsinghpur Thermal Power Station of Madhya Pradesh State Electricity Board.

- (viii) signed a Memorandum of Understanding with Tata Consultancy Service for providing comprehensive solutions and develop innovative cutting edge technology and futuristic IT-based solution for power sector.
- (ix) won the CII-Exim 'Significant Achievement Commendation Certificate' instituted by CII and Exim Bank for business excellence conforming to global standards.
- (x) received prestigious ISO-14001 &
 OHSAS-18001 Certificates instituted by
 Det. Norske Veritas (DNV), Netherlands
 for its Industrial Systems Group (ISG).
- (xi) signed a Memorandum of Understanding
 (MOU) with the National Thermal
 Power Corporation (NTPC) for promoting
 a Joint Venture Private Ltd. company
 with 50:50 stake for running and
 maintenance of power plants besides
 taking up other jobs in upcoming power
 projects.
- (xii) achieved a major milestone with successful deployment of Space Grade
 Solar Panels on INSAT 3A and GSAT2
 launched by Indian Space Research
 Organization (ISRO).
- (xiii) secured a major export order for hydro power equipment from Taiwan, valued at Rs.40 crore for 62.5 MW Hydro Turbine Generator to be set up at Bihai Hydro Electric Plant of Taiwan Power Co. (TPC)
- (xiv) received the prestigious Occupational Health & Safety Certification (OHSAS-18001) award and prestigious ISO-14001 – Environmental Management System Certification for its Southern Power Sector Division.

- (xv) bagged a contract valued at Rs.1412 crore, through global tender, for setting up the 1000 MW of National Thermal Power Corporation (NTPC)'s Kahalgaon Super Thermal Power Project (STPP) in Bihar comprising 2 units of 500 MW each.
- (xvi) won the top exporters award, amongst public and private sector companies in India for the thirteenth year in succession.
- (xvii) secured order valued at Rs.243 crore for setting up lignite-based power project in Rajasthan.
- (xviii) secured a contract valued at Rs.1619 crore for setting up 500 MW Bellary Thermal Power Project in Karnataka.
- (xix) achieved a new milestone in overseas markets with the exports of 150 MW gas turbine generator for the upcoming 600 MW Gas Turbine based power plant in Libya.
- (xx) secured highest ever order inflow of Rs.16,469 crore in 2003-04 which is about two years turnover for the Company.
- 3.7 Engineering Projects (India) Ltd. (EPI) received Project Commissioning Award and Certificate from Chief Minister of Gujarat for excellent performance for successful completion of Bachau Anjar Water Pipe Line ahead of schedule. EPI also secured the following major orders:
 - (i) secured a project worth Rs.41 crore from Hindustan Aeronautics Ltd. (HAL) for construction of a new Assembly Complex and a Hangar Complex at their Nasik plant.
 - (ii) bagged a turnkey contract for Design, Construction, Commissioning of Varia

Regional Water Supply Scheme, Surat, Gujarat valuing Rs.55.30 crore.

- (iii) secured a project valued at Rs.96 crore from Uranium Corporation of India for filtration, precipitation, and drawing system for Uranium Processing Plant.
- 3.8 Major highlights in respect of HMT Ltd. are as follows:
 - launched 65 HP category tractor during "Agrovision 2003" held at Rajkot from May 29 to June 2, 2003,. The unique feature of this model is that the driver cabin has been provided with Air Conditioner.
 - (ii) Shri Wali Mohammad Bhat, visually impaired employee of HMT Chinar Watches received Shramshri award in recognition of his distinguished performance, innovative ability and outstanding contribution in the field of productivity and exhibition of exceptional courage and presence of mind.
 - (iii) HMT Machine Tools Ltd. entered into an MOU with BARC, Mumbai for supply of high tech Special Purpose Machines (SPMs).
 - (iv) the company entered into MOU with Indira Gandhi Centre for Atomic Research (IGCAR), Kalpakkam, Tamil Nadu for manufacture and supply of 34 No. Radiation Shieding Windows (RSW).
 - (v) the Company signed an MOU with M/s Tranctor of UK for manufacture and introduction of high speed tractor in the Indian market.

- (vi) the company launched 'Corp Kisan Farm Mechanisation Scheme' for which HMT signed an MOU with the Corporation Bank to provide easy loan at low interest rate to farmers to buy HMT tractors.
- (vii) HMT Ltd. launched most efficient, flexible and cost effective Earth Moving Machinery names "HMT Vajra" built on 65 HP Tractor Model 6522 for use in construction of roads, dams and mining operations etc.
- (viii) Smt DY Girijamma, Senior Operator, HMT (Watch) Factory was selected for the Prime Minister's Shram Devi Award 2003.
- 3.9 Major achievements of Instrumentation Ltd. (ILK) are as under:
 - (i) secured an order worth Rs.22.86 crore from BSNL for CM-XL & MAX-XL.
 - (ii) secured orders worth Rs.17.75 crore for Identity cards from Chhatisgarh, Jharkhand, MP and Gujarat States.
 - (iii) secured an order of Rs.3.25 crore from CMC Bangalore for water management system.
 - (iv) secured orders of value of Rs.7.42 crore from ONGC for Offshore Instrumentation.
- 3.10 Scooters India Ltd. (SIL) was conferred "Greentech Environment Excellence Silver Award 2001-02".
- 3.11 Rajasthan Electronics & Instrumentation Ltd. (REIL), completed deployment of 1000 PCbased milk collection station in the Punjab in a record period of 3 months at a cost of Rs.12 crore.

Chapter - 4

Individual Public Sector Enterprises

4.1 ANDREW YULE & CO. LTD. (AYCL)

The company is engaged in manufacture, sales and servicing of various industrial products like industrial fans, tea machinery, air pollution control equipment, electrical equipments including switchgears, circuit breakers, etc. Six tea companies consisting of 12 tea gardens in West Bengal and Assam, engaged in cultivation, manufacture and processing of tea, became a part of the company in 1986. Transformers and Switchgears Ltd., Madras and Brentford Electric (India) Ltd., Calcutta were also nationalized and vested in Andrew Yule & Company Ltd. The company is sick and has been referred to BIFR. The Andrew Yule Group includes a subsidiary, M/s Hooghly Printing Company, and two major associate companies namely Dishergarh Power Supply Company Ltd (since renamed as DPSC Ltd) and Tide Water Oil Company Ltd. The company's Belting Division has been converted into a joint-venture company from 1.2.1999 with M/s Phoenix, AG Germany holding 74% of the equity and AYCL holding 26% of the equity in the new company. The company has ended the year 2003-04 (prov.) with a production of Rs.97.96 crore. A comprehensive restructuring of the company has been approved by the Government with a total package of approx. Rs.170 crore. As per the earlier policy, the process of disinvestment of the Company was initiated. However, a review is being carried out in the light of National Common Minimum Programme (NCMP).

4.2 HOOGHLY PRINTING COMPANY LTD.

The company was established in the year 1922 for catering to the printing and stationery requirement of the companies under Andrew Yule Group. It is a wholly owned subsidiary of Andrew Yule & Co. Ltd. The production of the company in 2003-04 (prov.) has been Rs.9.25 crore. As per the earlier policy, the process of disinvestment of the company was initiated. However, a review is being carried out in the light of NCMP.

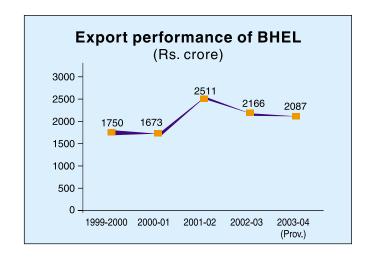
4.3 BHARAT HEAVY ELECTRICALS LTD.

The company was established for specially catering to the power generation & Transmission equipment needs of the country. BHEL today is a major single point supplier of all systems and equipment required in Power Sector. It has 14 manufacturing Plants, 8 service centers and 4 Power Sector regional centers besides project sites and regional offices spread all over India and abroad. The company has been identified as a 'Navratna' PSE. BHEL's performance in 2002-03 against MOU targets qualified it for placement in 'Excellent' category.



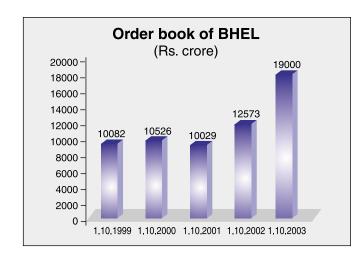
Kota Thermal Power Plant setup by BHEL

The company has taken several steps to enter into new business areas where its existing infrastructure, skills and capabilities could be optimally utilised. Some such new areas include Waste Heat Recovery Boilers, Advanced Class Gas turbines, Ceralin Insulators, Turret Castings, Water management, material handling O&M services, Simulators and equipment & services for defence.



The company has formed two Joint Ventures, one with M/s Siemens of Germany and the other with M/s General Electric, USA in the area of Servicing/ renovation of Thermal Plants and Servicing of Gas turbines respectively.

The company has ended the year 2003-04 (prov.) with a production of Rs.8653 crore.



4.4 BHARAT BHARI UDYOG NIGAM LTD.

Bharat Bhari Udyog Nigam Ltd. (BBUNL) was incorporated as a holding company in 1986, with the primary aim of bringing about technical, financial and managerial effectiveness through inter-unit correlation and better coordination with external agencies. It has the following subsidiary companies :

- (i) Burn Standard Company Ltd. Subsidiaries :
 - (a) Bharat Brakes & Valves Ltd. (BBVL) (since closed).
 - (b) RBL Ltd. (RBL) (since closed)
- (ii) Bharat Wagon & Engineering Company Ltd.
- (iii) Braithwaite & Company Ltd.
- (iv) Bharat Process & Mechanical Engineers Ltd. (since closed)Subsidiary : (i) Weighbird (India) Ltd. (WIL) (Since closed)
- (v) Braithwaite, Burn & Jessop Construction Co. Ltd.
- (vi)Jessop & Company Ltd. (since disinvested in Aug. 2003)

The aggregate production of all the operating subsidiaries (excluding Jessop & Co.) of the holding company has been Rs.284.07 crore. in 2003-04. (prov.)

4.5 BURN STANDARD COMPANY LTD.

Consequent upon the nationalization of the erstwhile Burn & Company Ltd. and the Indian Standard Wagon Company Ltd., Burn Standard Company Ltd. (BSCL) was incorporated in 1976. The company has two large engineering units at Howrah and Burnpur in West Bengal besides eight refractory and ceramic units located in Bihar, West Bengal, Tamilnadu and Madhya Pradesh. The major products being manufactured by BSCL include wagons, structurals, points and crossings, bogies, ash handling plant, coal handling plant etc. The company is sick and is under reference to BIFR. A revival plan was sanctioned by BIFR for the company. 7 loss making refractory units and Jellinghum Yard of the company have been closed following the permission granted by the competent Authority.

As per the revised policy, the process of disinvestment of the company was initiated. A review is now being carried out. The production of the company during the year 2003-04 (prov.) is Rs.176.92 crore.



Cast Steel High Speed bogie manufactured by Burn Standard & Co. Ltd.

4.6 JESSOP & COMPANY LTD.

The company is engaged in design and manufacture of a diversified range of products viz. Railway Rolling Stock, Earth Moving Equipment, a wide range of Cranes, Structural Fabrication, Hydraulic Gates, Paper Machinery etc. The company has been disinvested by offering majority equity to a strategic partner in August, 2003. The company is no more a PSE.

4.7 BRAITHWAITE & COMPANY LIMITED

Consequent upon nationalization, the company was taken over by Govt. in 1976. The company has three manufacturing units viz., (i) Clive Works, (ii) Victoria Works and (iii) Angus Works, which are



Tank wagons manufactured by Braithwaite & Co. Ltd.

engaged primarily in the manufacture of Railway Wagons, steel structurals, and general and special purpose cranes including Container Handling Cranes, Rail-Mounted Diesel Loco Break down Cranes, Jute Carding Machines and Roll Feeders for the Jute industry, etc. The company is sick and referred to BIFR. A revival scheme sanctioned by BIFR is under implementation. As per the previous policy, the process of disinvestment of the company was initiated. However, a reivew is being carried out in the light of National Common Minimum Programme (NCMP). The production of the company during the year 2003-04 (prov.) has been Rs 65.44 crore.

4.8 BHARAT WAGON AND ENGINEERING COMPANY LTD.

Bharat Wagon & Engineering Company Ltd. (BWEL) was formed after nationalization of Britannia, Mokameh, Bihar and Arthur Butler, Muzaffarpur, Bihar in 1979. The main products of the company are Railway Wagons, screw pile bridges, steel fabrications, Grey Iron Castings etc. The company has been referred to BIFR as it has become sick. As per the revised policy, the process of disinvestment is being reviewed. The production of the company during 2003-04 (prov.) has been Rs.11.91 crore.

4.9 BRAITHWAITE BURN & JESSOP CONSTRUCTION CO. LTD.

Braithwaite Burn & Jessop Construction Co. Ltd. (BBJ) was constituted by Braithwaite, Burn and Jessop in 1935 for erection of the Howrah Bridge. BBJ turned into a PSE in 1987 when it became a subsidiary of Bharat Bhari Udyog Nigam Ltd., (BBUNL).

The company is engaged in construction of steel bridges, marine structures and jetties etc. BBJ has acquired the modern technology of construction of cable stayed long span road bridges. The company has diversified into marine related activity. The turnover of the company in 2003-04 (prov.) has been Rs. 29.80 crore. The proposed disinvestment of the Company is being reviewed.

4.10 BHARAT YANTRA NIGAM LTD.

Bharat Yantra Nigam Ltd. (BYNL), was incorporated as a holding company in 1986, with the main objective to integrate, monitor and coordinate the activities of the following subsidiary companies with a view to secure optimum utilization of resources and to provide package and turnkey services to various core sectors.

- 1. Bharat Heavy Plate & Vessels Ltd., Visakhapatnam.
- 2. Bharat Pumps & Compressors Ltd., Naini, Allahabad.
- 3. Bridge & Roof Company (India) Ltd., Kolkata.
- 4. Richardson & Cruddas (1972) Ltd., Mumbai.
- 5. Tungabhadra Steel Products Ltd., Hospet, Karnataka.
- 6. Triveni Structurals Ltd., Naini, Allahabad.

The total production of all the subsidiary companies during 2003-04 (prov.) has been Rs.524.83 crore.

4.11 BHARAT HEAVY PLATE AND VESSELS LTD.

Bharat Heavy Plate & Vessels Ltd. (BHPV) was set up in the year 1966 for catering to the requirement of equipment for core sectors such as Fertilizers, Oil Refineries, Petrochemicals, etc.

