

MINISTRY OF STEEL

CHAPTER: X

BHARAT REFRACTORIES LIMITED

Working of Bharat Refractories Limited

Highlights

Despite receipt of concessions and cash assistance of Rs.234.60 crore during 1995-96 to 2004-05, the Company did not achieve the targets of manpower reduction, production, sales and profitability set forth in the TEV report.

(Para 10.3)

The overall production of refractories was only 39 and 87 *per cent* of the re-assessed capacity during 2001-02 to 2004-05 and the shortfall in production was 1.19 lakh tonnes due to under-utilisation of capacity, non-availability of working capital leading to shortage of raw materials and excess manpower leading to increased labour cost of Rs.9 crore annually.

(Para 10.4.1.1)

The Company was supplying magnesia carbon bricks and slide gate refractory under performance guarantee clause to Bokaro Steel Plant, who recovered/received materials free of cost amounting to Rs.6.33 crore and Rs.1.97 crore respectively due to non-achievement of the committed heats under the guarantee clause.

(Paras 10.4.2 and 10.4.3)

As against the re-assessed capacity of 12,000 tonnes of silica bricks at Bhilai Refractories Plant (BRP), the plant actually produced only 1790 tonnes during 1999-2000 to 2004-05 and there was no production during 2003-04. The Management was silent on the issue and had not examined the reasons for negligible/nil production.

(Para 10.4.4)

The actual rejection of bricks in the process of manufacture from green bricks (un-burnt bricks pressed in Presses) to saleable bricks was much higher than 10 *per cent* considered in TEV report. The Management neither fixed norms for rejection nor analysed the reasons.

(Para 10.4.5)

The Company consumed coal and furnace oil valuing Rs.5.21 crore at IFCORP in excess of the required consumption.

(Para 10.4.7)

The Company supplied refractory materials to a private company [M/s Otto India (P) Limited] on credit, without any security, resulting in loss of Rs.1.23 crore.

(Para 10.5.2)

The Company awarded (August 1999) the work of conversion of three units of coke-based gas producer plants to coal-based to achieve economy in firing of bricks at BRP, which had not been completed so far (December 2005). One unit completed at a cost of Rs.1 crore in July 2004 indicated increased fuel cost by Rs.206 per tonne.

(Para 10.6.4)

The utilisation of a 2500 tonne Sacmi Press procured at a cost of Rs.7.53 crore was only 37 per cent during 2000-01 to 2004-05. Alternatively, a press of lower capacity of 2000 tonne, which was considered earlier, could have well served the purpose.

(Para 10.6.5)

The Company could not implement the technology for manufacturing continuous casting refractories purchased from Japan in October 1991 at a fee of Rs.1.12 crore, rendering the expenditure infructuous.

(Para 10.7)

The labour productivity of the Company remained in the range of 8.30 – 56.40 tonnes per man per year as against 58 tonnes per man per year envisaged in the TEV report.

(Para 10.8)

The Company had no internal audit department. The last internal audit was conducted by an outside firm in the year 1999-2000.

(Para 10.10)

Gist of Recommendations

- The Company should take the following steps to bring improvement in its productivity and profitability:
- cut down its work force by separating 393 employees as per TEV recommendations to avoid recurring revenue expenditure of Rs.9 crore per annum.
- enhance capacity utilisation to the level of 100 *per cent* of the capacity reassessed in the TEV report.
- establish the production of silica bricks at least to an economical level at BRP and increase demand and enforce proper quality control on production of MCB sets at RRRP, if necessary by appointment of experts/consultants.
- reduce the rates of rejection during process, excess consumption of raw materials and fuel etc. For this purpose, the management should approve suitable norms for operation, raw materials and fuel consumption, analysis of idle time of presses so as to avoid excess idle time and overall increase in production.
- decision on implementation of AMR schemes should be taken after careful study of the project and taking into account the techno-economic study made by some expert agency in the field. To avoid delay in implementation of the capital schemes, a proper monitoring system should be evolved.
- start a standard and uniform costing system after getting a costing manual prepared.

- strengthen the internal audit system without loss of time.

Further, with almost all major steel producers, e.g. SAIL, TISCO etc. increasingly switching over to 100 *per cent* continuous casting of steel, the Company has to get into manufacture of the entire suite of refractories for this process, especially since these are high contribution products. Unless immediate action was taken on this project, the medium to long-term viability of the Company would be in doubt.

10.1 Introduction

10.1.1 Background

Refractories are processed substances that are able to withstand high temperatures without melting. It is used in the iron and steel industry to make linings inside coke oven batteries, furnaces, foundries and hot metal/slag ladles etc.

Refractories are of two types, shaped and monolithic or unshaped (also called Masses/Mortar). The shaped refractories are manufactured through the process of (i) crushing and grinding of raw materials (ii) mixing of raw materials in the required ratio (iii) pressing into different sizes and shapes (iv) drying of pressed bricks and (v) firing of dried bricks in the kilns. The unshaped refractories undergo the process of crushing, grinding and mixing raw materials only.

10.1.2 Company profile

Bharat Refractories Limited (Company) having its corporate office at Bokaro Steel City was incorporated in July 1974 with 100 *per cent* Government holding to manufacture and deal in refractory products. It has four manufacturing units viz. (i) Bhandaridah Refractories Plant (BHRP), (ii) Ranchi Road Refractories Plant (RRRP), (iii) Bhilai Refractories Plant (BRP) and (iv) India Firebricks and Insulation Company Refractory Plant (IFICORP), who supply their products mainly to steel plants of Steel Authority of India Limited (SAIL), Indian Iron and Steel Company Limited (IISCO), Rashtriya Ispat Nigam Limited (RINL), Neelachal Ispat in the public sector and some other steel plants like Tata Metalliks Limited (TML), MESCO, TISCO etc. in the private sector.

10.1.3 Capital Structure and Profitability

The authorised/paid up share capital of the Company as on 31 March 2005 was Rs.246 crore and Rs.215.79 crore respectively. As on that date the Company also borrowed Rs.161.50 crore from the Government of India. The Company had also taken cash credit loan/ short-term loans from Banks and the amount outstanding, as on 31 March 2005 was Rs.49.18 crore. The Company was incurring continuous losses and the accumulated losses as on 31 March 2005 stood at Rs.352.56 crores. The accumulated losses of the Company had already eroded the entire paid up capital and a substantial portion of the loan received from the Government of India. The Company is a sick company and got three revival schemes by the Board of Industrial and Financial Reconstruction (BIFR) over a period of five years from January 1997 to June 2002.

10.1.4 Organisational Setup

The Company is managed by a Board of Directors comprising of a full time Chairman-cum Managing Director (CMD) and five Directors. The Managing Directors of Bokaro Steel Plant (BOSP), Bhilai Steel Plant (BSP) and Rourkela Steel Plant (RSP) of Steel Authority of India Limited are on the Company's Board.

The CMD is the chief executive of the Company, assisted by one Additional General Manager (HRD), three Deputy General Managers holding charge of Finance, Personnel and Administration and Material Management at Head Office. All the four plants are headed by one Deputy General Manager-in-charge each.

10.1.5 Audit Objective

The primary objective of the performance review was to assess the extent of achievement of the targets specified in the Techno-Economic Viability (TEV) study prepared by MECON in July 2001 as part of BIFR revival scheme and identify and analyse the reasons for shortfall in achievements.

10.1.6 Scope of Audit

The review seeks to evaluate production & sales performance of the Company specially the contrasting performance of its different plants, technological advancements and capital expenditure projects. It covers assessment of financial and operational management in the areas of utilisation of equipment, working capital management, budgeting and business planning, costing system, management information system and internal audit for the period from 2001-02 to 2004-05.

Audit scrutiny covered the following aspects relating to the performance of the various plants of the Company:

- Lower production performance of refractory bricks.
- Negligible/nil production of silica bricks.
- Huge rejection of manufactured bricks.
- Delay in completion of capital schemes.
- Management control system, costing system and internal audit.
- Non-realisation/delayed realisation of sundry debtors.