The company has three product divisions namely Process Plant Division, Cryogenics and Boiler Division. For effective utilisation of the existing facilities, the company implemented a number of diversification schemes such as manufacture of Air & Gas Separation Plants, design and manufacture of Industrial Boilers, Systems packages for Process Industries etc. with the technical back-up from world renowned companies. The production of the company for the year 2003-04 (prov.) has been Rs.41.05 crore.



225 M.T. Urea Reactor manufactured by BHPV.

4.12 BHARAT PUMPS & COMPRESSORS LTD.

Bharat Pumps & Compressors Ltd. (BPCL) was incorporated in 1970 at Naini, Allahabad. The company is catering to the needs of sectors like oil, fertilizer, chemicals etc. for various types of pumps & compressors. The company became sick

and was referred to BIFR. The company's revival plan sanctioned by the BIFR has not been successful. Efforts have been initiated by BIFR for locating a joint venture partner. The company has ended the year 2003-04 (prov.) with a production of Rs.47.26 crore.

4.13 BRIDGE & ROOF COMPANY (INDIA) LTD.

Bridge & Roof Company (India) Ltd. (B&R) was initially a subsidiary of Balmer Lawrie & Co. Ltd. Subsequently, through investment of additional equity capital of Rs.1.74 crore by Government of India in 1978, B&R became a Govt. company. The administrative control of this company was transferred to this Department from Ministry of Petroleum in June, 1986. The company's operations cover fabrication of medium and heavy structures, civil engineering works in respect of buildings, concrete bridges, project civil work, cooling towers, mechanical erection of complete plants for



Gas cracking unit at IPCL, Nagothane commissioned by B & R

refineries, fertilizers, chemicals, steel, aluminium, etc. The turnover of the company during the year 2003-04 (prov.) has been Rs.403.75 crore.

4.14 RICHARDSON & CRUDDAS (1972) LTD.

Richardson & Cruddas (1972) Ltd. (R&C) was taken over from private sector in 1973. It has four units – two in Mumbai and one each in Chennai and Nagpur. The company became a subsidiary of BYNL in 1987.

The product profile of the company covers steel structures, transmission line towers, industrial machinery, chemical machinery, refrigeration equipment etc. The company is sick and referred to BIFR. The revival plan sanctioned by BIFR in 1995 has failed. In July, 2003, the BIFR passed the orders for winding up. An appeal has been filed before AAIFR. The company's production during the year 2003-04 (prov.) has been Rs.24.81 crore.

4.15 TRIVENI STRUCTURALS LTD.

Triveni Structurals Ltd. (TSL) was incorporated in 1965. The company is primarily engaged in the manufacture of heavy steel structural products, such as tall towers and mast for power transmission, communication and T.V. broad-casting, hydromechanical equipment, pressure vessels etc. The company became a subsidiary of BYNL in April, 1987. The company is sick and stands referred to BIFR. The revival plan sanctioned by BIFR has failed and BIFR have ordered winding up. The production during the year 2003-04 (prov.) has been Rs.0.49 crore.

4.16 TUNGABHADRA STEEL PRODUCTS LTD.

The company was initially established in 1960 as a joint enterprise of the Governments of Karnataka and Andhra Pradesh. Tungabhadra Steel Products Ltd. (TSP) became a Govt. company in February, 1967. The company became a subsidiary of BYNL in April, 1987. The company is engaged in design, manufacture and erection of hydraulic structures, penstocks, building structures, transmission line towers, EOT & gantry cranes etc. As per the earlier policy, the process of disinvestment of the Company was initiated. However, a review is being carried out in the light of NCMP. The production of the company has been Rs.7.47 crore during 2003-04 (prov.).



Gantry crane and bulk head emergency host for Chamera project by TSPL

4.17 HINDUSTAN CABLES LTD.

Hindustan Cables Ltd. (HCL) was set up in 1952 as the first telecommunication cable manufacturing unit in the country. The company has units in Roopnarainpur, West Bengal; Naini, Allahabad, U.P. & Hyderabad, Andhra Pradesh.

The company is engaged in manufacture of a wide range of sophisticated telecommunication cables and wires and is catering to the needs of vital sectors like Railways, Defence, communication etc. The company is sick and is under reference to BIFR. The Department is examining the available option regarding the future of HCL. The production of the company during the year 2003-04 (prov.) has been Rs. 104.86 crore.



Armouring of Jelly filled cables at Hyderabad Plant of HCL

4.18 HEAVY ENGINEERING CORPORATION LTD.

Heavy Engineering Corporation Ltd. (HEC), Ranchi was incorporated in December, 1958 with the primary objective of achieving self-sufficiency and self-reliance in the field of design and manufacture of equipment and machinery for the Iron and Steel Industry and other core sector industries like, Mining, Metallurgy etc. It has three manufacturing units namely Heavy Machine Building Plant (HMBP), Heavy Machine Tools Plant (HMTP) and Foundry Forge Plant (FFP). The company manufactures a wide range of equipments for steel plants, material handling equipment like wagon tipplers and EOT cranes, heavy machine tools including CNC Machine tools and special purpose machine tools and various types of castings, forgings and rolls etc. The company is sick and referred to BIFR. The company's production during the year 2003-04 (prov.) has been Rs.149.39 crore.

4.19 HMT LTD. (Holding Company with Tractor Divn.)

HMT Ltd., Bangalore was set up in 1953. The company is engaged in the manufacture of Machine tools, Watches, Tractors, Printing machinery, special purpose machines, Presses and Dairy machinery. It has several manufacturing units all over the country.

The company has been making losses for the past few years. The Company's turnaround plan approved by the Government in July, 2000 envisaged Organizational Restructuring by conversion of Business Groups into four new separate Subsidiary Companies and disinvestment of equity in these Subsidiaries. The Company has been restructured into HMT Limited, the Holding Company with Tractor Business in its fold, HMT Machine Tools Limited, HMT Watches Limited & HMT Chinar Watches Limited. Besides, the company has two wholly owned subsidiaries namely HMT(International) and HMT (Bearings)Ltd. and one partly owned subsidiary, Praga Tools Ltd. The process of Disinvestment/ Joint Venture has been initiated for HMT Machine Tools Limited, HMT Watches Limited, HMT Chinar Watches Limited & HMT Bearings Limited.

The Tractor Division of HMT commenced its operations in 1971 with the manufacture of 25 HP Tractor at the manufacturing plant established in Pinjore, Haryana but subsequently, it has developed Tractors up to 75 HP.

Currently the company has three tractor manufacturing units in India located at Pinjore in Haryana, Mohali in Punjab and Hyderabad in Andhra Pradesh. It has a well equipped R&D Centre duly recognized by the Department of Scientific & Industrial Research, Government of India. The production of HMT Holding Company (Tractors Division) has been Rs.129.35 crore during 2003-04 (prov.).

4.20 HMT MACHINE TOOLS LTD.

HMT Ltd., the pioneer in Machine Tools Industry in India and manufacturer of a diversified range of products has incorporated "HMT MACHINE TOOLS LIMITED" as its fully owned subsidiary in 1999.

It has its manufacturing units at five locations with each unit specializing in a particular family of Machine Tools. The sales and service network is spread across the length and breadth of the country. All the manufacturing units of HMT-MT Ltd. are ISO 9001 certified. The production of the company in 2003-04 (prov.) has been Rs.178.34 crore.

4.21 HMT WATCHES LIMITED

HMT Limited, the first company to start watch manufacturing in India, has incorporated "HMT Watches Ltd." as its fully owned subsidiary in 1999. It manufacturers mechanical and quartz analog watches.

The manufacture of wrist watches started at Bangalore as a part of diversification strategy of HMT in the year 1962, under technical collaboration with Citizen Watch Company of Japan.

HMT Watches Ltd. comprises 3 manufacturing units at Bangalore, Tumkur and Ranibagh while its marketing headquarters is based in Bangalore. All its manufacturing units have obtained the ISO 9001 certification.

The product range of HMT Watches Ltd. caters to all segments of the market, from

economy to premium and from the young age group to the old. HMT brand enjoys a very high brand equity in the Indian Market. The brand has consecutively been adjudged as one of the most recalled Indian brands in surveys by leading agencies in the country. As per the earlier policy, the process of disinvestment of the company was initiated. In the light of NCMP, this matter is being re-examined. The production of the company during 2003-04 (prov.) has been Rs.25.65 crore.

4.22 HMT CHINAR WATCHES LTD.

HMT Limited incorporated "HMT Chinar Watches Limited" as its fully owned subsidiary in the year 2000. It manufactures Mechanical gents' watches.

HMT Chinar Watches Limited comprises one manufacturing Unit at Srinagar, J&K and an assembly unit at Jammu with Registered Office at Jammu.

The product range of HMT Chinar Watches Limited includes 13 models. The quality and reliabiliity of HMT watches has been the main selling feature and attraction of the consumer. HMT Chinar Watches Limited markets its products through the wide marketing network of HMT Watches Limited.

HMT Chinar Watches Limited has the manufacturing capacity of 5 lakh watches per annum. As per the previous policy, the process of disinvestment of the company was initiated. A reivew is now being carried out in the light of the new policy under NCMP. The production of the company in 2003-04 (prov.) has been Rs. 1.98 crore.

4.23 PRAGA TOOLS LTD.

Praga Tools Ltd. (PTL), Secunderabad, originally incorporated as a Public Limited

Company in 1943, became a Central Public Sector Enterprise in 1959. PTL became a subsidiary of HMT Ltd. in 1988 when 51% of the share capital of the company was transferred in the name of HMT Ltd.

The company has been manufacturing various types of machine tools viz. CNC cutter & tool grinder, surface grinder, CNC milling machine, thread rolling machine, Jig boring machine and CNC jig boring machines etc. The company is sick and referred to BIFR. The production during the year 2003-04 (prov.) has been Rs. 8.12 crore.

4.24 HMT (BEARINGS) LTD.

HMT (Bearings) Ltd. (erstwhile Indo-Nippon Precision Bearings) was established in the year 1964 as a state public sector company. In the year 1981, this company became a central public sector enterprise as a subsidiary of HMT Ltd. The Enterprise of the company during the year 2003-04 (prov.) has been Rs.23.60 crore.



Product range of bearings manufactured by HMT (Bearings) Ltd.

4.25 HMT (INTERNATIONAL) LTD.

HMT (I) Ltd. was established in December, 1974 as a trading company for giving greater thrust to exports of the products of the parent company, HMT Ltd. The major items for exports are machine tools, watches and other associated products which are being exported to Africa, USSR, USA, Canada, Australia etc. The turnover of the company during the year 2003-04 (prov.) has been Rs.29.58 crore.

4.26 INSTRUMENTATION LTD.

Instrumentation Ltd., Kota (ILK) was set up in 1964. The company has three manufacturing units at Kota, Rajasthan, Jaipur, Rajasthan and Palakkad, Kerala and also has a subsidiary namely, *M*/s Rajasthan Electronics and Instruments Ltd. (REIL) at Jaipur. The company is engaged in manufacture of micro processor based and digital distributed control systems, advanced electronic transmitters, fault tolerant control systems, railway signaling systems, telecommunication equipment etc.

The company became sick and was referred to BIFR. A revival package sanctioned by BIFR in March, 1999 is under implementation. As per revival plan, Govt. have released Rs. 66 crore as fresh infusion of funds and carried out financial restructuring of Rs.42.98 crore. Government have approved reservation of orders to the extent 10% of the requirement of telephone exchanges by BSNL for a period of three years. As per the earlier policy, the process of disinvestment of the company of was initiated. However, a review is being carried out in the light of NCMP. The production of ILK in the year 2003-04 (prov.) has been Rs.139.02 crore.

4.27 RAJASTHAN ELECTRONICS & INSTRUMENTS LTD.

Rajasthan Electronics & Instruments Ltd. (REIL) was set up in 1981 as a Joint Venture of Instrumentation Ltd., Kota and RIICO for manufacture and supply of Electronic Milk Testers (EMT) to various milk plants/dairies, milk chilling centres and village cooperative societies. The company has diversified its product range to include Solar photo voltaic modules/system, Electronic Energy meters and Information technology. By virtue of its scintilating performance, the PSE has gained the status of 'Miniratna'. As per earlier policy, the process of disinvestment of the company was initiated. However, a review is being carried out in the light of NCMP. The production of the company during the year 2003-04 (prov.) has been Rs.44.05 crore.

4.28 NATIONAL INSTRUMENTS LTD.

National Instruments Ltd. (NIL), was incorporated as a PSE in 1957 after taking over the assets and liabilities of National Instruments Factory, a departmentally run workshop under the then Ministry of Production and Supplies. The company is engaged in the manufacture and trading of various types of Opticals & Opto Electronic Surveying Instruments including Pressure & Vacuum Gauges, Cameras, Gas Meters, etc. together with sophisticated Night Vision devices. The company became sick and was referred to BIFR. As per revival plan sanctioned by BIFR in November 1999, Govt. has released Rs.17.96 crore as fresh infusion of funds. However, the company's performance continues to be poor. The production of the company during the year 2003-04 (prov.) has been Rs. 3.62 crore. The Department is examining the options available regarding the future of NIL.

4.29 SCOOTERS INDIA LTD.

Scooters (India) Ltd. (SIL) was incorporated as a Government of India enterprise in 1972. At present, three wheelers are

manufactured in its factory located in Lucknow. The company became sick and was referred to BIFR. The company has achieved turn around in its performance and posted profits consecutively during the past three years. With the improvement in the performance of the company, it has come out of the purview of BIFR. The company has achieved a production of Rs. 157.15 crore during 2003-04 (Prov.).

4.30 BHARAT OPTHALMIC GLASS LTD.

Bharat Opthalmic Glass Ltd. (BOGL) was set up in 1972 and took over the Opthalmic Glass Plant at Durgapur from the National Instruments and Opthalmic Glass Ltd. The company is engaged in manufacture of opthalmic blanks, flint buttons, optical glass, radiation shielding window (RSW) glass and other special quality optical glasses for the Defence, Nuclear and other sectors. The company became sick and was referred to BIFR. BIFR has recommended winding up of the company. The operations of the company have stopped since March, 2003.

4.31 CEMENT CORPORATION OF INDIA LTD.

Cement Corporation of India Ltd. (CCI) was established in 1965 with the principal objective of setting up cement factories in Public Sector to achieve self-sufficiency in cement production and to remove regional imbalance. It has 10 production units spread over 8 States/Union Territories, located in Mandhar, Akaltara in Chattisgarh; Nayagaon in MP; Kurkunta in Karnataka; Bokajan in Assam; Rajban in HP; Adilabad and Tandur in Andhra Pradesh; Charkhi Dadri in Haryana and Delhi Grinding unit in Delhi. The performance of CCI has been adversely affected due to severe liquidity crunch and infrastructural constraints particularly related to power shortage. 7 units out of 10 are non-operational due to various reasons. The company became sick on 8.8.1996 and was referred to BIFR. After due consideration the BIFR has directed the CCI to approach Ministry of Labour for seeking their approval for closure of such non-operating units. Further, as directed by BIFR, OA has appointed a merchant banker to complete the sale of CCI as a whole as a going concern basis or its units individually or collectively. The production for the year 2003-04 (prov.) in the running units has been Rs.132.16 crore.