10.1.7 Audit Methodology

An entry conference was held with the Management on 12 April 2004. After a preliminary survey and collection of background information, guidelines for the audit review were finalised. The test audit was conducted during August-October 2004 covering visits to the Head office as well as all the four plants. The audit findings are based on the documents and records as well as information furnished by the Management.

The draft performance audit report was issued to the Management on 7 April 2005, and was discussed in the exit conference held on 13 May 2005.

The Management provided a written reply on 26 May 2005 to the draft audit report. Their comments have been considered and included appropriately in this report. The draft audit report after incorporating management's reply and audit's further comments was issued to the Ministry of Steel in October 2005. The reply of the Ministry was received in February 2006.

10.1.8 Acknowledgement

Audit takes this opportunity to thank the management and staff of the Company for their co-operation and assistance in the conduct of this performance audit.

10.2 BIFR Revival Schemes

Pursuant to the amendment to Sick Industrial Companies (Special Provisions) Act (SICA) 1985, the Company and IFICO, (a subsidiary of the Company since 1978), came under the purview of section 3(I) (O) of SICA and were referred to BIFR in 1992. The Pursuance to the amendment to BIFR/Cabinet committee of Economic Affairs (CCEA) sanctioned a revival scheme for the company in January 1997. According to the scheme, (i) interest amounting to Rs.61.64 crore accrued on loan as on 31 March 1995 was waived (ii) 50 *per cent* of the loan of Rs.79.52 crore i.e. Rs.39.76 crore was converted into equity, and non-plan loan of Rs.12.05 crore was converted into preference shares (iii) cash credit limit of Rs.14 crore from bank was allowed against government guarantee (iv) IFICO was merged and became a plant of the Company in October 1997 and (v) State Bank of India (SBI) was appointed to conduct a techno-economic viability (TEV) study of the four plants to explore possibility of their recovering all costs in the long run.

As this scheme failed due to delay in its implementation, under-utilisation of capacity, low manpower utilisation, incorrect initial projections etc. and there was also a delay in conducting techno-economic viability study, Government of India approved a second scheme in 1999, under which, the Company got (i) grant of Rs.4 crore for revision of wages, (ii) interest free working capital loan of Rs.16 crore, (iii) Government of India guarantee for cash credit and letter of credit upto Rs.24 crore from banks, (iv) interest holiday till 2007-08 on loan paid upto 31 March 1999 and (v) four years moratorium period upto 2003-04 on repayment of loan.

In pursuance of the first revival scheme of the year 1992, SBI appointed (April 2001) MECON Limited to conduct TEV study. MECON Limited submitted its report in July 2001, which, considering the available infrastructure in each plant, re-assessed the existing annual installed capacity from 1,35,500 tonne to 75,645 tonne for all the four plants of the Company. The TEV report also recommended reduction in manpower from 3,013 to 1,311 by March 2002 and estimated the cost of rehabilitation as Rs.186 crore. Accordingly, the Government of India sanctioned the third revival scheme in June 2002 under which (i). loan of Rs.97.89 crore was converted into equity, (ii) further equity of Rs.35 crore was sanctioned for addition, modification and replacement (AMR) schemes to be released over a period of five years at the rate of Rs.7 crore per year and (iii) working capital loan of Rs.30 crore was allowed against Government guarantee without guarantee fee.

Apart from the financial packages mentioned above, the Company received total cash assistance of Rs.234.60 crore* from Government of India during the period 1995-96 to 2004-05 against the estimated rehabilitation cost of Rs.186 crore.

10.3 Audit Findings

It was observed in audit that inspite of waiver of accrued interest of Rs.61.64 crore, conversion of total loan of Rs.149.70 crore into equity/preference shares, cash receipt in

* Rs.219.63 crore in the shape of loan and Rs.14.97 crore in the shape of equity.

the shape of loans and equity amounting to Rs.234.60 crore and Government guarantee for raising working capital loan from banks upto Rs.30 crore without guarantee fee, the Company could not achieve the targets set forth in the TEV report as below:

- Three hundred ninety three employees were yet to be separated to achieve the target of 1,311 employees recommended in TEV report, resulting in excess wages payment of Rs.9 crore per annum as discussed in paras No. 10.4.1.1 and 10.8.
- The actual production was only 46 *per cent* during the second year (2002-03) against the target of 90 *per cent* of reassessed capacity and 87 *per cent* in the fourth year (2004-05) against the target of 100 *per cent* of the re-assessed capacity as discussed in para No. 10.4.1.1.
- The net sales were only Rs.58.28 crore (2002-03), Rs.86.41 crore (2003-04) and Rs.109.35 crore (2004-05) as against Rs.116.86 crore as per TEV report as discussed in para No.10. 5.1.
- The Company was to achieve net profit after prior period adjustment/VRS of Rs.11.95 crore. But it incurred loss of Rs.74.51 crore, Rs.9.40 crore and Rs.5.21 crore in the years 2002-03, 2003-04 and 2004-05 as discussed in para No. 10.5.1.

10.4 Production Performance

In the TEV report, the annual requirement of refractory materials by the steel industry of the country during 2001-02 was assessed at 2.57 lakh tonnes of bricks and 0.56 lakh tonne of masses/mortar. Against this, the reassessed production capacity of BRL was 0.76 lakh, which also remained underutilised as discussed in the subsequent paragraphs.

10.4.1 Product Mix & Capacity

In the TEV report, the production capacity and product mix of the four refractory plants was re-assessed on the basis of physical status of infra-structures available and demand for the product as under:

Name of Units	Product Mix	Capacity as per TEV study (in metric tons)		
		Bricks	Masses	Total
BHRP	Fireclay bricks & Masses (trough mix, Castable, Mud Gun Mass etc.	10060	14500	24560
RRRP	Magnesia Carbon Bricks (MCB) for converters and ladles & Masses	8200	2200	10400
IFICORP	Fireclay bricks, Hi-Alumina bricks and Slide Gate Plates & Accessories and Masses	20725	160	20885
BRP*	MCB, MCH, CHM, MGT (basic bricks), Silica bricks & Masses	17000	2800	19800
Total		55985	19660	75645

* manufacturing magnesia carbon bricks for BSP on conversion cost basis.

10.4.1.1 Shortfall in production

The actual production of bricks and masses for the years 2001-02 to 2004-05 compared to the re-assessed capacity (TEV) and the target fixed by management was as under:

(quantity in tonne)

Plant/capacity as per TEV	Year	Target	Actual	Shortfall		Achievement (in percentage)	
				TEV	Target	TEV	Target
BHRP (24560)	01-02	24900	16325	8235	8575	66	66
	02-03	19648	19833	4912	+185	81	101
	03-04	22104	23974	586	+1870	98	108
	04-05	24560	23616	944	944	96	96
RRRP (10400)	01-02	9400	4147	6253	5253	40	44
	02-03	8320	4477	5923	3843	43	54
	03-04	9360	5125	5275	4235	49	55
	04-05	10400	5037	5363	5363	48	48
IFICORP (20885)	01-02	20580	6882	14003	13698	33	33
	02-03	16708	9472	11413	7236	45	57
	03-04	18797	13636	7249	5161	65	73
	04-05	20885	19644	1241	1241	94	94
BRP (19800)	01-02	38400	2068	17732	36332	10	5
	02-03	15850	1378	18422	14472	7	9
	03-04	17820	10381	9419	7439	52	58
	04-05	19800	17187	2613	2613	87	87
BRL (as a whole) (75645)	01-02	93280	29422	46223	63858	39	32
	02-03	60526	35160	40485	25366	46	58
	03-04	68081	53116	22529	14965	70	78
	04-05	75645	65484	10161	10161	87	87

From the above, it may be seen that the production of BRP was abnormally poor at 10 and 7 per cent of the re-assessed capacity during the years 2001-02 and 2002-03 and there was an overall shortfall in production (Bricks and Masses) of 1.19 lakh tonnes during the last four years ending 2004-05 as compared to TEV projections. Further, the overall production of bricks and masses was in the range of 39 and 87 per cent against the re-assessed capacity and between 32 and 87 per cent compared to targets as per

Annual Plan during the years 2001-02 to 2004-05. The main reasons for under-utilisation of capacity were (i) non-availability of working capital leading to shortage of raw materials and (ii) excess manpower leading to increased labour cost of Rs.9 crore annually.

While accepting the facts, the Management stated (May 2005) that late release of dues by the majority of customers, acute power crisis, sanction of loan with high interest burden as against grant-in-aid envisaged in the TEV report and un-remunerative selling price vis-à-vis all round increase in rate of critical inputs were the main reasons due to which the Company could not achieve the TEV targets.

The contention of the management is not acceptable as (i) the clients were giving advance towards raw materials of 50 *per cent* of cost of purchase orders placed (ii) the Company had received the full amount of non-plan loan assistance with interest subsidy from the Government of India for reduction of the excess manpower, but the manpower was not reduced and (iii) the Government of India had sanctioned non-plan interest free loan of Rs 16 crore for meeting working capital in addition to guarantee for Rs 30 crore for raising cash credit limit. The conversion cost scheme at BRP involved no expenses on raw materials by BRL and the matter regarding high interest rate on loans should have been taken up with the Government of India for reduction in the rates in view of low interest rate prevailing in the market. Further, selling goods on un-remunerative prices is a failure on the part of the management in taking commercial decisions.

Audit noted that the main problems were that of quality and operational issues, as described in the subsequent paragraphs.

10.4.2 Performance Guarantee System for MCB (RRRP)

Ranchi Road Refractories Plant (RRRP) received (March 2000 to January 2005) nine Purchase Orders from Bokaro Steel Plant (BOSP) for supply of Magnesite Carbon Bricks (MCB) required for relining of converters in its two Steel Melting Shops (SMS). The purchase orders provided for a performance guarantee clause, under which each set of MCB supplied was required to achieve a minimum number of heats* and rate of payment was graded to the number of heats achieved. The Company could not achieve the target of 1231/1232 number of heats in respect of 20 sets out of 22 supplied for SMS-I. Similarly it did not achieve the target of 1300/1600 number of heats in respect of three sets out of five sets supplied for SMS-II. Thus, against the total of 30928 numbers of achievable heats for the total 27 sets supplied during 2001-02 to 2004-05, the Company achieved 24384 number of heats only. As such there was a total shortfall of 6544 number of heats. As a result BOSP recovered from the company a sum of Rs.5.65 crore as penalty for non-achievement of desired heats and also recovered Rs.0.68 crore towards cost of materials supplied by the purchaser in order to complete the sets and for maintaining the sets in operating condition. Thus, the Company suffered a loss of Rs.6.33 crore in the supply of MCBs under performance guarantee system due to non-achievement of prescribed heats.

The Management stated (May 2005) that RRRP was totally dependent on orders from BOSP and hence had to accept the price and estimated life fixed by BOSP. The life of

* Heat indicates the number of operation cycles of SMS converter achieved by each relining of converter with MCB set.

converter depended on operational parameters, which were poor in case of SMS-I, and hence the target life could not be achieved.

Management's reply is not tenable as (i) it was for the Company to take a commercially viable decision to accept BOSP's orders for supply of MCB sets for SMS-I, especially when other manufacturers were not willing to supply sets for SMS-I, (ii) due to poor past performance, the Company was no longer receiving orders from BOSP for MCB sets for SMS-II, which was more lucrative and (iii) the Company had not investigated the reasons for non-achievement of prescribed heats of the MCB supplied to BOSP.

The Ministry stated (February 2006) that RRRP achieved guaranteed 800 heats in all converters except in two cases which was due to operational reasons and committee set up by BSL confirmed the same and recommended for full per heat payment.

Ministry's reply is not tenable since estimated heats could not be achieved and payments were limited to the number of heats achieved, resulting in loss to the company. As regards full payment in respect of two cases, the same has not yet been received by the Company (February 2006).

10.4.3 Performance guarantee system in Slide Gate Refractories (IFICORP)

Bokaro Steel Plant (BOSP) placed eight purchase orders on India Firebricks and Insulation Co. Refractory Plant (IFICORP) between April 2000 and March 2004 for supply of Slide Gate (S/G) Plates and accessories. In the event of non-achievement of estimated heats, the purchase orders provided for recovery of penalty in the form of extra S/G refractory to be supplied by IFICORP free of cost. S/G Refractory supplied by IFICORP failed to achieve the estimated heat guarantee in respect of all the purchase orders due to which it supplied extra refractory materials worth Rs.1.97 crore free of cost during 2002-03 to 2004-05.

The Management stated (May 2005) that IFICORP was buying back used S/G Refractory at Rs.25/- per plate, the application of which, along with introduction of other technical measures, had reduced the batch cost without sacrificing the quality of end product. Thus, if IFICORP had supplied certain materials free of cost, it could save money through reduction in batch cost.

Management's reply is not tenable as the quality of S/G refractory produced in IFICORP was not up to the mark and the Company did not produce figures of purported savings, nor could Audit work this out in the absence of any record.

Ministry stated (February 2006) that though IFICORP had to supply some material free of cost it could save Rs 1.43 crore during 2000-01 to 2003-04 by optimising the cost of production with reduction of raw material cost and introduction of other technical measures.

Ministry's reply is not tenable since the Company, by optimisation of cost of production, could have achieved improved margin in supply of S/G refractory. It could not achieve this due to poor quality of S/G refractory supplied and consequently had to supply it free of cost.

10.4.4 Negligible Production of Silica Bricks (BRP)

Initially the production capacity of silica bricks at BRP was 20000 tonnes, which was reassessed under TEV report to 12000 tonnes. Against this production capacity, the actual

production after rejections during the years 1999-00 to 2004-05 was only 1790 tonnes, and no silica bricks were produced during 2003-04.

Further, during the physical verification of stocks for the year 1999-2000 to 2001-02, 1525 tonnes of silica bricks were found to be short due to which the Company suffered a loss of Rs.1.31 crore.

The Company also suffered a loss of Rs.59 lakh due to excess consumption of raw material (quartzite). During the years from 1999-2000 to 2004-05 it consumed on an average three tonnes of quartzite for every tonne of silica bricks against the norm of 1.05 tonne envisaged in the detailed project report (DPR). This resulted in excess consumption of 3484 tonnes of quartzite valuing Rs.59 lakh.

The Management stated (May 2005) that since inception, silica bricks could not be produced at a stretch due to various reasons and hence quality norm could not be substantiated. The reply of the Management is however, silent on the issues of reasons for negligible/nil production, abnormally high rejections, heavy shortage during physical verifications and abnormally excess consumption of raw materials.

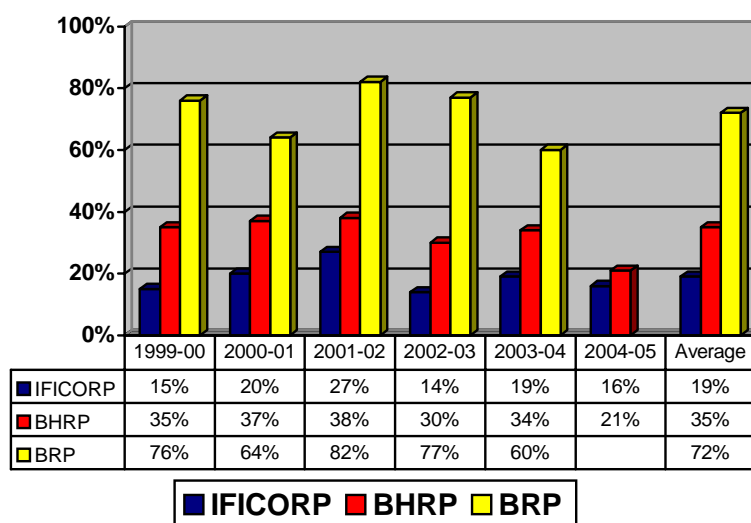
Ministry stated (February 2006) that BRP never had sufficient orders, as such quality of bricks could not be established and the norms of raw materials fixed in the DPR were not practical.