4.32 HINDUSTAN PAPER CORPORATION LTD.

Hindustan Paper Corporation Ltd. (HPC), incorporated in 1970, is engaged in manufacture of paper, paperboards, craft paper and newsprint.

HPC is a Holding company and has 2 subsidiaries and two major integrated pulp and paper mills under its control as given below:

Subsidiaries of HPC

- a) Hindustan Newsprint Ltd. (HNL)
- b) Nagaland Pulp & Paper Company Ltd. (NPPC).

Units of HPC

- (i) Nagaon Paper Mills (NPM)
- (ii) Cachar Paper Mills (CPM)

The production of the company (NPM and CPM) during the year 2003-04 has been Rs. 569.81 crore.

4.33 NAGALAND PULP & PAPER COMPANY LTD.

Nagaland Pulp & Paper Company Ltd. (NPPC) is a subsidiary of Hindustan Paper Corporation (HPC). HPC holds 94.78% of the equity shares and the Government of Nagaland holds the balance 5.22%. The company which came out of the purview of BIFR due to financial restructuring again became sick as the revival scheme could not be put into operation due to law and order problem, lack of infrastructure and absence of banking facilities. There is no production activity in the plant. BIFR has since recommended winding up of the company.

4.34 HINDUSTAN NEWSPRINT LTD.

Hindustan Newsprint Ltd. (HNL) originally started as a unit of HPC was converted into a wholly owned subsidiary of HPC in August, 1983. This mill with annual capacity of 1 lakh MT is located in the State of Kerala and is engaged in the production of newsprint. The company has recently commissioned a De-inking Plant at a cost of Rs.52.20 crore. This is likely to improve the financial health of the company and reduce its dependence on forest resources. The process of disinvestment of the company is being reviewed in the light of NCMP. The production during the year 2003-04 (prov.) has been Rs.250.94 crore.

4.35 HINDUSTAN PHOTO FILMS MANUFACTURING COMPANY LTD.

Hindustan Photo Films Manufacturing Company Ltd. (HPF) was established in 1960 with the objective of ensuring regular supply of raw cine films to the motion picture industry, X-ray films for health services and Defence Forces and special photographic materials for photographers. The company has two manufacturing plants, the main factory at Ootacamund and a plant at Ambattur near Madras. HPF started production in 1967. The company undertakes both integrated production and jumbo conversion. The products manufactured by integrated production are cine films positive (black & white), cine films sound negative, medical X-ray films, photographic paper and amateur roll film (black and white). The company has set up a project for manufacture of polyester based medical x-ray, industrial x-ray and graphic arts films. The company is sick and is under reference to the BIFR. The production of the company during the year 2003-04 (prov.) has been Rs.28.43 crore.

4.36 HINDUSTAN SALTS LTD.

Hindustan Salts Ltd. (HSL), set up in 1959, is engaged in the production of common salt and salt-based chemicals at its three units located at Kharaghoda, Gujarat; Mandi, Himachal Pradesh and Ram Nagar,



Bromine plant of Hindustan Salts Ltd. at Kharaghoda (Gujarat)

Uttar Pradesh. The company is sick and referred to BIFR. The process of disinvestment is being reviewed in the light of NCMP. Its production during the year 2003-04 (prov.) has been Rs.6.96 crore.

4.37 SAMBHAR SALTS LTD.

Sambhar Salts Ltd. (SSL) is a subsidiary of Hindustan Salts Ltd. (HSL). The paid up capital of the company is Rs.1 crore, 60% of which has been subscribed by HSL and balance 40% by the Government of Rajasthan. The company is producing salt, both for edible and industrial use, and salt based chemicals. The process of disinvestment is being reviewed in the light of NCMP. The production of the company during the year 2003-04 (prov.) has been Rs.6.20 crore.

4.38 NEPA LTD.

NEPA Ltd. (NEPA), formerly, the National Newsprint & Paper Mills Ltd. was initially set up in 1947 in private sector. Later on, in October, 1949, its management was taken over by the State Government. Central Govt. acquired the controlling interest in 1959 by conversion of loans into equity and it became a central PSE. The company produces Newsprint and paper. The company became sick and was referred to BIFR. Recommendations of the Disinvestment Commission were considered and the Govt. have approved financial restructuring, VRS etc. apart from strategic sale of 51% to 100% of equity. As per earlier policy, the process of disinvestment of the company was initiated. This is being reviewed in the light of NCMP.

The production of the company during the year 2003-04 (prov.) has been Rs.38.15 crore.

4.39 TYRE CORPORATION OF INDIA LTD.

Tyre Corporation of India Ltd. was incorporated in 1984 after the nationalization of two sick companies, namely, M/s Incheck Tyres Ltd. and M/s National Rubber Manufacturers Ltd. It has three operating units viz. (1) Tyre Division at Kankinara, (2) Industrial Rubber Products Division at Tangra and (3) Reclaimed Rubber Unit at Kalyani (West Bengal). The production line covers Automobile Tyres & Tubes, Nylon Conveyor Belts, Hoses, Vee and Fan Belts etc. A Modernization-cum-expansion project at Kankinara was subsequently implemented for the manufacture of 6.31 lakh tyres and tubes per annum in technical collaboration with Techno Export of then undivided Czechoslovakia. The company became sick and was referred to BIFR. Tangra Unit of the company has since been closed after necessary permission from the competent authority. The disinvestment of the company is being reviewed in the light of NCMP. The production during the year 2003-04 (prov.) has been Rs.144.88 crore.

4.40 BHARAT LEATHER CORPORATION LTD.

Bharat Leather Corporation Ltd. (BLC) was set up in 1976 to undertake promotional and developmental activities besides commercial activities like procurement and marketing of leather goods, leather footwear etc. Efforts to locate a joint venture partner for the company have not been successful. In the meantime, all the employees of the company have availed VRS with financial assistance from Government in April, 2001. BLC has filed a writ petition in Allahabad High Court for winding up of the company under Section 433 of Companies Act, 1956.

4.41 ENGINEERING PROJECTS (INDIA) LTD.

Engineering Projects (India) Ltd. (EPI) is a premier turnkey contracting company incorporated in the year 1970. The company's field of operation is extensive and includes projects relating to civil and structural engineering, material handling, metallurgy, petrochemicals, environment and pollution control etc. After the financial restructuring of the company in 2001, the company has turned around and has posted profits. In the light of NCMP, the disinvestment of the company is being reviewed.



Sardar Vallabhbhai Patel Agriculture University Meerut (U.P.) constructed by EPI Ltd.

The turnover of the company during the year 2003-04 (prov.) has been Rs.400.78 crore.

4.42 NATIONAL INDUSTRIAL DEVELOPMENT CORPORATION LTD.

The National Industrial Development Corporation Ltd. (NIDC) was established by the Government in 1954. The company has been providing consultancy services in the field of Civil Engineering Projects, Industrial Townships, Water Supply & Treatment, Restructuring, Technology upgradation, Industrial Projects and development of Computerized Management Information System. The company has been making losses for last few years. Being a nonmanufacturing company, it is not referable to BIFR. Efforts to convert the company into a joint venture formation have not been successful.All employees of the company have opted for VRS. Winding up process has been initiated in Delhi High Court.

Heavy Electrical Industry and other Industrial Machinery Sectors

5.1 HEAVY ELECTRICAL INDUSTRY

Heavy Electrical Industry encompasses basically power generation, transmission and distribution equipment. These include turbo generators, boilers, various types of turbines, transformers, switchgears and other allied items. The demand for power generation equipment depends largely upon power development programmes. The targets for additional power generation during the Tenth and Eleventh Plan Period is 1,00,000 Mega Watt, i.e. addition of about 10,000 MW per year. New power plants to be set up is expected to generate substantial demand for heavy electrical equipment.

Electrical equipments such as transformers, switchgears etc. are used by several sectors of the Indian Economy. Some major areas where these are used are the multi – crore projects for power generation including nuclear power stations, petrochemical complexes, chemical plants, integrated steel plants, non-ferrous metal units etc. The Industry has been upgrading the existing technology and is now capable of taking up turnkey contracts also for export markets. The Industry has been de-licensed and foreign collaborations are also allowed with 100% FDI.

A strong manufacturing base has already been established for heavy electrical equipment and existing installed capacity of the industry is of the order of 4,500 MW of thermal, 1,345 MW of Hydro and about 250 MW of Gas based power generation equipment per annum. The Indian Heavy Electrical Industry is also capable of manufacture and supply of equipment required for setting up nuclear power plants. The present share of the Indian industry is about 66% of the country's power generation capacity.

The Heavy Electrical Industry is capable of manufacturing, transmission and distribution equipment upto 400 KV AC and high voltage DC. The industry has taken up the work for upgradation of transmission to the next higher voltage system of 765 KV and have upgraded their manufacturing facilities to supply 765 KV class transformers, reactors, CTS, CVT, Bushing and Insulators etc. Large electrical equipment used in Steel plants, Petrochemical complexes and other such heavy industries are also being manufactured in the country.

A status report covered under Heavy Electrical Industry is given below:-

5.2 TURBINES & GENERATOR SETS

The capacity established for manufacture of various kinds of turbines such as steam & hydro turbines including Industrial turbines is more than 7000 MW per annum. Apart from BHEL, the public sector unit which has the largest installed capacity, there are units in the private sector also, manufacturing steam & hydro turbines for power generation & industrial use. The manufacturing range of BHEL includes steam turbines upto 500 MW unit rating which they are planning to enhance upto 660 MW. They have capability to manufactures Gas Turbines upto 255 MW (ISO) rating. BHEL has developed an Aerofoil Bladed Radial Fan for 210 MW and 250 MW thermal sets, which is more efficient than conventional straight bladed fans.

AC Generators manufactured in India are on par with international AC Generators and consistently deliver high quality power with high performance. Domestic manufacturers are capable of manufacturing AC Generator right from 0.5 KVA to 25,000 KVA and above with specified voltage rating.

The import and exports during 2002-03 were Rs.1012.81 crore and Rs.377.61 crore respectively. The exports have grown by about 10% during the year compared to 2001-02.

5.3 **BOILERS**

BHEL is the largest manufacturer of boilers in the country (worth 60% share) and has the capacity to manufacture boilers for Super Thermal Power Plants apart from utility boilers and industrial boilers. The domestic industry has the capacity to meet the indigenous requirement/ demand for boilers. The Indian Industry is continuously upgrading their technology and introducing better products. BHEL has upgraded Boiler Feed Pump suitable for 110 and 210 MW thermal power stations. The upgraded pumps have easier maintainability, increased reliability and have better efficiency. They have also developed Blast Furnace Gas Firing System for a 65 tonnes per hour boiler for utilising blast furnace gas in steel plants, which otherwise goes as a waste.

The import and exports during 2002-03 were Rs.5.82 crore and Rs.61.66 crore respectively. The exports during the year have grown by 50%.

5.4 TRANSFORMERS

The industry is well equipped to cope with the requirement of the country's power sector development programme with the ability to provide state-of-the-art equipment. The industry has the capacity to manufacture a whole range of power and distribution transformers including the REC rating of 25/53/100 KVA and also the extra High voltage ranges of 400 kV, 600 MVA. Special types of transformers required for furnaces, rectifiers electric tract etc. and series and shun reactors as well as HVDC transmission up to 500 kV are also being manufactured in the country.

The import and exports during 2002-03 were Rs. 881.64 crore and Rs. 560.77 crore respectively.

5.5 SWITCHGEAR AND CONTROL GEAR

The entire range of circuit breakers from bulk oil, minimum oil, air blast, vacuum to SF6 are manufactured in India to standard specification. Further, the products cover the entire voltage range for 240V to 800KV. Switchgear and control gear, MCBs, air circuit breakers, switches, rewireable fuses and HRC fuses with their respective fuse bases, holders and starters. BHEL has developed a new series compensation scheme involving Thyristor Control Reactors popularly known as Flexible AC Transmission System (FACTS) for enhancing the power transfer capability of transmission lines and reducing transmission losses. The industry is competitive in the field of design and

engineering as the skill sets available in the country are relatively less expensive.

The import and exports during 2002-03 were Rs. 882.69 crore and Rs. 497.63 crore respectively.

5.6 ELECTRICAL FURNACE

Electrical Furnaces are used in Metallurgical and Engineering industries like forging and foundry, machine tools, automobiles etc. Adequate capacity for production of these products has been established.

The import and exports during 2002-03 were Rs. 31.90 crore and Rs. 20.49 crore respectively. The exports have grown by 33% during the year compared to 2002-03.

5.7 SHUNTING LOCOMOTIVES

Shunting locomotives for localized / internal transport facilities are used in Railways, Steel Plants, Thermal power plants etc. BHEL's Jhansi Unit among others is manufacturing such locomotives. The installed capacity is adequate to meet the domestic demand.

5.8 TEXTILE MACHINERY INDUSTRY

About 600 Textile Machinery Manufacturers in the country are engaged in manufacture of textile machinery required for sorting, carding, processing of yarns/ fabrics and weaving along-with the components, spares and accessories.

The industry is gearing itself to avail of opportunities of supplying machines required to cater the export target of garment manufacturers post Multi Fiber Agreement (MFA). The Development Council on Textile Machinery has set up



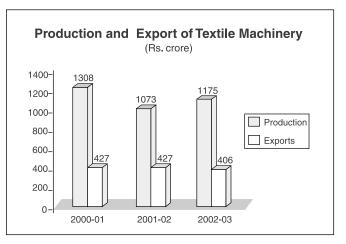
Spinning machine – Twin delivery auto ceveller draw frame LDA/2

Working Group comprising of Senior Officers of this Ministry, Textile Ministry, Manufacturers and users to suggest ways and means for enhancing the production and export capability of this industry.

With a capital investment of Rs. 1500 crore and an installed capacity of Rs. 3000 crore per annum, their current production as well as exports are as given below:



Spining machine comber LK54.



5.9 CEMENT MACHINERY INDUSTRY

Complete cement plants based on dry processing and pre-calcinations technology for capacities up to 7500 TPD are manufactured in India. Modern cement plants are designed for zero downtime, high product quality and better output with minimum energy consumed per unit of cement production etc. At present, there are 18 units in the organized sector for the manufacture of complete cement plant machinery. The industry is fully capable to meet the domestic demand of cement machinery. The value of the existing installed capacity has been estimated at Rs. 600 crore/annum.