Ministry's reply is not tenable since it could not succeed in obtaining orders and improving the quality. Moreover, no norms were fixed by the Company even though the norms fixed in the DPR were not practical.

10.4.5 Excess Rejection of Bricks

Rejection of bricks occurs at two stages viz. (i) green rejects which cover rejects till the firing stages and (ii) burnt rejects which cover fired bricks rejected during sorting/inspection.

The company had not fixed any norms for either of the two rejections. However, the TEV study implied a total rejection rate of 10 *per cent*. The actual percentage of rejection of bricks at IFICORP, BHRP and BRP was as follows:



Note: The figures for production of “green bricks” and rejects for basic bricks at RRRP for the period 1999-00 to 2002-03 are not available with management, and have thus not been considered.

The total excess rejection of bricks beyond 10 *per cent* during the period 1999-00 to 2003-04 at these three plants amounted to 20,115 tonnes, resulting in extra operating costs of Rs.20.74 crore. Since the Management did not furnish details of production of green bricks by the three units during 2004-05, the extra expenditure on recycling the rejected bricks during 2004-05 could not be worked out. It would be noticed that even in BHRP, where the quality of masses and castables was being maintained, the process for production of bricks was unsatisfactory.

The Management did not analyse the reasons for such high rejections and also did not offer their comments on the issue.

10.4.6 Poor Utilisation of Presses

One of the reasons for shortfall in production of bricks and lower production of green bricks was poor utilisation of presses installed in the Plants as detailed in the following table:

	Percentage Utilisation	Average Productivity (Tonnes / machine hr)	Productivity as per TEV Study (Tonnes/machine hr.)
IFICORP (Figures in hours)			
2001-02	26	0.54	0.67
2002-03	26	0.56	
2003-04	36	0.58	
2004-05	44	0.56	

BHRP (Figures in shifts)			
2001-02	23	1.76	3.13
2002-03	19	1.36	
2003-04	17	2.28	
2004-05	NA*	NA*	
RRRP (Figures in shifts)			
2001-02	35	4.16	6.67
2002-03	36	4.68	
2003-04	39	5.00	
2004-05	44	4.8	
BRP (Figures in hours)			
2001-02			
2002-03			
2003-04	47	1.00	1.02
2004-05	30	NA*	

Note: Management did not furnish the figures for production of green bricks and running hours of presses. Hence, productivity of presses for 2004-05 could not be ascertained.

It was observed that:

- Only IFICORP maintained records of downtime by reason, which revealed that out of the 56 per cent – 74 per cent downtime during 2001-02 to 2004-05, only 6.5 per cent was on account of external reasons such as power failure. Other units did not have records of downtime by reason.
- BHRP and RRRP maintained records of utilisation only in shifts (and not in hours), which did not indicate whether the shift was fully utilised or not.
- BRP maintained records for working hours only from 2003-04 onwards

Thus, the utilisation of presses was poor during the period of report and the production in tonnes/machine hour was further lower than the TEV projections. In the absence of detailed records and reasons for downtime, Management would be unable to analyse the data and take effective remedial action.

The Management neither analysed the reasons for poor utilisation of presses nor furnished their comments on the issue.

10.4.7 Excess Consumption of Raw Materials and Fuel

The Company produces various types of refractories for which different raw materials are required. However the Company had not fixed norms for consumption of each type of raw material for each product. On an average, the actual consumption of total raw materials (excluding quartzite for silica bricks) varied from plant to plant. The

consumption of raw materials was in the range of 1044-1104 kgs per tonne of refractories in BHRP, 996-1039 kgs per tonne of refractories in RRRP, 373-1176 kgs per tonne in BRP and 1054-1267 kgs per tonne in IFICORP. There was no reason on record either for the wide variations in consumption of raw materials in different plants when one tonne of refractory was produced with 996 Kg of raw material in RRRP and 373 Kg of raw material in BRP.

Similarly, no norms were fixed for consumption of fuel (coal/coke and furnace oil) at any of the plants. As a result, management had no yardstick against which to properly manage consumption of fuel, or check excess consumption. However, in a proposal for modification/modernisation of existing producer gas plant from coke based to coal as feed stock, the Management projected the consumption of coal and furnace oil as 247 Kg and 53 litres respectively per tonne of refractory on an approximate basis in one of the units of IFICORP.

Based on the above consumption pattern, Audit estimated the excess consumption of coal and furnace oil at IFICORP during the period 1999-00 to 2004-05 at Rs.5.21 crore. The unit also consumed 284 KL HSD oil valuing Rs.64 lakh during 2003-04 & 2004-05 in addition to the furnace oil.

Though the reply (May 2005) of the Management was silent on the issues of non-fixation of norms as well as for wide variations in actual consumption by various plants, it, however, contended that the norms of consumption pattern of coal and furnace oil as pointed out by audit could not be achieved as the unit was running with a very low level of production due to lack of sufficient order for high value product and the position improved with increase in production during 2003-04 and 2004-05.

The Management's reply is not tenable as the consumption of furnace oil and coal was 86 litres per MT and 282 Kgs per MT respectively during the year 2004-05 which was still substantially higher than the consumption pattern indicated above even though the production was increased to 94 *per cent* of reassessed capacity during that year.

Ministry (February 2006) agreed to audit's view point for fixation of norms of raw material and assured to take up the matter with the Company to formulate norms for consumption of raw material.

10.5 Financial performance

10.5.1 Sales/Profitability

The order balance at the end of the year, target vis-à-vis actual sales in quantity and value and gross/net margin in respect of all the four plants for the years 2001-02 to 2004-05 are given in the following table:

Plant	Year	Target sales (MT)	Actual sales (MT)	Value of Sales (Rs. in crore)	Gross Profit (Rs. in crore)	Net Profit (Rs. in crore)	Order balance at the end of the year (MT)
BHRP	2001-02	24900	16215	22.51	(7.60)	(8.68)	19711
	2002-03	19648	19970	29.72	1.20	(11.34)	15726

	2003-04	22104	24018	36.08	5.24	1.13	16161
	2004-05	24560	23616	36.94	4.64	0.15	24239
As per TEV report				26.13	4.75	3.47	
RRRP	2001-02	9400	4503	13.89	(2.13)	(5.22)	3171
	2002-03	8320	4844	14.17	(1.03)	(7.39)	1677
	2003-04	9360	4522	15.68	1.21	(1.46)	3596
	2004-05	10400	5321	17.03	1.79	(3.75)	2767
	As per TEV report				28.43	3.38	2.00
BRP	2001-02	38400	2119	2.80	(23.68)	(27.46)	42403
	2002-03	15840	1914	2.30	(12.63)	(30.72)	15628
	2003-04	17820	9526	11.99	(0.83)	(7.64)	21593
	2004-05	19800	16697	24.39	4.17	(2.42)	7827
As per TEV report				28.77	6.85	3.48	
IFIC ORP	2001-02	20580	8511	10.80	(20.32)	(21.99)	15858
	2002-03	16708	10019	12.09	(7.55)	(25.06)	21029
	2003-04	18797	13332	22.66	1.33	(1.43)	21593
	2004-05	20885	19019	30.99	4.10	0.81	26313
	As per TEV report				33.53	5.01	3.00
BRL as a whole	2001-02	93280	55145	50.00	(53.73)	(63.35)	81143
	2002-03	60516	36747	58.28	(20.01)	(74.51)	54060
	2003-04	64585	51398	86.41	6.95	(9.40)	56636
	2004-05	75645	64653	109.35	14.70	(5.21)	61146
As per TEV report				116.86	19.99	11.95	

It may be seen from the above that though one plant viz. BHRP met the sales target for the years 2002-03 and 2003-04, the Company as a whole could never achieve the same throughout the period covered in audit. In terms of value also, the company remained much behind the projections envisaged in the TEV report in all the four years ending March 2005.