			(Ks. crore)
	2000-01	2001-02	2002-03
Import	1.18	0.42	1.30
Export	3.25	4.38	3.05

(D.)

5.10 SUGAR MACHINERY INDUSTRY

India is a leading manufacturer in sugar machinery in the world. Indian industry is capable of manufacturing sugar plants of latest design for a capacity upto 10,000 TCD (tons crushing per day). There are presently 27 units in the organised sector for the manufacture of complete sugar plants and components with installed capacity of Rs. 200 crore. The import & export performance is indicated below :

			(Rs. Lakh)
	2000-01	2001-02	2002-03
Import	305	3.0	1.70
Export	548	253	852

5.11 RUBBER MACHINERY INDUSTRY

The industry has secured export orders against stiff international competition for tyre tube curing presses, tube splicers etc. and the export is continuously rising. There are at present 19 units in the organized sector for the manufacture of rubber machinery mainly required for tyre/tube industry. The range of equipments manufactured in the country includes inters-mixer, tyre curing presses, tube splicers, bladder curing presses, tyre moulds, tyre building machines, turnet servicer, bias cutters, rubber injection moulding machine, bead wires etc. There is gap in technology for the manufacture of high speed calendering line particularly for heavy earthmoving equipment and the like.

Export Performance

(Rs.	cro	re)

	2000-01	2001-02	2002-03
Import	15.41	11.35	12.81
Export	4.30	11.04	15.25

5.12 MATERIAL HANDLING EQUIPMENT INDUSTRY

There are 50 units in the organised sector for the manufacture of material handling equipment. The range of equipments manufactured includes crushing and screening plants, coal/ore/ash handling plant and associated equipment such as stackers, reclaimers, ship loaders/ unloaders, wagon tipplers, feeders etc. catering to the growing and rapidly changing needs of the core industries such as Coal, Cement, Power, Port, Mining, Fertilizers and steel plants.

Besides units in the organized sector, there are numbers of units operating in the small-scale sector manufacturing material handling equipments and its components. This industry is more or less self sufficient in meeting domestic demand and is capable of meeting global competition.

5.13 OIL FIELD EQUIPMENT

Domestic manufacturers are manufacturing drilling rigs for on shore drilling. For Offshore drilling like jack-up rigs etc. are not being manufactured indigenously and these are imported sometimes in second hand condition. However, offshore platforms and some other technological structures are being produced locally. The major producers are BHEL, Hindustan Shipyard, Mazagon Dock and Burn & Co. and Larsen & Toubro Ltd.

The petroleum industry in India is undergoing a major change. In accordance with the ongoing process of liberalisation, the industry has been thrown open for private sector in all the major areas of exploration, production, refining and marketing, resulting in increased demand for the oil field and related equipment. The users are ONGC, Oil India Ltd. and Reliance Industries.

5.14 METALLURGICAL MACHINERY

At present there are 39 units in the organized sector engaged in the manufacture of various types of metallurgical machinery. Metallurgical machinery includes equipment for mineral benefication, ore dressing, size reduction, steel plant equipments, foundry equipments and furnaces.

Indigenous manufacturers are in a position to supply majority of the equipment for steel plant like blast furnaces sinter plants, coke ovens steel melting shop equipment, continuous casting equipment, rolling mills & finishing line.

The existing production capacity in the country is sufficient to meet the demand of these equipments in the country. However, because of technological gap in the basic design and engineering for plants and equipments in the ferrous and non-ferrous sector the domestic manufacturers are dependent on imported know-how. There is a need for close interaction between the process know-how, designers and equipment manufacturers.

Export-import performance

			(Rs. crore)		
2000-01 2001-02 200					
Import	386.49	191.80	244.18		
Export	128.90	126.60	267.96		

5.15 MINING MACHINERY

At present there are 32 manufacturers in the organized sector both in public and private sector for underground and surface mining equipment of various types. Out of these 17 units manufacture underground mining equipment.

The major mining equipments are Longwall Mining Equipments, Road Header, side discharges Loader (SDL), Haulage Winder, Ventilation Fan, Load Haul dumper (LHD), Coal Cutter, Conveyors, Battery Locos, Pumps, Friction Prop, etc.

The vast majority of mining equipment requirement of the mining industry is being met by the indigenous manufacturers of the equipment. In case of some highly sophisticated equipment, critical parts are imported.

5.16 DAIRY MACHINERY INDUSTRY

At present there are 16 units manufacturing dairy machinery and equipment in the organized sector, both in private and public sector. In the organized sector, both in private and public sector. In the recent year many dairy plants have been commissioned by M/s N.D.D.B. and the majority of equipments have been supplied by indigenous manufacturers. The range of equipment presently manufactured by the indigenous manufacturers includes stainless steel dairy equipments, evaporators, milk refrigerators and storage tanks, milk and cream deodorizers, centrifuges, clarifiers, agitators, homogenizers, spray dryers and heat exchangers (tubular and plate type) etc. The spray dryers, plate type heat exchanger and other core equipments for their milk powder plant call for high degrees of polish requirement on the equipments because the presence of any micro crevices resulting from inadequate polish tends to be the incubation and breeding ground for the bacteria.

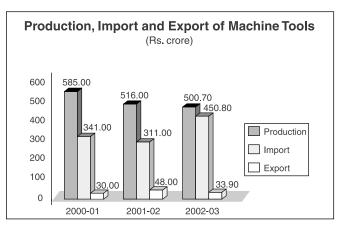
A technology gap exists for handling equipments such as self cleaning cream separator, aseptic processing systems, etc. The processing technology for manufacture of yoghurt and traditional Indian sweets plant equipment is also found wanting.

5.17 MACHINE TOOL INDUSTRY

India is one of the few developing countries in the world to have a strong vibrant Machine Tool Industry. It is in a position to not only meet domestic demand but also exports general purpose and standard Machine Tools to even industrially advanced countries. During the last four decades, the machine tool industry in India has established a sound base and there are around 125 machine tool manufacturers in the organized sector as also around 300 units in the small ancillary sector.

Indian machine tools are manufactured to the international standard of quality/ precision and reliability. Most of the major manufacturers have already developed Computerised Numerically Controlled Machine (CNC) Tools. The industry is now exporting conventional as well as NC/CNC high – tech machine tools. In the field of R & D, Central Manufacturing Technology Institutes, Bangalore has been conducting research for more appropriate designed machine tools. The sector is delicenced and import is also permitted. There is gap in technology for Special Purpose Machines and even in some categories of CNC's. Import of technology is encouraged to bridge the gap.

The production, import and export data furnished by the Machine Tools Manufacturing Association for 2000-01, 2001-02 and 2002-03 are as under: -



Automotive Industry

6 Overview of the Automotive Industry:

- 6.1 Automotive Industry, globally, as well in India, is one of the largest industries and key sectors of the economy. Due to its deep forward and backward linkages with several segments of the economy, the industry has a strong multiplier effect and is capable of being the driver of economic growth. A sound transportation system plays a pivotal role in the country's rapid economic and industrial development. The well-developed Indian automotive industry ably fulfils this catalytic role by producing a wide variety of vehicles: passenger cars, light, medium and heavy commercial vehicles, multi-utility vehicles such as jeeps, scooters, motor-cycles, mopeds, three wheelers, tractors etc.
- 6.2 Until 1982, only three manufacturers -M/s. Hindustan Motors, M/s. Premier Automobiles & M/s. Standard Motors tenanted the motorcar sector. Owing to low volumes, it perpetuated obsolete technologies and was out of sync with the world industry. In 1982, Maruti Udyog Limited (MUL) came up as a Government initiative in collaboration with Suzuki of Japan to establish volume production of contemporary models. After the lifting of licensing in 1993, 17 new ventures have come up, of which 16 are for manufacture of cars. There are at present 12 manufacturers of passenger cars, 5 manufacturers of MUVs, 9 manufacturers of Commercial Vehicles, 12 of two wheelers, 4 of three wheelers and 10 of tractors besides 5 manufacturers of engines.

6.3 The industry has an investment exceeding Rs.50,000 crore. The turnover of the automobile industry during the year 2003-04 has crossed Rs.1,00,000 crore The industry provides direct employment to 4.5 lakh and generates indirect employment of 1 crore. The contribution of the automotive industry to GDP is estimated to be 4.7%.

6.4 Installed capacity:

In physical terms the Automobile Manufacturers have put up a robust manufacturing capacity of 95 lakh vehicles per annum since 1993. India is the world's second largest manufacturer of two wheelers, fifth largest manufacturer of commercial vehicles and manufactures largest number of tractors in the world. A supplier driven market having no more than a handful of vehicular models two decades ago now offers more than 150 models and variants by way of customer options. The installed capacity of the automobile sector during the year 2003-04 was as under:

S.	Segment	Installed capacity
No.		(in nos.)
1.	Four wheelers	1,590,000
2.	Two & Three Wheelers	7,950,000
3.	Grand Total	9,540,000

6.5 Performance of the Automobile industry during 2002-03 and 2003-04:

6.5.1 Production:

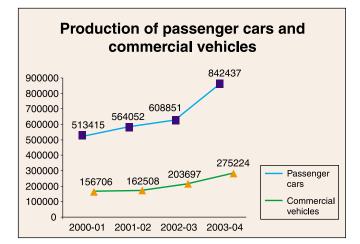
One of the largest industries in India, automotive industry has been witnessing impressive growth during the last two decades. Overall automobile sector bagged a growth of 18.60% in 2002-03. During

39

the year 2003-04 the Industry has registered a growth rate of 15.12% compared to the previous year. The details of actual production during 2002-03 and 2003-04 are given below:

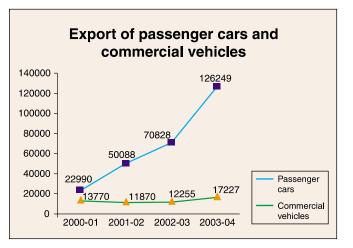
(in Nos)

5. No	o. Name of the Sector		Produc	ction
		No. of units	2002-03	2003-04
1.	Commercial Vehicles	9	203697	275224
2.	Cars	12	608851	842437
3.	Multi-Utility Vehicles	5	114479	146103
4.	2-wheelers	12	5076221	5624950
5.	3-wheelers	4	276719	340729
	Total	42	6279967	7229443



6.5.2 Export :

Automotive industry of India is now finding increasing recognition worldwide and a beginning has been made in exports of vehicles as well as components. The export of cars crossed the 100,000 mark during the year 2003-04. The details of exports during 2002-03 and 2003-04 are given below:-



6.6 Vehicular Pollution Control Measures:

Government initiated pollution and safety checks by notifying emission and safety standards from the year 1992 which were further tightened in April, 1996 under the Motor Vehicle Act. BHARAT STAGE-I (Equivalent to Euro I) emission norms have already been made applicable throughout the country and India is poised to induct

			(in Nos
S.No	EXPORT	2002-03	2003-04
1.	Medium & Heavy Commercial vehicles	5638	8112
2.	Light Commercial vehicles	6617	9115
3.	Passenger cars	70828	126249
4.	Multi- Utility Vehicles	1177	3067
5.	2-wheelers	179682	264669
6.	3-wheelers	43366	68138
	TOTAL	307308	479350

BHARAT STAGE-II (Equivalent to Euro II) norms across the country by April 2005. The norms are already applicable in the four Metros. From April 2005, 7 metropolitan cities are going to switch over to BHARAT STAGE-III (Equivalent to Euro III) norms. To meet this emerging challenges of newer emission norms Indian automobile industry has already braced itself up with new investments and fresh technological inductions. A higher safety and emission standards regime requires adequate infrastructure for testing and certification of products domestically produced and imported. Existing testing infrastructure in the country are limited and are grossly inadequate to meet the future and emerging requirement of the automotive industry. Therefore, the Government in close cooperation and coordination with the industry has initiated steps for upgrading the existing testing facilities and setting up of new testing infrastructure in the country.

6.7 Auto Components Industry:

6.7.1 **Overview:** The Indian auto component industry over the years has played a key role in the growth and development of the country's automotive industry. Surge in automobile industry since the nineties has led to an impressive growth of the auto component sector in the country in terms of spread, absorption of newer technologies and flexibility, despite multiplicity of technology platforms and low volumes. India's reasonably priced skilled workforce, coupled with strengths gained by the country in IT and electronics all build up an environment for significant leap in component industry. The Indian auto component sector is being written up as the next industry, after software, that has the

potential of becoming globally competitive. Auto component industry, with a turn over of a Rs. 30,640 crore sector, manufacturing all the key components required for vehicle manufacturing, is thus an important sector of the Automotive industry.

6.7.2 **Production:** The Indian auto component sector today has 420 key players contributing more than 85% of the output of this sector. The vital statistics of the auto component sector during 2002-03 & 2003-04 are as follows:

Indicators	2002-03	2003-04	
Investment	Rs 12,500 cr.	Rs. 13,400 cr.	
Output	Rs 24,500 cr.	Rs. 30,640 cr.	
Exports	Rs 3,800 cr.	Rs. 4,550 cr.	
Employment	5,00,000 persons	5,00,000 persons	

Indian auto component industry has seen major growth with the arrival of world vehicle manufacturers from Japan, Korea, US and Europe. Due to diversities in the technological profiles of these OEMs, the sector today produces large variety of components. Today, India is emerging as one of the key auto components center in Asia and expected to play a significant role in the global automotive supply chain in the near future.

6.7.3 Export:

Component exports in the year 2002-03 have already crossed US \$ 800 million. This, however, represents only about 0.08% of global component trade currently estimated at around US \$1 trillion. This is reflective of significant opportunities that lie ahead. Several export units have reached a rejection rate below 5 parts per million (PPM) with many of them touching a zero PPM. On export front, auto component industry has registered a robust growth of 37% in the year 2002-03 as compared to a paltry growth of 2.5% during the year 2001-02. During the year 2002-03, total export was of the order of Rs 3800 crore as compared to Rs 2775 crore during the previous year. During the year 2003-04 the export of the sector has further grown by around 20%.

6.8 Tractors

- 6.8.1 At present, there are 14 units in the organized sector manufacturing agricultural tractors covering a wide range from lower Horse Power in the range of 16-20 to higher Horse Power of 50 and above. The Indian Tractor Industry has a total investment of over Rs. 4500 crore and turnover of Rs. 6500 crore. The industry employees over 25,000 people directly and over 1,00,000 people indirectly.
- 6.8.2 The Industry made a beginning in 1961 with a total production of 880 units. There has been a substantial growth in the production of tractors since late 1980s and the production reached a level of 2,66,385 in 1999-2000. The tractor industry which grew at a CAGR of 8% between 1990-2000, has experienced a sharp drop of 36% in the recent 3 years from 2000 to 2003 owing mainly to failure of monsoon in some states. Production figures of tractors during the last few years are given below: -

Year	Numbers
1994-95	1,62,900
1995-96	1,91,149
1996-97	2,21,743
1997-98	2,56,258
1998-99	2,53,850
1999-00	2,66,385
2000-01	2,34,575
2001-02	2,15,000
2002-03	1,62,000

While the production of tractors in the range of 31-40 HP is around 60%, it is 23% in the range of 41 HP and above. Below 30 HP category constitutes the balance 17% of the total production.