Evidently the performance of sales remained poor despite the fact that all the four plants of the Company had sufficient order quantities yet to be executed at the end of each year.

Though, the Company earned operational profits (Gross profit) of Rs.6.95 crore and Rs.14.70 crore during the years 2003-04 and 2004-05 respectively, it incurred net losses of Rs.9.40 crore and Rs.5.21 crore during the above years, mainly due to high incidence of interest burden of Rs.12.97 crore and Rs.14.85 crore coupled with labour cost of excess manpower.

The Management in their reply (May 2005) accepted the facts.

10.5.2 Non-Realisation of Sundry Debtors

The position of sundry debtors for the period 2001-02 to 2004-05 was as follows:

(Rs. in crore)

Year	Sales	Sundry Debtors	Debtors in terms month's sale	Provision
2001-02	58.10	38.93	8.04	12.56
2002-03	68.00	44.40	7.84	14.23
2003-04	100.48	57.34	6.84	14.58
2004-05	127.34	68.23	6.43	16.02

It may be seen from the above that sundry debtors always remained more than 50 per cent of sales during the period of report. Doubtful debts also increased from Rs.12.56 crore in the year 2001-02 to Rs.16.02 crore in the year 2004-05. Though the debtors in terms of months sales decreased during the period of report but the same, equivalent to 6.43 months sales was still on the high side.

One major outstanding debt was from M/s Otto India (P) Ltd., a private customer who placed purchase orders on RRRP for converter bottom lining and MCB refractories for work relating to SMS-II of BOSP. Out of Rs.1.70 crore payable for the work, the customer paid only Rs.0.47 crore and the balance of Rs.1.23 crore remained outstanding since March 2003 though M/s Otto India (P) Ltd. received full payment from BOSP. Thus prospect of recovery of the amount remained bleak.

On the issue of huge outstandings, the Management did not furnish any comments in their reply (May 2005). However, on the issue of outstanding from M/s Otto India, it stated that the matter was being pursued with the party for early release of the payment and they also filed a case in the Jharkhand High Court for appointment of an arbitrator.

Ministry stated (February 2006) that the Company had drawn up a plan for realisation of dues from public sector steel plants and efforts were being made through out-of court settlement, apart from legal action, for realisation of dues from M/s OTTO India (P) Ltd.

10.6 Execution of Addition Modification and Replacement (AMR) Schemes

10.6.1 Utilisation of AMR Funds

Between 1999-2000 and 2004-05, the Government released a total of Rs.37.50 crore (Rs.23.50 crore as plan loan, and Rs.14 crore as equity) for executing AMR/capital schemes. Out of this the Company distributed (upto 2004-05) only 25.45 crore to its units. The amount distributed to its various units and the utilisation of the amount on AMR schemes by the units are given in the following table:

(Rupees in crore)

Fund received from Govt. of India			Fund distributed to the units				Funds spent by units			
Year	Plan Loan	Equity	BHRP	RRRP	BRP	IFICORP	BHRP	RRRP	BRP	IFICORP
1999-00	3.50	00	0.17	1.83	0.00	1.50	0.34	0.55	0.11	0.23

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2000-01	3.50	00	0.00	0.00	2.00	1.50	0.14	0.27	0.30	0.25
2001-02	3.50	00	1.00	1.00	0.00	1.50	0.11	0.04	0.21	0.51
2002-03	5.00	00	1.15	0.45	0.20	3.15	0.25	0.73	0.53	0.17
2003-04	5.00	7.00	0.00	0.00	0.00	0.00	2.27	0.00	1.53	1.71
2004-05	3.00	7.00	2.00	3.75	1.75	2.50	0.01	0.29	0.57	1.76
Total	23.50	14.00	4.32	7.03	3.95	10.15	3.12	1.89	3.24	4.63
Grand Total	37.50		25.45				12.88			

It may be seen from the above that out of the total funds of Rs.25.45 crore distributed by the Company for AMR schemes, the units invested Rs.12.88 crore only on these schemes. Thus, out of the total Rs.37.50 crore meant for AMR schemes, a sum of Rs.12.88 crore was invested for the purpose leaving the balance amount of Rs.24.62 crore, which was inappropriately diverted to other revenue expenses.

Management did not furnish any comment on this issue.

Ministry stated (February 2006) that funds received from the Government under AMR schemes had been utilized for AMR purpose only. However, the Company would verify booking and classification of expenditure.

Confirmation of booking and classification of expenditure is awaited (February 2006).

It was observed in audit that the Company took hasty and injudicious decisions in procurement and installation of plant/equipment valuing Rs.10.02 crore on the major projects under the AMR scheme. The cases are discussed below.

10.6.2 Purchase of an Intensive Mixing Machine by RRRP

While Ranchi Road Refractories Plant (RRRP) had existing mixing capacity of 38,000 tonnes per annum (p.a.) against the requirement of only 12,000 tonnes p.a. as per the TEV report, the plant placed a purchase order in April 2002 for an intensive type counter current mixing machine at a price of Rs.29 lakh against a purchase indent of April 1999. The machine was received only in March 2003, and commissioned in November 2003.

The mixing machine was procured for using Novalac resin, in place of the existing resole resin. According to Management, a gain of Rs.29 lakh per annum on account of this machine was envisaged in 2000-01, when the life of the BOSP converter linings was between 900 and 1000 heats; however, as the life had gone up beyond 2000 heats, the gain would come down. In fact, another PSU viz. Burn Standard Company Limited, having the same machine, had indicated in October 2000 that even after considerable rectification, the performance of this type of machine was unsatisfactory. Out of the available 568 shifts for the period November 2003 to August 2004, the mixing machine was used for only 42 shifts (seven per cent). Thus the investment in the machine was injudicious.

The management stated (May 2005) that efforts were made to establish the technology for manufacture of bricks through use of Novolac resin but the same was delayed as the right specification of Novolac resin had not been developed by its suppliers so far.

The reply is not tenable as the purchase of the mixer was made before establishing the technology and development of the required specification of Novolac resin to be used.

Ministry stated (February 2006) that the Mixer would be put into more effective use which would ensure proper mixing and better performance.

Further action is awaited.

10.6.3 Installation of Shuttle Kiln at IFICORP

In May 1998, India Firebricks and Insulation Co. Refractory Plant (IFICORP) obtained administrative approval for installation of a LDO-based 40 tonne batch capacity Shuttle Kiln to achieve firing temperature of 1600 degree centigrade ($^{\circ}\text{C}$) at an estimated cost of Rs.1.50 crore. Since the bids received were much higher, the project was shelved, but was re-opened in 2001.

In December 2002, a letter of intent for 20 tonne capacity Oil Fired Shuttle Kiln to achieve firing temperature of 1550°C was issued to the lowest tenderer at a cost of Rs.1.82 crore for completion by September 2003. As of May 2005, the kiln had not been completed, and a total of Rs.1.20 crore had been paid to the contractor.

IFICORP had an existing coal gas fired tunnel kiln, with a capacity of 21,200 tonnes per annum, against which the actual maximum production was 65 *per cent* and 94 *per cent* during the years 2003-04 and 2004-05 respectively. The new Shuttle Kiln would thus be redundant. Further, its operation, using costly LDO, would be expensive, as compared to the coal-gas fired kiln. The expenditure of Rs.1.82 crore on the kiln was thus injudicious.

Management stated (May 2005) that they had planned to go in for high value products like high performance S/G plates with zirconia inserts, mullite bricks and Zirmul for glass industries, zero cement castables suitable for fusion case blocks etc., which were highly remunerative. These products required high temperatures (1500°C to 1600°C), which was not possible in the existing Tunnel Kiln. Hence, it was decided to construct a shuttle kiln. There was delay in starting the project due to delay in handing over the site, in dismantling and cleaning of old construction, in civil works etc.

The Management's reply is not acceptable as the technical specification indicating the firing temperature of the Kiln originally planned for 1600°C was later changed to 1550°C and the existing Coal based Tunnel Kiln could achieve the required temperature. The project had not been completed even after seven years.

10.6.4 Modification of Producer Gas Plant at BRP

Bhilai Refractories Plant (BRP) decided to modify its coke-based three – unit Producer Gas Plant (PGP) to a coal-based PGP. As per the techno-economic analysis, the estimated investment of Rs.1.80 crore would generate a net annual saving of Rs.1.96 crore, primarily through replacement of costly furnace oil being consumed in the tunnel kilns for production of basic bricks with producer gas. Accordingly a work order at a total price of Rs.1.85 crore for all three units was issued in August 1999 on M/s India Industrial Enterprises (IIE); the work was to be completed by July 2000, with the first PGP unit by February 2000.

Analysis in audit revealed that the first PGP was modified and commissioned in July 2004. However, a number of complaints were reported which required rectification. Modification of second PGP had not been taken up so far (March 2005). In August 2003, the modification of the third unit was diverted to IFICORP at the same rates, terms and conditions.

There was a delay in commissioning of 16 months from March 2003 due to the failure of the Company to procure coal; this was finally procured from BSP. In this connection Audit observed as under:

- A comparison of fuel costs for July 2004 and September 2004 (after connection of the PGP gas line) for production of basic bricks in the tunnel kiln indicated that the fuel cost/tonne had gone up from Rs.1,355 to Rs.1,561, an increase of Rs.206/tonne as against the envisaged reduction.
- The contractor was paid Rs.1 crore upto June 2005. There was no progress on the modification of the other two units.
- The expenditure on modification of the PGP had thus become infructuous.

The management has not furnished any comment.

Ministry stated (February 2006) that the complaints had been rectified and PGP was running smoothly. The contractor was paid as per the payment schedule which was linked with the progress of job.

Ministry however, had not given its comments about non-completion of the modification of the other two units although Rs 1 crore had already been spent on the project.

10.6.5 Purchase of Sacmi Press

Ranchi Road Refractories Plant (RRRP) installed a new 2500 tonne Sacmi hydraulic press at a cost of Rs.7.53 crore in December 1999. The 2500 tonne press was purchased, as against a global tender for only a 2000 tonne press initially, on the grounds that the larger press would be able to make larger sized MCBs. However, during the period 2000-01 to 2003-04, the average capacity utilisation of this press remained at 37 *per cent* of the production capacity of 4800 tonne of bricks per annum. As such, this press on which expenditure of Rs.7.53 crore was incurred was grossly underutilised.

The management stated that if they had procured the 2000 T press, 800 X 125 mm and 900 X 125 mm brick could not have been produced at RRRP. The reply is not tenable, since as per the proposal for purchase of the press, even a 2000 T press could produce bricks of the above sizes.

Management further contended that provision for producing 1000 X 125 mm bricks in future was made. This is also not tenable, since no order for the above sized bricks had been received even after five years of installation of the press.

10.7 Other points of interest

10.7.1 Continuous Casting Project

In order to develop the capacity for manufacturing refractories for continuous casting of steel, BRL entered into three collaboration agreements in October 1991 with Shinagawa Refractories Company, Japan (SRC) for transfer of technology/know-how for setting up a 3000 tonnes p.a. plant at a lump sum royalty of 63 million yen (equivalent to Rs.1.45 crore). Between 1992 and 1997, the company paid Rs.1.12 crore to SRC on this account.

The Board of Directors also approved setting up of a refractories project in December 1992 for continuous casting of steel at an estimated capital cost of Rs.19.88 crore. While Government of India sanctioned and paid Rs.20 crore for this project between 1997-98 and 2000-01, these funds were utilised for replacement/revamping of obsolete machinery. Subsequently, the Company signed an MOU with Monnet Ispat Limited in May 1999 for setting up this project as a Joint Venture (JV) at an estimated cost of Rs.35 crore, and the Board of Directors also approved the formation of the JV Company in February 2001.

However, till date, no action had been taken to set up this project, and the expenditure of Rs.1.12 crore on technology transfer had become infructuous.

The Management stated (May 2005) that the project was not implemented for want of resources. Budgetary support of Rs.20 crore earmarked for the project was utilised on other schemes for replacement/revamping of obsolete machinery. It also stated that the Company was pursuing the setting up of the project at the earliest.

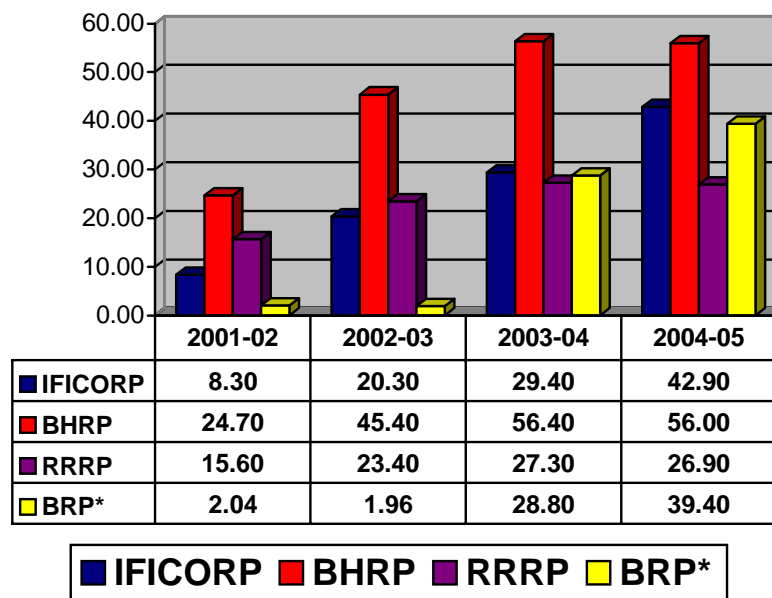
The reply is not tenable since, despite the technology transfer agreement with SRC being signed in 1991, the project has not yet been started (May 2005), especially when large number of manufacturers have entered the market. It was doubtful whether a 15 years old technology would be fruitful at this juncture, rendering the expenditure of Rs.1.12 crore incurred infructuous.

10.8 Manpower

The TEV Study recommended a reduction in total manpower from 3013 as of March 2001 to 1311 by March 2002. However, even as of March 2005, the total manpower was 1704, which was in excess of the TEV norm by 393 employees.

According to the TEV Study, the projected reduction in manpower would have ensured that BRL's labour productivity would go from 11 tonnes per man per year to 58 tonnes per man per year, as compared to the average of 60-70 tonnes per man per year for Indian refractory producers and 100-300 tonnes per man per year for foreign producers. The position of each unit was as follows:

(Productivity in tonnes per man/year)



Note: For the above calculations, casual workers engaged by units have also been included.

* Labour productivity in BRP for 2003-04 & 2004-05 has been worked out considering conversion job of MCB also.

With the improvement in their capacity utilisation, BHRP also substantially improved its labour productivity, though it was still below the TEV projections. The position in other

units, particularly RRRP, was much below the TEV projections. Production at BRP increased substantially but labour productivity indicated was less due to excess strength of manpower.

Ministry stated (February 2006) that productivity of RRRP had reduced due to lack of working capital and orders and there was increase in labour productivity during 2005-06.

Audit observed that although there was improvement in the labour productivity, yet it was far below the industry norm.