6.8.3 Technological capabilities:

Though tractor industry started production by importing technology from renowned manufacturers in USA, UK, USSR, Germany, Poland, Czechoslovakia etc. technology has been fully absorbed. Over the years, some tractor manufacturers have introduced higher Horse Power tractors of 75 HP with imported components for meeting the specific requirements of high HP category of tractors.

6.8.4 Markets:

Traditionally, Haryana, Punjab and Uttar Pradesh are the main States for the tractor market. The new markets for tractors in the States of Madhya Pradesh, Andhra Pradesh, Tamilnadu, Maharashtra and Gujarat are growing at a faster pace.

6.9 Earth Moving and Construction Machinery

6.9.1 Earth Moving Equipment and Construction Machinery Industry play a vital role in the economic development of our country. This industry is closely linked with major development and infrastructural schemes such as coal and mining, irrigation and power projects, ports, steel, fertilizers etc. The technology required to manufacture such machines was not earlier available. It was, therefore, necessary to permit import of technology for development of the same from internationally reputed manufacturers like KOMATSU, CATERPILLAR, POCLAIN, DRESSER, DEMAG & HITACHI. The earth moving equipment currently being manufactured include Shovels up to 10

cu.m. capacity, Excavators up to 8.5 cu.m. capacity, Bulldozers up to 770 HP, Dumpers up to 120 HP, Scrapper and Motor Graders up to 280 HP, walking Draglines, Mobile cranes etc. Construction equipment, particularly road construction equipment such as graders, loaders, excavators, vibratory compactors, hot mix plants etc. are being manufactured indigenously.

6.9.2 Indigenous production of Earth-moving and Construction Machinery commenced in 1960s. Today, country is, by and large, self-

sufficient in respect of these items. The total capacity available in the Earth Moving and Construction Equipment Industry is around 6000 nos. India has over 60 equipment manufacturers in organized sector besides several medium sized units. BEML supplies nearly half the total market. BEML and Caterpillar lead in dumpers and dozers while L&T Komatsu and Telecon lead in excavators and Escort JCB in Backhoe loaders. With the Government's emphasis and priority on the development of infrastructure, this group of industry is expected to grow in near future.

Technology Upgradation and R&D

7.1 A constant, conscious and concerted thrust on R&D is an essential ingradient to enable an enterprise to compete and survive in an increasingly competitive market environment. The deregulation of industry in its wake has brought the international competition at our doorstep further reinforcing the need for upgradation of technology to global standards. The changing demands of user sector also play a significant role in the selection of technologies and introduction of products. Given these realities, the Indian Industry which enjoyed protection for over four decades is bracing up to meet the challenge. While the Government appreciating the importance of promoting thrust on R&D have contemplated certain catalytic actions, the PSEs under the Department have also taken steps to acquire technology through technical and business alliances as well as pure R&D inputs. Areas where the country has specific advantages need to be strengthened to develop a brand image for the nation. In pursuance of these objectives, some of the initiatives taken by the Department are as under -

7.1.1 Integrated Gasification Combined Cycle (IGCC) project

Lately the increased production of SPM and green house gases in the atmosphere has worried the authorities and administrators alike. This has resulted in increased stress on more efficient methods of generation & utilization of energy through R&D initiatives. The Department of Heavy Industry in coordination with the Ministry of Power & close involvement of PSEs like BHEL and NTPC is supporting the Integrated Gasification Combined Cycle (IGCC) project. IGCC is combined cycle power plant wherein the fuel gas for gas turbine is generated by the gasification of coal (or any other carbonaceous fuels like refinery residues; such as pet coke, visbreaker tar etc.). The selection of the coal gasification process - which is largely decided by the type of coal available, and its efficiency integration with a suitably designed gas turbine is of paramount importance in achieving higher overall efficiency of IGCC plant.

BHEL has already made some headway in identifying & developing a technology suitable for local coal which has higher ash content and the project will result in better utilisation of 'high ash' Indian Coal besides improving the efficiency of power generation and reducing pollution.

7.1.2 Testing and R&D Infrastructure for Automotive Sector

In India, rapid industrialisation and consequent requirements for mobility of goods and passengers have led to high growth of vehicle population in recent years. Simultaneously, Emergence of statutory regulations on emission and safety has necessitated independent and comprehensive testing of vehicles and their major assemblies and sub-assemblies being manufactured and imported into the country. In consonance with the announced policy of positioning India as an international hub for manufacture of small cars, it is proposed to promote setting up of testing and R&D infrastructure in conformity with international safety and emission standards as also undertaking upgradation of existing facilities in the country to cater to the emerging needs of the auto sector.

7.2 R&D INITIATIVES BY THE PSEs

Some of the programmes of technology upgradation and R&D effort of the Public Sector enterprises under the Department of Heavy Industry are detailed below :

7.2.1 Bharat Heavy Electricals Ltd. (BHEL) -R&D Initiatives

R&D / Technology upgradation achievements by BHEL are as under :

- developed a Permanent Magnet based Actuator (PMA) for use in medium voltage vacuum circuit breakers up to 33 kV, 16 kA rating. The PMA has some advantages over the spring operated actuator mechanism used at present, such as simpler design, reduced maintenance requirements, greater reliability, lower cost etc. The PMA has been tested in the laboratory and the results are encouraging.
- developed a new method to test the impulse voltage withstandability of winding insulation paper of transformers, as specified by Power Finance Corporation for RLA of transformers. The possibility of filing a patent for the novel test procedure is being studied.
- developed and tested a model for six jet Pelton hydro turbine, with a head or 789 m, for the 4 x 200 MW Parbati HEP. The test results indicate that the weighted average efficiency of

92.271% achieved is better than the quoted efficiency of 92.225%. The peak efficiency is 92.33%. With this the efficiency of Pelton turbines for this head range is competitive against the current international level.

- developed a dry type 145 kV air to cable termination for interfacing between cable and the open air terminals of a transmission or distribution network. These are also suitable for terminating equipment like GIS etc. At present, these are being imported. Two prototype have been made and tested in-house.
- developed a 425 kW three phase AC induction motor suitable for use in 4000 HP diesel electric locomotives being manufactured by DLW. A prototype motor has been designed and manufactured and all performance tests successfully completed.
- developed an improved design of 850 kW three phase AC induction motors for use in 6000 HP electric locomotives. The technology for the motors was originally obtained from ABB through Railways. A patent on the process is being filed.
- developed a new technique to improve the accuracy of RLA studies of thermal power plants.

Some other R&D Technology Upgradation Projects started by BHEL during the year are as under :

- Development of three phase AC drive system for 700 HP Diesel Electric Locomotive.
- Development of improved pump hydraulics for 150 KHI Sigma design Boiler Feed Pump (BFP), manufacture



2 MVA Phase Shifting Transformer to enhance power transfer capability and improve system stability between two parallel 33 kv transmission lines - an innovation in the field of Flexible AC Transmission (FACTS)

& testing for 209E combined cycle power plants.

- Development of microcontroller based multi-fuel flame scanner.
- Development of common terminal for controlling electrostatic precipitators of multiple boilers.
- Development of cast resin dry type transformer using aluminium conductor.
- Development of phase shifting transformer with static tap changer.
- Design, development, manufacture, erection and trials on XRP 1103 Bowl Mill.
- Development of an artificial Intelligence based Technology for Laser Welding Applications.
- Design and development of SRL 254 Integrally Geared Turbo Compressor.

In BHEL, Information Technology has penetrated in all functional areas and it is suitably deployed in various facets of company's operations in its Engineering, Manufacturing, and Materials Management & Production functions.

The company has established its Corporate level wide area network, linking Manufacturing Units, Service Divisions, Project Sites and offices using both satellite and terrestrial network services, (VSATs, ISDN, Leased lines etc.). Major thrust for use of computer has been given in Engineering functions. All engineering centers are well equipped with engineering work stations using advanced Engineering Software for Designing , Modelling, Analysis & drafting etc. State of art Drawing data Management Systems are being installed for management of drawings.

Company has already prepared itself for the e-transformation in the merging era of New Economy and global competitiveness. The salient initiatives of the company in IT area include Enterprise Resource Planning (ERP) and web-based applications. BHEL became first PSE to implement e-enabled Performance Management System for all executives called e-map (Moving Ahead through Performance).

7.2.2 Burn Standard Co. Ltd. (BSCL) - R&D initiatives.

The company has undertaken following R&D and technology upgradation programme:

- (a) Beneficiation of Magnesite through Bioleaching:
- (b) Through re-designing of 1.5T capacity Export bags, the Load bearing capacity has been improved considerably. Salem Works are able to export material without palleting thus saving costs.
- (c) Introduction of Huck Bolt in place of Rivets as per requirement of Rly. Board.

7.2.3 Instrumentation Ltd., Kota (ILK) - R&D initiatives

The Palakkad Unit of the company has

46

developed Bellow Sealed Valve, received import substitution award from DGTD for this.

In the past, the Kota Unit has received award for import substitution of following products :

- Solenoid Valves for nuclear applications
- Throw-away thermocouples for measuring molten metal temperature.
- Miniature Electronic Indicators

7.2.4 Andrew Yule & Co. Ltd. (AYCL) -R&D initiatives

The main focus of in-house R&D facilities in the company is to provide continuous upgradation of existing products to match the needs of domestic as well as export market. This includes new product development, product extension and revalidation of the Test Certificate for the upper ranges to be followed up by prototype development and commercialisation. The major plans of the company are as under :

Product Development

- i) Development of VCB Panel of 12 kV
 40 KA Ratings to meet the requirement of Petro-chemical and other industrial Sectors.
- ii) Development of Dry Type Transformers
 in the range of 11 kV 995 KVA and 630
 KV. These Dry Type Transformers
 (instead of Oil based) are required by
 the industries as per the new
 Regulations.
- iii) Product approval for single Pole DC Contactors required for the Telecommunication Sectors.

iv) Development of 12 kV Raising Cast current Transformers for Export market.

Revalidation of Test Certificates

- i) Complete validation test for 33 kV 25
 KA Porcelain Clad Outdoor VCB.
- ii) Revalidation of Transwitch/UTS unit.
- iii) Type test for LT Contactors upto 600A
- iv) Mandatory validation test for 3.3 KV /6.6 KV Mining Switchgear.
- v) The Company's R&D set-up has been recognized by the Department of Scientific & Industrial Research.

7.2.5 Bridge & Roof Ltd. (B&R) - R&D endeavours

The company has carried out Research & Development and Technology Upgradation in the following areas :

- i) Highways and Expressways
- ii) Bailey bridge
- iii) Group gathering station
- iv) Furnace and heaters
- v) Soil densification by Vibraflot method
- vi) Railway wagons.

Customer response has been encouraging.

7.2.6 Hindustan Cables Ltd. (HCL) -R&D activities

The company's R&D Centre continued its efforts on standardization of new and cheaper basic raw materials for Jelly Filled Cables. It has developed water swellable flooding compound for telecom cable and cross-linked polythene for sleeve manufacturing. It is undertaking testing and standardizing various joint closures in association with TEC.

7.3 NATIONAL LEVEL INSTITUTES FOR R&D IN NEW TECHNOLOGIES

7.3.1 In the past, five national level institutes have been set up with UNIDO/UNDP assistance for research in newer technologies. These are ; Fluid Control Research Institute (FCRI), Pollution Control Research Institute (PCRI), Centre for Electric Transportation Technology (CET), Ceramic Technological Institute (CII), and Welding Research Institute (WRI). Out of these only FCRI is under the direct administrative control of the Department while the remaining four are under the control of the BHEL.

7.3.2 Fluid Control Research Institute, Palghat

The Fluid Control Research Institute (FCRI), set up as an independent national centre for developing a frame of reference/ standardisation in flow control/metering with precision, provides infrastructural facilities for applied engineering research projects in the area of fluid flow. It also acts as a national certifying authority for testing and calibration for all kinds of flow products. It has helped many organisations in obtaining ISO 9000 certification by calibrating their reference/master instruments with traceability to national standards and by imparting training as laid down in the ISO 9000 system requirements. It has set up a 20 bar HP air flow calibration and testing facility to enable the petroleum companies to have the tests carried out in India.

7.3.3 Ceramic Technological Institute, Bangalore

The developmental objective of this project is to support the Indian Ceramic Industry in modernising its technology and to develop new products of advanced ceramics. Many ceramic products required for the industry have been developed and a few of them commercialised. Test and evaluation services have been offered to more than 50 organisations.



Unique facility for noise studies at FCRI

7.3.4 Centre for Electric Transportation, Bhopal

The Project for development of Electric Transporation Technology was approved by the Govt. of India and UNDP in July 1988. The capabilities in the Centre have been developed to analyse and test all aspects of electrically powered vehicle designs to improve their performance, reliability and efficiency. The Centre is also able to conduct both computer and physical simulations of the vehicles' performance under all foreseable operating conditions.

7.3.5 Pollution Control Research Institute, Hardwar

Pollution Control Research Institute (PCRI) was set up by Department of Heavy Industry with Bharat Heavy Electricals Ltd. (BHEL) as the lead agency under United Nations Development Programme (UNDP). The development objective of PCRI project is to evolve industrial pollution control technologies with respect to air, water, house and solid wastes to avoid unintended side effects of economic growth. The Institute provides services to various industries and Thermal Power Stations on a regular basis.

7.3.6 Welding Research Institute (WRI), Tiruchirapalli

Welding Research Institute (WRI), the only one of its kind in the country, is equipped with state of art welding research facilities like electron and laser beam, flashbutt, friction and plasma welding in addition to facilities for conventional arc welding. Further, it has advanced testing facilities for fatigue testing, residual stress measurement, residual life estimation etc. The institute has entered into an agreement with GTZ Germany for undertaking cooperative research projects in welding, in the IInd phase of the Project. During the year 2003-04, seminars were conducted by WRI for application of the technologies in the Auto sector.

Welfare of Minorities

- 8.1 It has been the endeavor of this Department to oversee the obligations of PSEs to promote the welfare of minorities in the light of Government's directives on the subject.
- 8.2 There is an SC/ST Cell and a Liaison Officer of the rank of Director made responsible for monitoring implementation of reservation Policy of Government of India in the PSEs under the administrative control of this Department. This cell is also responsible for conducting annual inspections of reservation rosters of the PSEs. The work force in the PSEs comprises a large number of persons from different minority communities. Their integration into the mainstream workforce is promoted by ensuring that there is no discrimination

on account of caste, creed or religious beliefs.