10.9 Business Planning and Financial Management

10.9.1 Business Plan

At its 140 meeting in September 2004, the Board of the Company asked for a Business Plan for five years. In response, the Company prepared and submitted a production plan for five years, with the following noteworthy features:

- The plan did not cover investment and profitability aspects. No increase in capacity had been indicated, nor any techno-economic studies conducted.
- The plan indicated 100 *per cent* capacity utilisation for 2005-06 and 2006-07 (except RRRP) and more than 100 *per cent* capacity from 2007-08 to 2009-10. In particular, it projected BRP's production of bricks at 14,000- 16,000 tonnes p.a., against the re-assessed capacity of 19800 tonnes.
- It projected the production of Concast refractories at IFICORP from Rs.10 crore to Rs.15 crore during 2007-08 to 2009-10, although no action to set up this project had yet been taken as commented upon in para No. 10.7.1.

The optimistic projections in the plan, without detailed justification, was indicative of the Management's lack of serious interest in the planning process.

The Management stated (May 2005) that the Board of Directors desired preparation of business plan through an outside agency. Accordingly, preparation of business plan was under progress by MECON.

Ministry stated (February 2006) that business plan had since been prepared by MECON.

10.9.2 Costing and Budgeting System

The Company did not prepare any costing manual, nor had it adopted any proper costing system (with standard and actual costs) for the purpose of cost accounting and cost control. As stated in para No 10.4.7, no norms were fixed for consumption of raw materials and other inputs like fuel and electricity. Cost of production was worked out on a rough basis for a group of products, primarily for valuation of inventory. While original and revised budgets were prepared annually, variance analysis of actual vis-à-vis budgeted expenditure was not conducted. Thus, the Company's controls over budget and cost were weak.

Ministry stated (February 2006) that the Company was in the process of setting up a Costing and Budgeting department for the purpose of cost accounting and cost control.

10.10 Internal Audit set up

The last internal audit of the Company was conducted by an outside firm for the year 1999-2000 for four units. The company had no internal audit department, and the post of

Chief Internal Auditor was vacant. Though a Chief Manager (Finance) was appointed as Chief of Internal Audit in August 2005, no internal audit team had been constituted as yet (December 2005).

Ministry stated that during 2002-03, a large number of finance executive and staff opted for voluntary retirement and the present strength was fully utilized in accounts job. The Company was contemplating transfer of staff from departments other than finance for setting up the internal audit department. Considering the cost and present financial crisis, engagement of outside parties might not be desirable.

Further action is awaited (February 2006).

10.11 Conclusion

The Company received three revival packages during the years 1997 to 2002, wherein it got various concessions like waiver of interest on loans upto March 1995, grant of interest free working capital loan, interest holiday upto 2007-08, four years moratorium for repayment of loan, conversion of loans into equity and cash assistance of Rs.234.60 crore in the shape of loan and equity.

Despite these substantial concessions, the Company could achieve maximum 87 *per cent* of the reassessed production capacity of 75645 tonne per annum due to under utilisation of presses, excess rejection of bricks, lower demand of MCB sets on account of poor quality, negligible production and abnormally higher rejection in case of silica bricks at BRP. The Company managed to earn operational profit of Rs.6.95 crore and Rs.14.70 crore during 2003-04 and 2004-05 respectively as against TEV projection of Rs.19.19 crore and Rs.19.23 crore for the third and fourth year of the revival scheme respectively. However, it could not earn net profit and instead incurred net loss ranged between Rs.74.51 crore and Rs.5.21 crore during the years 2002-03 and 2004-05 respectively against the TEV projection of Rs.11.95 crore. The accumulated loss on 31 March 2005 was Rs.325.56 crore which had eroded the entire paid up capital and a substantial portion of loan received from Government of India. The main reasons for non achievement of profit targets were lower production, negligible production of silica bricks, production of poor quality of MCB sets, S/G refractory, excess manpower leading to excess expenditure of Rs.9 crore per annum, non realisation of sundry debtors and excess consumption of raw materials.

The Company had taken a number of hasty and injudicious decisions for procurement and installation of equipment/plant etc. resulting in blocking up of capital and loss of interest. The Company could not achieve the desired results from installation of Mixing machine, gas producer plant, Sacmi press etc and the same were lying un-utilised/under-utilised.

The mechanism of managerial control in the company like costing and budgeting system, internal audit system etc. was weak. The Management had not fixed operational norms, norms for consumption of raw materials and fuels etc. against which it could measure its performance. The Company had also not prepared and approved manuals for purchase, contract, stores, costing, accounting etc.

CHAPTER: XI

MSTC Limited

High Seas Sale Activity

Highlights

During 2002-03 the Company surpassed the targets of turnover and was also rated 'Excellent' in terms of MOU; however, it failed to meet the target of ensuring that at least 20 per cent of the imports were for non-captive buyers.

(Para 11.7.1.1)

The specific contribution of High Seas sale activity to the overall financial performance could not be ascertained as no separate cost records had been maintained for allocation of overheads made to this activity.

(Para 11.7.1.2)

During the last five years ending 31 March 2005 maximum business was derived from four to five items. Growth in overall sales of the Company had been price driven and not volume driven. Concentration of sales on limited number of products and a single customer i.e. HPL involved attendant risk of loss of flexibility and sudden decline in volume of business in future.

(Para 11.7.1.3)

Internal audit of International Marketing Division was conducted by an external agency from 2002-03 onwards. However, Board was not apprised of major internal audit findings.

(Para 11.7.2.1)

Scrutiny of records did not reveal any process of verification of rates of the suppliers with the prevailing market price to ensure acceptance of competitive rates.

(Para 11.7.3.1)

As envisaged in the Strategic Plan (2003-07), the Company had not developed the market research function till October 2005.

(Para 11.7.3.2)

The existing Manual for Import of the Company does not provide for scrutinizing credentials of new buyers and foreign sellers through independent rating agencies.

(Para 11.7.4.2)

Deviations from the terms and conditions of MOAs e.g. terms of lifting of goods, provision of bank guarantees, storage of goods in Company controlled warehouses and stockyards, issue of goods at prices less than provisional issue prices, etc. were noticed in several cases.

(Para 11.7.4.3)

As a result of allowing waiver of third party inspections and quality and quantity certification by the supplier in the MOA with Reliance Silicones (India) Pvt. Ltd., the Company incurred a loss of Rs.4.03 crore.

(Para 11.7.4.5)

Non-inclusion of adequate safeguards in the MOA entered into with Shamon Ispat Limited (SIL), a 100 *per cent* EOU client led to waiver of interest of Rs.82.00 lakh, which was otherwise recoverable as per MOA.

(Para 11.7.4.6)

Gist of recommendations

- Operational Plans need to be drawn up based on data analysis specifying the concrete measures/actions to be taken and quantifying the levels of various activities required to achieve the MOU targets.
- Cost Records may be maintained so that product-wise/ segment-wise (import/export/domestic)/activity-wise (trading/selling agency) performance is ascertainable which will provide the management with information for control and decision making and also help in developing Strategic Business Unit (SBU) concept.
- Management should develop competence in the area of procurement of materials at competitive cost to be able to carry out full-fledged trading activity as envisaged in the Strategic Plan.
- To ensure its emergence as a diversified trading house, the Company needs to actively identify buyers' needs and attune the activities of its Marketing Division to the market trends.
- The Company should insist on adherence to the conditions of MOA by the customer. Relaxation may be permitted only after amending the MOA after approval by the competent authority.

11.1 Introduction

11.1.1 MSTC Limited (formerly known as Metal Scrap Trade Corporation Limited) was incorporated under the Companies Act, 1956 in September 1964 under the administrative control of the Ministry of Steel. The Company became a subsidiary of Steel Authority of India Limited (SAIL) in February 1974. In the year 1982-83, it was converted into an independent Company by transfer of its shares from SAIL to the President of India. It was declared a Mini Ratna Company in 2001.