- 8.3 Every year "Quami Ekta/Sadbhavna Diwas" is organized where people from all sections of the society including women and children participate to stimulate the spirit of oneness, national integration and harmony.
- 8.4 During the year 2003-04 the Parliamentary Committee on the welfare of Scheduled Castes & Scheduled Tribes had interaction with the management of Hindustan Photo Films Ltd. regarding representative of SC/ST in services. The representatives from the Department also participated in these meetings to ensure suitable follow up on the recommendations and observations of the committee.

Vigilance

- 9.1 The Department has a Chief Vigilance Officer of the rank of Joint Secretary to look into complaints against the employees of the Department as well as Board Level Officers of the Public Sector Enterprises and Organizations under its administrative control. He is assisted by Director and an Under Secretary along with a Vigilance Section.
- 9.2 The main areas of work of Vigilance Section are:
 - Dealing with complaints against Board level appointees of PSEs as well as the officers of the Department of Heavy Industry;
 - Issue of vigilance clearance in respect of Board level appointees in PSEs and all other appointments based on PESB recommendations requiring ACC approval;
 - Liaisoning with CVC, CBI and CVOs of PSEs under Department of Heavy Industry to streamline flow of

information in respect of vigilance matters;

- Tendering advice on issues of financial irregularity and procedural irregularity;
- Vetting charge sheets in respect of charges against Board level appointees.
- 9.3 The Vigilance Organization also lays emphasis on preventive vigilance.However, punitive measures are taken in appropriate cases and duly followed up.
- 9.4 Vigilance Section is responsible for maintaining Annual Confidential Reports of officers and staff of the Department and also of the Board level appointees and Chief Vigilance Officers (CVOs) of PSEs under the administrative control of this Department.
- 9.5 The Vigilance Section monitors submission of Annual Property Returns by officers and staff of the Department of Heavy Industry as well as Chief Executives of PSEs under Department of Heavy Industry.

Progressive Use of Hindi

- 10.1 The efforts to promote the use of Hindi in official work of the Department were continued during the year 2003-04. The Official Language Implementation Committee held its meetings regularly to review the progress made in use of Hindi and suggested ways to remove the impediments in implementation of the provisions of the Official Language Act, 1963 and the rules made thereunder.
- 10.2 The Hindi Advisory Committee also met twice & provided valuable guidance to the department to promote to use of Hindi.
- 10.3 During the period under review, the Parliamentary Committee on Official Language inspected the offices of Bharat Heavy Electricals Limited, situated at Hyderabad, Noida (U.P.) and Mumbai and HMT, Bangalore and processing machinery unit of HMT, Aurangabad and while expressed satisfaction with the progress also provided valuable guidance. The officers of the Department carried out inspections of a number of enterprises during the year to monitor progress made in use of Hindi and the officers of these enterprises so visited were apprised of the Official Language Policy of the Government of India.
- 10.4 All the Notifications, Resolutions, Notes and Circulars, Parliament Questions, Annual Reports, General Orders and papers laid on the Tables of both the Houses of the Parliament were issued both in Hindi and in English. All the letters received in Hindi were responded to in Hindi. In order

to promote the use of Hindi and to increase correspondence in Hindi, a "Hindi Pakhwara" was organized from 16th September 2003 to 30th September, 2003 during which several competitions including Noting/drafting, Essay writing and Paragraph writing in Hindi were conducted. Officers of the Department participated in these activities with keen interest. Cash awards were given to winning candidates. A workshop was also organized for officers/employees of the Department to impart training in noting/ drafting in Hindi as well as filling up the proforma for quarterly report for progressive use of Hindi correctly. The provisions of the Official Language Act, 1963, were impressed upon all concerned.

- 10.5 Following important steps were taken to promote progressive use of Hindi in official work during the year:
 - (i) Under rule 10(4) of the Official Language (Use for Official purpose of the Union) Rule 1976, the Central Government is required to notify the offices where more than 80% staff have acquired working knowledge of Hindi. Accordingly the Department identified and notified a unit of Hindustan Paper Corporation, Nagoan (Assam) and Bharat Heavy Electricals Limited, Power Sector (Hqrs.), Noida.
 - (ii) Implementation of the programme of learning Hindi through 'AAJ KA SHABDA'.

10.6 Public Sector Enterprises, under the administrative control of this Department also continued to make vigorous efforts to implement the Official Language Act and its provisions. Various Seminars,

competitions and workshops were organized in these PSEs to propagate use of Hindi. **"HINDI PAKHWARA"/ "HINDI WEEKS**" were celebrated in these PSEs with great zeal.

Empowerment / Welfare of Women

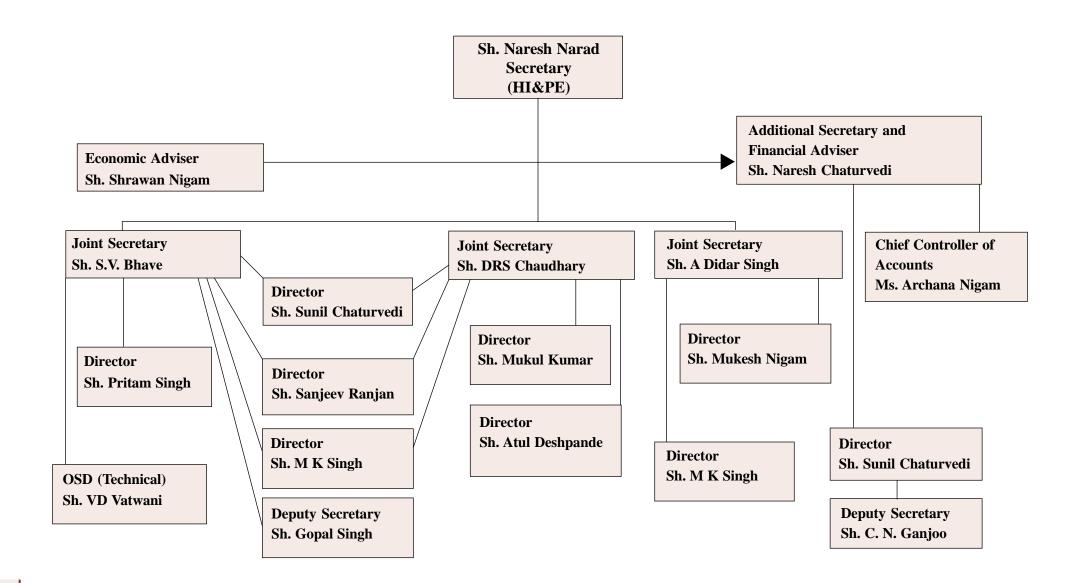
- 11.1 Department of Heavy Industry and the PSEs under its administrative control value the principle of gender mainstreaming and gender justice enshrined in the Constitution of India
- 11.2 In compliance with the Hon'ble Supreme Court judgement for the reservation and enforcement of the right to gender equality of working women, a Complaints Committee has been constituted in this Department for redressal of complaints relating to sexual harassment of women. The guidelines laid down by Supreme Court in this regard have been brought to the notice of the employees of this Department. Moreover, the Department

of Public Enterprises vide their O.M. dated 29th May, 1998, has issued detailed guidelines and norms to Chief Executives of PSEs for prevention of sexual harassment of working women.

11.3 It is a constant endeavor of the Department to see that there is no discrimination against women on any account. Ladies are encouraged to freely participate in all activities in the Department like meetings, seminars, training etc. The Department has constituted a complaint Committee headed by a woman officer for redressal of complaints relating to sexual harassment of women workers at work places.

ORGANOGRAM OF DEPARTMENT OF HEAVY INDUSTRY

As on 31.03.2004



General Information about the Public Sector Enterprises under the Department of Heavy Industry

			(Rs. in crore)
SI.No.	Name of PSE and location of Registered Office	Year of setting up of PSE	Gross Block as on 31.3.2004 (Provisional)
1	Andrew Yule & Co.Ltd. (AY&CO) Kolkata	1979	192.30
2	Hoogly Printing Kolkata	1979	1.66
3	Bharat Heavy Electricals Ltd. (BHEL), New Delhi	1956	3576.00
4	Burn Standard Co. Ltd. (BSCL), Kolkata	1976	133.36
5	Braithwaite & Co. Ltd. Kolkata	1976	40.74
6	Bharat Wagon Engineering Company Ltd (BWEL) Patna	1978	16.71
7	BBJ Construction Co. Ltd.	1987	7.15
8	Bharat Heavy Plates & Vessels Ltd. (BHPV) Vishakhapatnam	1966	77.52
9	Bharat Pumps & Compressors Ltd. (BPCL) Allahabad	1970	37.87
10	Richardson & Cruddas (R&C) Mumbai	1972	30.71
11	Triveni Structurals Ltd. (TSL) Allahabad	1965	20.14
12	Tunghabhadra Steel Products Hospet, Karnataka	1967	22.17
13	Bridge and Roof Co. (India) Kolkata	1972	101.30
14	Hindustan Cables Ltd. (HCL) Kolkata	1952	525.42
15	Heavy Enginering Corpn. Ltd. (HEC), Ranchi	1958	309.88

SI.No.	Name of PSE and location of Registered Office	Year of setting up of PSE	(Rs. in crore) Gross Block as on 31.3.2004 (Provisional)
16	HMT Ltd. (Holdg Company) Bangalore	1953	115.94
17	HMT Machine Tools Ltd. Bangalore	2000	212.14
18	HMT Watches Ltd. Bangalore	2000	187.62
19	HMT Chinar Watches Ltd. Bangalore	2000	10.46
20	Praga Tools Ltds (PTL) Secundrabad	1959	37.64
21	HMT (Bearing)	1981	28.68
22	HMT(International Bangalore	1974	22.00
23	Instrumentation Ltd, (IL) Kota	1964	66.35
24	REIL Jaipur	1981	8.02
25	National Instruments Ltd. (NIL) Kolkata	1957	9.17
26	Scooters India Ltd. (SIL) Lucknow	1972	50.00
27	Bharat Opthalmic Glass Ltd. (BOGL) Durgapur	1972	5.91
28	Cement Corpn.of India Limited (CCI), New Delhi	1965	643.29
29	Hindustan Paper Corporation Ltd. (HPC) Kolkata	1970	775.02
30	Hindustan Newsprint Ltd. (HNL) Vellore Kottayyam	1983	348.58
31	Hindustan Photo Films Mfg. Co. Ltd. (HPF) Ooty	1960	715.00
32	Hindustan Salts Limited (HSL) Jaipur	1959	4.30

			(Rs. in crore)
SI.No.	Name of PSE and location of Registered Office	Year of setting up of PSE	Gross Block as on 31.3.2004 (Provisional)
33	Sambhar Salts Limited (SSL) Jaipur	1964	6.70
34	Nepa Ltd. (NEPA) Nepanagar	1949	115.00
35	Tyre Corpn. of India Ltd. (TCIL) Kolkata	1984	127.67
36	Engineering Projects (India) Ltd. (EPI) New Delhi	1970	16.37
	TOTAL		8598.79

Note : (i) 9 PSEs namely, BPME, WIL, BBVL, RBL, TAFCO, CCIL, NBCIL, MAMC & RIC have been closed and 3 PSEs (BLC, NIDC & NPPC are not in operation.

(ii) Apart from above 36 PSEs, there are two non-manufacturing holding companies (BBUNL & BYNL) and one non-operational subsidiary namely; Scooters India International GmbH.

Employment Position including SC/ST, as on 31.3.2004 (Provisional) in Public Sector Enterprises under the Department of Heavy Industry.

o. Name of PSE	-	TOTAL NO. C	OF EMPLOYEE	S	No. of SC	No. of ST
_	Executives	Supervisors	Workmen/ Others	Total	Employees	Employees
2	3	4	5	6	7	8
Andrew Yule	227	117	15841	16185	257	654
Hoogly Printing	8	8	49	65	1	_
BHEL	9813	7219	26927	43959	8095	1738
BSCL	124	164	1348	1636	_	-
BRAITHWAITE	77	47	448	572	_	_
BWEL	45	44	900	989	88	2
BBJ	41	10	42	93	6	1
BHPV	393	181	1150	1724	301	118
BPCL	227	51	979	1257	204	2
R&C	63	12	36	111	6	-
TSL	84	63	271	418	54	-
TSP	55	34	329	418	86	9
B&R	458	532	411	1401	169	5
HCL	467	474	2271	3212	849	235
HEC	643	607	2487	3737	310	667
HMT	297	176	2095	2568	559	108
HMT (MT)	1035	540	3139	4714	822	217
HMT (Watches)	206	241	1779	2226	395	99
HMT (Chinar Watches) 22	108	530	660	53	4
PTL	94	6	459	559	98	13
HMT(Bearing)	56	55	272	383	46	-
HMT (I)	43	27	11	81	12	3
	Andrew Yule Hoogly Printing BHEL BSCL BSCL BRAITHWAITE BWEL BBJ BHPV BPCL R&C TSL R&C TSL TSP B&R HCL HCL HMT (MT) HMT (Watches) HMT (Chinar Watches	Executives 2 3 Andrew Yule 227 Hoogly Printing 8 BHEL 9813 BSCL 124 BRAITHWAITE 77 BWEL 45 BBJ 41 BHPV 393 BPCL 227 R&C 63 TSP 55 B&R 458 HCL 467 HEC 643 HMT (MT) 1035 HMT (Watches) 227 PTL 94 HMT(Bearing) 56	Executives Supervisors 2 3 4 Andrew Yule 227 117 Hoogly Printing 8 8 BHEL 9813 7219 BSCL 124 164 BRAITHWAITE 77 47 BWEL 45 44 BBJ 41 10 BHPV 393 181 BPCL 227 51 R&C 63 12 TSL 84 63 TSP 55 34 HEC 643 607 HMT 297 176 HMT (MT) 1035 540 HMT (Watches) 20 241 HMT (Chinar Watches) 22 108 PTL 94 6	ExecutivesSupervisorsWorkmerry Others2345Andrew Yule22711715841Hoogly Printing84849BHEL9813721926927BSCL1241641348BRAITHWAITE77474448BWEL45444900BBJ4110422BHPV3931811150BPCL22751979R&C63122364TSP5534329B&R458532411HCL4674672487HMT (MT)1035403139HMT (Watches)2054530FMT (Chinar Watches)22108530HMT(Bearing)5655222	ExecutivesSupervisorsWorkmen/ OthersTotal23456Andrew Yule2271171584116185Hoogly Printing884965BHEL981372192692743959BSCL12416413481636BRAITHWAITE7747448572BWEL4544900989BBJ411004293BHPV39318111501724BPCL227519791257R&C631236111TSL8463271418B&R4585324111401HCL46747422713212HEC64360724873737HMT (MT)103554031394714HMT (Watches)22108530660PTL946459532453	ExecutivesSupervisorsWorkmen/ OthersTotalEmployees234567Andrew Yule2271171584116185257Hoogly Printing8849651BHEL9813721926927439598095BSCL12416413481636-BRAITHWAITE7747448572-BWEL454490098988BBJ4110429366BHPV39318111501724301BPCL227519791257204R&C6312361116TSL846327141856B&R4585324111401169HCL46747422713212849HEC64360724873737310HMT (MT)103554031394714822HMT (Vatches)22108530660535PTL94645955998HMT(Chinar Watches)22108530660538PTL94645955998HMT(Kearing)565527238346

59

S. N	o. Name of PSE	-	FOTAL NO. C	F EMPLOYEES	5	No. of SC	No. of ST
		Executives	Supervisors	visors Workmen/ Others		Employees	Employees
1	2	3	4	5	6	7	8
23	IL	242	735	820	1797	294	83
24	REIL	49	42	99	190	27	11
25	NIL*	4	67	211	282	49	9
26	SIL	239	81	1491	1811	307	2
27	BOGL	12	2	189	203	21	4
28	CCI	188	206	1213	1607	198	129
29	HPC	604	217	2137	2958	275	234
30	HNL	191	85	849	1125	78	4
31	HPF	95	70	929	1094	179	56
32	HSL	12	29	103	144	22	7
33	SSL	7	28	108	143	39	10
34	NEPA	129	0	1354	1483	108	23
35	TCIL	35	44	275	354	17	3
36	EPIL	361	91	17	469	77	13
	TOTAL	16646	12413	71569	100628	14102	4463

Note: (I) 9 PSEs namely; BPME, WIL, BBVL, RBL, TAFCO, CCIL, NBCIL, RIC and MAMC have been closed and 3 PSEs (BLC,NIDC &NPPC) are not in operation

(ii) Apart from above 36 Operating PSEs, there are two non-manufacturing holding companies (BBUNL & BYNL) and one non-operational Subsidiary, namely; Scooters India International GmbH.

* As on 31.3.2003

Statement showing Production Performance of Public Sector Enterprises under the Department of Heavy Industry

						(Rs. in crore)
S.No.	Name of PSE	2000-2001 (Actual)	2001-2002 (Actual)	2002-2003 (Actual)	2003-2004 (Provisional)	2004-2005 (Target)
1	2	3	4	5	6	7
1	AY&CO	167.02	112.45	106.54	97.96	163.87
2	Hooghly Printing	3.32	7.11	11.64	9.25	10.00
3	BHEL	6348.00	7287.00	7482.00	8653.00	9200.00
4	BSCL	235.02	118.79	208.35	176.92	276.36
5	BRAITHWAITE	147.11	75.20	75.15	65.44	102.37
6	BWEL	113.44	74.54	39.05	11.91	96.76
7	BBJ	37.51	36.47	41.93	29.80	40.00
8	BHPV	264.27	223.17	220.13	41.05	150.00
9	BPCL	59.51	66.42	68.00	47.26	60.00
10	R&C	74.90	53.69	47.47	24.81	25.00
11	TSL	13.70	24.58	30.22	0.49	5.00
12	TSP	37.42	15.03	10.84	7.47	15.00
13	B&R	334.49	344.21	364.24	403.75	450.00
14	HCL	875.08	579.08	403.46	104.86	491.91
15	HEC	147.19	162.10	141.82	149.39	231.00
16	НМТ	296.57	217.68	141.45	129.35	283.85
17	HMT (MT)	200.95	227.76	197.07	178.34	310.00
18	HMT (Watch)	144.08	79.06	44.49	25.65	200.00
19	HMT (Chinar Watches)	1.78	2.11	2.72	1.98	10.00
20	PTL	6.42	3.98	6.29	8.12	22.58
21	HMT(B)	45.00	41.68	18.40	23.60	60.00
22	HMT(I)	46.81	58.69	43.92	29.58	61.20

						(Rs. in crore)
S.No.	Name of PSE	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
		(Actual)	(Actual)	(Actual)	(Provisional)	(Target)
1	2	3	4	5	6	7
23	IL	106.74	107.85	131.53	139.02	165.00
24	REIL	32.03	35.45	44.00	44.05	55.65
25	NIL	5.63	5.48	5.14	3.62	4.25
26	SIL	116.79	124.65	134.50	157.15	168.62
27	BOGL	3.71	3.09	2.02	0.05	2.41
28	CCI	74.85	131.45	122.00	132.16	199.18
29	HPC	468.83	521.73	564.27	569.81	582.93
30	HNL	254.02	242.24	204.05	250.94	246.75
31	HPF	31.97	42.40	30.32	28.43	29.00
32	HSL	3.80	4.19	5.00	6.96	9.04
33	SSL	3.83	6.09	6.22	6.20	9.25
34	NEPA	131.75	99.97	32.04	38.15	115.16
35	TCIL	94.57	61.36	128.22	144.88	150.65
36	EPI	260.97	390.53	358.71	400.78	508.72
	TOTAL	11189.08	11587.28	11473.20	12142.18	14507.31

Note: (i) 9 PSEs namely; BPME, WIL, BBVL, RBL, TAFCO, CCIL, NBCIL, RIC and MAMC have been closed and 3 PSEs (BLC, NIDC & NPPC) are not in operation.

(ii) Apart from above 36 operating PSEs, there are two non-manufacturing holding companies (BBUNL & BYNL) and one non-operational subsidiary, namely; Scooters India International GmbH.

Statement showing Profit(+)/Loss (-) (Before Tax) of Public Sector Enterprises under the Department of Heavy Industry

						(Rs. in crore)
S. No.	Name of PSE	2000-2001 (Actual)	2001-2002 (Actual)	2002-2003 (Actual)	2003-2004 (Provisional)	2004-2005 (Target)
1	2	3	4	5	6	7
(A) P	ROFIT MAKING PSEs					
1	Hoogly Printing	0.05	0.41	1.72	1.02	1.23
2	BHEL	294.00	663.00	803.00	979.00	920.00
3	HPC	32.80	63.75	40.60	42.15	43.59
4	HNL	30.35	6.45	-7.55	9.00	5.93
5	B&R	3.39	3.61	3.85	3.07	6.00
6	EPI	17.76	9.44	3.01	2.26	5.00
7	HMT (I)	0.38	0.54	0.34	0.11	0.70
8	REIL	0.43	0.60	3.55	3.58	4.35
9	SIL	5.10	2.26	2.65	2.80	2.75
	Sub-total for (A) Profit making Cos.	384.26	750.06	851.17	1042.99	989.55
(B) L	OSS MAKING PSEs					
10	AY&CO	-26.78	-39.45	-60.66	-55.04	-6.89
11	BRAITHWAITE	1.74	-33.55	-21.89	-23.42	-15.78
12	BSCL	-45.22	-78.35	-73.74	-77.95	-77.92
13	BBJ	0.60	0.57	-4.39	-5.88	-2.64
14	BWEL	-4.69	-26.87	-8.99	-22.15	-9.93
15	TSP	0.07	-0.66	-2.63	-99.98	-14.50
16	BHPV	0.94	1.72	1.53	-158.81	-20.00
17	BPCL	-5.59	-11.86	-8.51	-24.75	-8.20
18	R&C	-8.15	-19.21	-28.19	-40.64	-27.00
19	TSL	-45.92	-12.23	-8.54	-27.00	-13.00

63

						(Rs. in crore)
S.	Name of	2000-2001	2001-2002	2002-2003	2003-2004	2004-2005
No.	PSE	(Actual)	(Actual)	(Actual)	(Provisional)	(Target)
1	2	3	4	5	6	7
20	HCL	-71.41	-236.08	-256.31	-302.16	-298.30
21	HEC	-189.26	-173.78	-173.82	-136.12	-32.33
22	HMT (Hldg. Co.)	24.41	10.24	-34.41	-6.64	10.75
23	HMT (B)	2.21	1.02	-15.03	-9.81	8.65
24	HMT (MT)	-96.17	-70.65	-102.05	-113.96	-48.84
25	HMT (Watch))	-59.00	-106.00	-113.00	-115.41	-11.00
26	HMT (Chinar)	-7.95	-10.16	-6.31	-22.18	5.90
27	PTL	-34.42	-35.06	-37.50	-10.79	-1.66
28	ILK	-34.52	-30.49	-29.18	-28.63	-1.23
29	NIL	-4.48	-5.90	-2.08	-2.15	-2.29
30	BOGL	-24.88	-31.87	-35.11	-39.95	-40.82
31	CCI	-230.76	-215.33	-215.36	-61.70	-209.06
32	HPF	-328.16	-353.72	-385.39	-457.13	-518.50
33	HSL	-2.19	-1.91	-2.78	-2.26	-1.15
34	SSL	-3.27	-3.02	-2.66	-2.89	-2.11
35	NEPA	4.86	-35.16	-50.90	-41.18	-31.81
36	TCIL	-66.43	-67.41	-16.91	-37.02	-67.32
	Sub-total (B) Loss making Cos.	-1254.42	-1585.17	-1694.81	-1925.6	-1436.98
	GRAND TOTAL (A&B)	-870.16	-835.11	-843.64	-882.61	-447.43

Note: (i) 9 PSEs namely; BPME, WIL, BBVL, RBL, TAFCO, CCIL, NBCIL, RIC and MAMC have been closed and 3 PSEs (BLC, NIDC & NPPC) are not in operation.

(ii) Apart from above 36 operating PSEs, there are two non-manufacturing holding companies (BBUNL & BYNL) and one non-operational subsidiary, namely; Scooters India International GmbH.

(iii) Categorisation of profit-making/loss-making PSEs has been based on results of 2003-04 (Prov.).

65

ANNEXURE - VI

STATEMENT SHOWING SALARY/WAGE BILL & SOCIAL OVERHEADS AS % OF TURNOVER OF PUBLIC SECTOR ENTERPRISES UNDER THE DEPARTMENT OF HEAVY INDUSTRY

			Wages and s	salaries as % o	of Turnover			overheads as %			
SI.No.	Name of	2000-01	2001-02	2002-03	2003-04	2004-2005	2000-01	2001-02	2002-03	2003-04	2004-2005
	PSE	(Actual)	(Actual)	(Actual)	(Provisional)	(Target)	(Actual)	(Actual)	(Actual)	(Provisional)	(Target)
1	2	3	4	5	6	7	8	9	10	11	12
1	AY&CO	34.13	47.58	54.85	58.23	26.00	4.92	6.60	5.92	5.60	5.30
2	Hoogly Ptg.	30.87	21.78	13.48	17.08	16.85	2.74	1.31	1.02	1.03	1.15
3	BHEL	26.09	19.83	20.11	19.24	19.06	3.28	3.14	2.52	2.85	2.72
4	BSCL	39.94	42.77	20.54	16.29	15.49	2.89	4.68	2.08	2.77	2.22
5	BRAITHWAITE	23.97	52.64	29.59	16.18	12.72	1.30	2.78	1.51	1.83	1.58
6	BWEL	34.18	65.53	60.34	158.72	18.84	1.54	0.95	1.08	3.38	0.61
7	BBJ	14.40	12.11	12.00	15.34	12.50	0.91	0.90	0.77	1.30	0.88
8	BHPV	20.25	21.17	29.18	52.80	16.21	2.54	2.79	2.17	4.04	2.46
9	BPCL	49.44	32.68	42.27	50.07	27.58	5.38	3.78	4.42	5.60	4.50
10	R&C	8.31	11.43	27.75	19.61	3.40	1.07	1.13	0.94	1.37	0.20
11	TSL	97.73	41.42	219.68	630.92	65.20	18.25	7.00	3.71	17.20	16.80
12	TSP	25.35	21.47	69.60	86.29	31.93	1.40	1.56	3.91	4.10	2.40
13	B&R	10.61	10.64	11.49	10.02	7.54	0.84	0.78	0.81	0.69	0.57
14	HCL	5.96	10.33	15.28	59.96	12.28	1.11	1.18	1.62	5.31	1.33
15	HEC	67.45	46.21	34.58	32.43	24.43	13.14	7.30	4.82	6.38	2.84
16	HMT(Hldg)	23.04	21.13	32.43	38.60	17.84	2.56	2.58	3.48	3.95	1.82
17	HMT(MT)	59.00	39.00	43.00	57.00	30.00	8.00	4.00	3.00	4.00	3.00
18	HMT(Watches)	58.73	67.74	105.55	153.66	16.00	5.82	6.29	9.06	18.18	1.88
19	HMT(Chinar)	499.00	511.00	1074.00	648.00	122.00	47.00	69.00	152.00	97.00	17.00
20	PTL	142.00	209.00	109.00	78.00	25.00	41.00	56.00	42.00	30.00	10.00
21	HMT(B)	27.00	30.00	54.00	31.52	18.00	4.00	4.00	5.00	5.59	2.00
22	HMT(I)	5.15	3.23	4.66	7.03	3.25	1.07	0.70	0.98	1.35	0.75
23	IL	39.38	36.87	28.90	24.14	18.79	2.20	2.05	1.70	1.38	1.15
24	REIL	13.40	11.23	9.82	7.45	8.67	2.62	2.54	2.59	1.63	1.87
25	NIL	62.00	64.00	48.17	18.38	17.21	0.18	0.16	0.16	0.08	0.23
26	SIL	18.84	18.65	16.70	18.16	16.28	4.44	4.63	4.74	4.78	4.34
27	BOGL	107.39	83.82	202.31	325.98	87.18	31.03	23.24	56.58	38.80	10.38
28	CCI	68.23	42.54	32.07	22.85	12.06	27.86	12.64	11.61	3.43	3.01
29	HPC	9.71	10.14	9.47	9.68	12.78	5.30	4.99	4.45	4.58	4.09
30	HNL	8.51	9.74	8.71	8.89	11.76	5.17	5.47	4.75	3.66	3.20
31	HPF	91.15	70.74	49.07	46.86		3.76	2.39	2.74	2.55	
32	HSL	69.07	64.73	63.44	33.00	31.14	6.06	4.77	3.67	3.10	3.40
33	SSL	90.58	43.04	47.26	40.00	39.12	6.93	3.19	3.22	2.70	2.76
34	NEPA	12.00	20.00	30.00	43.00	13.00	2.00	3.00	5.00	2.00	2.00
35	TCIL	34.28	31.70	14.77	18.34	10.15	5.65	4.26	5.10	4.14	4.17
36	EPIL	6.85	4.41	5.27	4.37	3.59	1.01	0.91	1.00	0.94	0.72

Note (I) 9 PSEs namely; BPME, WIL, BBVL, RBL, TAFCO CCIL NBCIL, RIC and MAMC have been closed and 3 PSEs (BLC, NIDC & NPPC) are not in operation.

(ii) Apart from above 36 Operating PSEs, there are two non-manufacturing holding companies (BBUNL & BYNL) and one non-operational Subsidiary, namely; Scooters India International GmbH.

7/18/2004, 4:49 PM

Statement Showing Order Book Position of Public Sector Enterprises under the Department of Heavy Industry

						(Rs. in crore)
S.No.	Name of PSE	As on				
		1.10.1999	1.10.2000	1.10.2001	1.10.2002	1.10.2003
1	2	3	4	5	6	7
1	AY & CO	117.35	130.78	140.05	131.66	103.54
2	Hoogly Ptg	0.25	0.20	0.11	2.84	1.10
3	BHEL	10082.00	10526.00	10029.00	12573.00	19000.00
4	BSCL	112.50	123.20	86.83	111.02	174.74
5	Braithwaite	155.23	156.20	19.98	106.85	130.59
6	BWEL	77.79	108.56	33.24	32.68	115.48
7	BBJ	30.19	57.79	40.09	51.99	45.24
8	BHPV	158.52	309.20	183.05	130.41	115.50
9	BPCL	26.24	66.10	73.91	38.83	43.50
10	R&C	83.21	96.80	79.71	158.15	69.20
11	TSL	50.85	46.70	38.58	37.72	36.00
12	TSP	26.43	55.00	25.95	32.65	24.40
13	B&R	239.73	325.40	375.77	385.16	636.40
14	HCL	72.16	185.49	243.49	351.63	164.00
15	HEC	169.03	150.93	150.32	99.63	192.90
16	HMT (Hldg)	NA	NA	NA	NA	NA
17	HMT (MT)	140.57	133.00	145.08	99.19	111.23
18	HMT (W)	NA	NA	NA	NA	NA
19	HMT (Ch)	NA	NA	NA	NA	NA
20	PTL	12.34	12.74	8.12	5.30	4.47
21	HMT (B)	18.02	2.25	2.28	4.37	2.15
22	HMT(I)	28.19	38.30	42.53	53.15	12.11
23	IL	64.00	36.03	34.85	53.82	88.50
24	REIL	4.91	6.04	19.43	16.94	27.09
25	NIL	4.14	2.16	2.51	2.13	0.38
26	SIL	-				-
27	BOGL	0.59	0.41	0.44	0.52	0.59
28	CCI	22.30	12.29	110.41	4.17	-
29	HPC	9.37	24.89	24.10	4.15	15.21
30	HNL	-	-	-	-	
31	HPF	-	-	0.00	5.10	2.60
32	HSL	1.00	2.21	0.39	3.22	6.12
33	SSL	2.05	1.20	2.10	1.03	2.07
34	NEPA	16.25	27.80	6.59	5.94	4.99
35	TCIL	15.84	9.00	5.00	4.80	5.39
36	EPIL	261.00	430.00	626.45	595.78	891.26
	TOTAL	12002.05	13076.67	12550.36	15103.83	21923.84

Note: (i) 9 PSEs namely; BPME, WIL, BBVL, RBL, TAFCO, CCIL, NBCIL, RIC and MAMC have been closed and 3 PSEs (BLC, NIDC & NPPC) are not in operation.

(ii) Apart from above 36 operating PSEs, there are two non-manufacturing holding companies (BBUNL & BYNL) and one non-operational subsidiary, namely; Scooters India International GmbH.
 N.A. Not Applicable

ANNEXURE - VIII

EXPORT PERFORMANCE OF PUBLIC SECTOR ENTERPRISES UNDER THE DEPARTMENT OF HEAVY INDUSTRY

		19	999-2000		20	000-2001		20	001-2002		2002			2003-2004 (Pro		sional)
SI No.	PSEs	Physical	Deemed	Total	Physical	Deemed	Total	Physical	Deemed	Total	Physical	Deemed	Total	Physical	Deemed	Tota
1	AY&CO	10.49	17.79	28.28	8.86	12.00	20.86	8.09	0.00	8.09	6.51	2.10	8.61	0.33	3.40	3.73
2	BHEL	355.00	1395.00	1750.00	247.00	1426.00	1673.00	987.00	1524.00	2511.00	637.00	1529.00	2166.00	603.00	1484.00	2087.0
3	BSCL	2.69	0.17	2.86	2.80	0.00	2.80	4.89	0.00	4.89	1.48	13.17	14.65	2.48	4.90	7.38
4	BWT	0.00	0.00	0.00	7.84	0.00	7.84	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	BWEL	0.00	0.20	0.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	BBJ	0.00	2.05	2.05	0.00	2.26	2.26	0.00	1.43	1.43	0.00	0.63	0.63	0.00	0.00	0.00
7	BHPV	12.78	5.19	17.97	2.00	2.92	4.92	0.00	6.37	6.37	0.00	0.00	0.00	0.00	0.00	0.00
8	BPCL	0.00	0.14	0.14	0.00	0.01	0.01	0.00	0.00	0.00	0.00	4.63	4.63	0.00	5.27	5.27
9	R&C	0.41	3.06	3.47	0.34	0.99	1.33	0.24	0.30	0.54	0.71	0.00	0.71	0.00	0.00	0.00
10	TSL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	TSPL	2.58	7.03	9.61	2.58	7.03	9.61	1.69	1.86	3.55	0.00	0.00	0.00	0.00	0.00	0.00
12	B&R	0.00	0.00	0.00	0.88	0.00	0.88	8.47	0.00	8.47	8.97	0.00	8.97	0.69	0.00	0.69
13	HCL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	HEC	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	HMT (MT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	HMT (W)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
17	PTL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.16	0.08	0.77	0.85
18	HMT (B)	0.05	0.00	0.05	0.11	0.00	0.11	0.15	0.00	0.15	0.07	0.00	0.07	0.00	0.00	0.00
19	HMT (I)	34.37	0.00	34.37	39.18	0.00	39.18	49.68	0.00	49.68	34.73	0.00	34.73	29.58	0.00	29.58
20	IL	0.10	1.40	1.50	0.80	0.00	0.80	0.25	1.34	1.59	0.51	1.89	2.40	0.26	3.85	4.11
21	REIL	0.42	0.00	0.42	0.25	0.00	0.25	0.08	0.00	0.08	0.09	0.00	0.09	0.16	0.15	0.31
22	NIL	0.01	0.00	0.01	0.09	0.00	0.09	0.02	0.00	0.02	0.01	0.00	0.01	0	0.00	0.00
23	SIL	6.26	0.00	6.26	1.29	0.00	1.29	0.31	0.00	0.31	0.94	0.00	0.94	1.05	0.00	1.0
24	HPC	26.90	3.21	30.11	3.39	14.58	17.97	0.00	25.17	25.17	0.00	10.32	10.32	0.00	3.12	3.12
25	HPF	0.01	0.00	0.01	0.36	0.00	0.36	0.40	0.00	0.40	0.59	0.00	0.59	0.31	0.00	0.3
26	HSL	0.73	0.00	0.73	0.81	0.00	0.81	0.92	0.00	0.92	0.65	0.00	0.65	0.38	0.00	0.38
27	SSL	0.00	0.00	0.00	0.00	0.00	0.00	0.10	0.00	0.10	0.10	0.00	0.10	0.10	0.00	0.10
28	EPIL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total	452.80	1435.24	1888.04	318.58	1465.79	1784.37	1062.29	1560.47	2622.76	692.36	1561.90	2254.26	638.42	1505.46	2143.88

(Rs. in crore)

Paid Up Capital, Networth and Accumulated Profit(+)/ Loss(-) as on 31.3.2004 (Provisional) of the PSEs under the Department of Heavy Industry

SI.No	o. Name of PSE	Paid up	Capital		Accumulated		
		Government/ Holding PSE	Others	Networth	Profit (+)/Loss (-)		
1	AY & CO*	54.34	3.93	-72.95	-137.01		
2	HOOGLY PTG	1.03	-	2.05	0.52		
3	BHEL*	165.76	79.00	4708.00	4559.00		
4	BSCL	128.26	-	-444.21	-572.47		
5	BRAITHWAITE	106.37	-	-105.06	-203.43		
6	BWEL	10.10	-	-78.09	-73.90		
7	BBJ	2.14	-	-10.17	-12.31		
8	BHPV	73.57	-	-419.27	-350.45		
9	BPCL	53.53	-	-113.54	-157.93		
10	R&C	54.84	-	-111.91	-146.60		
11	TSL	21.02	-	-211.01	-232.02		
12	TSP	21.74	-	-95.81	-103.58		
13	B&R	13.98	-	43.64	30.89		
14	HCL	415.19	1.67	-954.71	-1428.31		
15	HEC	448.12	-	-1328.30	-1824.39		
6	HMT	462.17	8.50	12.43	-409.97		
7	HMT (MT)	10.70	-	-560.33	-382.83		
8	HMT (Watch)	5.49	-	-516.30	-393.8		
9	HMT (Chinar)	1.41	-	-85.95	-79.13		
20	PTL	17.06	19.11	-252.31	-288.48		
21	HMT (B)	8.99	0.24	-21.57	-15.68		
22	HMT (I)	0.48	-	21.19	20.00		
23	IL	79.64	-	-178.29	-227.61		
24	REIL	0.64	0.61	7.90	6.65		
25	NIL*	8.31	-	-232.18	-240.48		
26	SIL	42.99	-	53.65	10.81		
27	BOGL	7.14	-	-363.13	-370.03		
28	CCI	429.28	-	-1485.39	-1914.67		
29	HPC	700.38	-	622.18	-78.20		
30	HNL	82.54	-	192.96	114.96		
31	HPF	180.68	19.19	-2442.52	-2661.36		
32	HSL	9.11	-	-10.03	-19.14		
33	SSL	1.00	0.00	-13.95	-14.95		
34	NEPA	103.00	2.39	-158.43	-246.62		
35	TCIL	93.10	-	-585.80	-678.80		
36	EPIL	35.42	-	113.59	32.46		
	TOTAL	3849.52	134.64	-5073.62	-8488.86		

Note: (i) 9 PSEs namely; BPME, WIL, BBVL, RBL, TAFCO, CCIL, NBCIL, RIC and MAMC have been closed and 3 PSEs (BLC, NIDC & NPPC) are not in operation.

(ii) Apart from above 36 operating PSEs, there are two non-manufacturing holding companies (BBUNL & BYNL) and one non-operational subsidiary, namely; Scooters India International GmbH.

* As on 31.3.2003

Comptroller & Auditor General Report

The following remarks observations were made by the CAG in respect of the PSEs under the administrative control of the Department of Heavy Industry in its Report received during the year:-

Without ascertaining its actual requirement before placement of order Cement Corporation of India Limited procured a DG set in August, 1996, which remained unutilized resulting in avoiding expenditure of Rs. 16.71 crore.

(Para 13.1.1 of Report 3 of 2003) commercial

Bharat Heavy Electricals Limited supplied locos to Railways and was required to keep the same in working condition during the warranty period. AS BHEL failed to fulfil its warranty obligations, it could not recover lease rentals of Rs. 6.82 crore during 1997-98 to 2001-02.

(Para 13.2.1 of Report 3 of 2003) commercial

ABBREVIATIONS

AAIFR	Appellate Authority of Industrial & Financial Reconstruction
AY & CO	Andrew Yule & Co.
BBJ	Braithwaite, Burn & Jessop Construction Co. Ltd.
BBUNL	Bharat Bhari Udyog Nigam Ltd.
BHEL	Bharat Heavy Electricals Ltd.
BHPV	Bharat Heavy Plates & Vessels Ltd.
BIFR	Board of Industrial & Finance Reconstruction
BLC	Bharat Leather Corporation Ltd.
BOGL	Bharat Opthalmic Glass Ltd.
BPCL	Bharat Pumps & Compressors Ltd.
BPME	Bharat Process & Mechnical Engineers Ltd.
BRAITHWAITE	Braithwaite & Co. Ltd.
BSCL	Burn Standard Company Ltd.
BWEL	Bharat Wagon & Engineering Co. Ltd.
BYNL	Bharat Yantra Nigam Ltd.
C-DOT	Centre for Development of Telematics
CCI	Cement Corporation of India Ltd.
CCIL	Cycle Corporation of India Ltd.
CEA	Central Electricity Authority
CNC	Computer Numerically Controlled
DOE	Department of Electronics
EEC	European Economic Community
EOT	Electrically Operated Trolley
EPI	Engineering Projects (India) Ltd.
FBP	Fluidised Bed Combustion
FCRI	Fluid Control Research Institute
FFP	Foundry Forge Plant
HCL	Hindustan Cables Ltd.
HMBP	Heavy Machine Building Plant
HMT(I)	HMT (International) Ltd.
HMTP	Heavy Machine Tools Plant
HNL	Hindustan Newsprint Ltd.
HPC	Hindustan Paper Corporation Ltd.
HPF	Hindustan Photo Films Manufacturing Co. Ltd.
HSL	Hindustan Salts Ltd.
HVDC	High Voltage Direct Current
ILK	Instrumentation Ltd., Kota
ISRO	Indian Space Research Organisation
JESSOP	Jessop & Co. Ltd.
kV	Kilo Volt

70

kW	Kilo Watt
LAGANJUTE	Lagan Jute Machinery Co. Ltd.
MAMC	Mining & Allied Machinery Corporation Ltd.
MAX	Main Automatic Exchange
MoU	Memorandum of Understanding
MT	Metric Tonne
MUL	Maruti Udyog Ltd.
MVA	Mega Volt Amperes
MW	Mega Watt
NBCIL	National Bicycle Corporation of India Ltd.
NC	Numerically Controlled
NEPA	NEPA Ltd.
NCMP	National Common Minimum Programme
NIDC	National Industrial Development Corporation Ltd.
PSE	Public Sector Enterprises
PTL	Praga Tools Ltd.
R&C	Richardson & Cruddas (1972) Ltd.
RDSO	Research Design & Standard Organisation
RIC	Rehabilitation Industries Corporation Ltd.
RSW	Radiation Shielding Window
SHA	Shareholders Agreement
SIL	Scooters India Ltd.
SPA	Share Purchase Agreement
SSL	Sambhar Salts Ltd.
TAFCO	Tannery & Footwear Corporation of India Ltd.
TCIL	Tyre Corporation of India Ltd.
TSL	Triveni Structurals Ltd.
TSP	Tungabhadra Steel Products Ltd.
UNDP	United Nations Development Programme
UNIDO	United Nations Industrial Development Organisations
VRS	Voluntary Retirement Scheme
WIL	Weighbird (India) Ltd.