11.1.2 The Company has two major spheres of activities viz; selling and marketing. As a selling agency, the Company undertakes disposal of ferrous scrap and other secondary arisings generated in integrated steel plants and disposal of scrap, surplus stores, etc. from other public sector enterprises and government departments including the Ministry of Defence. In the area of marketing, the Company imports material required by large industrial houses on back-to-back basis and transfers the same to the buyer through High Seas sales. Under High Sea Sales system, buyer approaches the Company with the purchase requirement and a Memorandum of Agreement (MOA) is entered into with the buyer. The Company then floats the tender on its website and obtains quotes, the offers are sent to the buyer for their comments and acceptance and after receiving the buyer's acceptance, the Company finalises the Purchase Order followed by opening of Foreign Letter of Credit after acceptance of Purchase Order by the seller. After receipt of Bill of Entry from the foreign supplier the Company sells the entire quantity of material to the

buyer on High Seas Sale basis prior to arrival of the ship at the unloading port and takes post dated cheques for the invoice amount. On the basis of that sale, the buyer files the Bill of Entry with the Customs authority and pays the customs duty. The buyer pledges the materials to the Company and stores it in a stockyard controlled by its authorized custodian and takes delivery of the material as and when required after making necessary payments to the Company. The items imported include petroleum products, Low Ash Metallurgical (LAM) coke, Coking coal, Direct Reduced pellets, Hot Rolled (HR) Coils and melting scrap. The International Marketing Division at the Corporate Office in Kolkata looks after the High Seas sale operations. Marketing activity also includes direct trade in items within the country.

11.2 Organisations Structure

The Management of the Company is vested with the Board of Directors headed by the Chairman cum Managing Director (CMD). The members of the Board are nominated by the Ministry of Steel. Though the Memorandum of Association stipulates a minimum of three Directors, the actual number was two from May 2003 onwards. The functional areas of the Company are looked after by executive officers of the rank of Chief General Manager/General Manager.

11.3 Scope Of Audit

Performance Audit was conducted to review the performance of the company on account of the marketing operation with reference to the strategic plan/MOU targets and the process and transactions on account of High Seas sales. The thrust areas of audit were contract management and effectiveness of the process for High Seas sale and related internal controls. Audit examination covered 63 MOA the Company had entered into with 21 parties during the period April 2000 to March 2005 and other records/files related to High Seas sale.

11.4 Audit Objective

Performance Audit of High Seas sale activity was taken up to ascertain whether:

- i. the goals set in the operational plans/MOUs were consistent with the strategic plan of the Company and same were achieved;
- ii. internal control and accountability within the Company provided sufficient assurance for safeguarding the financial interest of the Company;
- iii. systems and procedures for entering and executing MOA for High Seas sales ensured protection of the Company's financial interests.

11.5 Audit Methodology

Audit methodology involved detailed examination and analysis of MOA files and records relating to High Seas sale for the period April 2000 to March 2005 and a comparative analysis of best practices followed by other similar Public Sector undertaking engaged in similar business like MMTC Limited (MMTC) and State Trading Corporation (STC).

11.6 Acknowledgement

For conducting this performance audit, the audit team visited the Corporate Office of the Company at Kolkata as well as the Southern Regional Office at Chennai. Audit acknowledges the co-operation and assistance extended by different levels of management at various stages of the Performance Audit.

11.7 Audit Findings

11.7.1 Achievement vis-a-vis corporate goals

11.7.1.1 The Strategic Plan (2003-07) while highlighting the areas of concern for the future as well as identification of new business areas, set out the objectives for the year 2002-03 also. The following activities, inter-alia, were envisaged to achieve the financial goals of the organisation.

- i. drawing up of an operational plan by February each year
- ii. development of risk management module to undertake trading in the true sense
- iii. conducting market survey to assess customer satisfaction

The Company also entered into a Memorandum of Understanding (MOU) with the Ministry of Steel each year.

It was observed in audit that no operational plans were prepared by the Company. Documentation of the planning process to attain stated goals was not on record. The Management contended (October 2005) that no separate operational plan needed to be drawn up as MOU was signed with the Ministry of Steel based on the Strategic Plan (2003-07). However, while Strategic Plan/MOU indicated the larger objectives and strategy to be followed in a broader perspective, the detailed operational plan was required to further break down the major objectives/goals and specify the concrete measures/actions to be taken and quantify the levels of various activities required to achieve the MOU targets. Mere fulfillment of major MOU targets was not adequate as during 2002-03 the Company surpassed the targets of turnover and gross margin and was also rated 'Excellent' in terms of MOU; however, it failed to meet the strategic target of ensuring that at least 20 *per cent* of the imports were for non-captive buyers. The Management contended (December 2005) that the target of importing for non-captive buyers was considered keeping in view the proposed introduction of VAT which had not yet happened. The contention of the management is not tenable since this target was not related to introduction of VAT. The Company categorically stated in its strategic plan (2003-07) that the idea behind setting the target of at least 20 *per cent* of the import for non-captive buyers was basically to import without a back to back contract and undertake trade in the real sense. Failure to achieve this target reflected inability of the management to develop competence in the area of procurement at competitive cost which was also one of the strategic objectives.

11.7.1.2 While the Company's financial performance was 'excellent' vis-à-vis the MOU target during the period 2000-2001 to 2004-2005 as given at Table I below, the specific profit contribution of High Seas sale to the overall financial performance could not be ascertained as no separate cost records for or allocation of overheads made to High Seas sale transactions were maintained by the Company.

Table- I

(Rs. in crore)

Year	MOU Target	Achievement	
	Total Sales	Total Sales	High Seas sale
2000-01	220	324.19	324.03
2001-02	285	422.77	421.98
2002-03	400	2045.69	1468.68
2003-04	1835	3292.62	2566.75
2004-05	2645	4870.80	4611.08

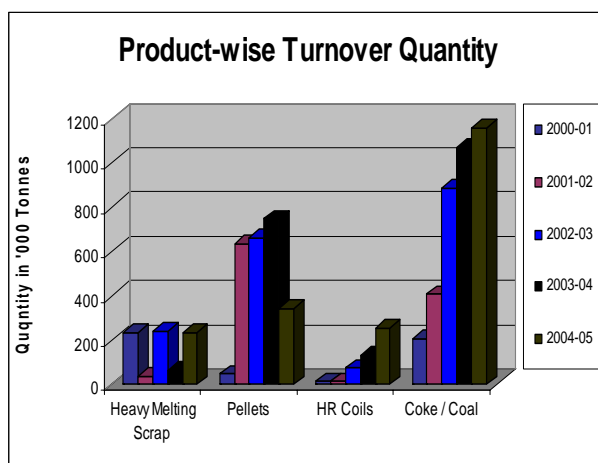
11.7.1.3 Analysis of Turnover

As shown in Table I, the year wise percentage of High Seas sale to total sales varied from 72 per cent to 100 per cent during the period April 2000 to March 2005. A review of the item-wise quantity sold during the last five years revealed that maximum business was derived from four to five items namely, Heavy Melting Scrap, Pellet, HR Coils, Coke/Coal and Naphtha. These contributed 78 per cent to 96 per cent of the total turnover during the period 2000-01 to 2004-05. Of the above five items, trading in Naphtha for Haldia Petrochemicals Limited (HPL) contributed 46 per cent to 55 per cent of the total turnover during the period 2002-03 to 2004-05. Factors contributing to increase in turnover are indicated in Table II below:

Table II

Year	Total Turnover (Rs. in crore)	Increase in Turnover (per cent)		
		Over previous year	Over previous year on account of HPL	Over previous year on account of other factors *
2000-01	324.19	-	-	-
2001-02	422.77	30.41	-	30.41
2002-03	2045.69	383.88	253.44	130.44
2003-04	3292.62	60.95	35.91	25.04
2004-05	4870.80	47.93	13.05	34.88

* Note: Other factors include increase in the international prices of heavy melting scrap, Pellets, Coke/Coal, and HR Coils.



Analysis of turnover of commodities other than Naphtha shows that huge surge in price of commodities and industrial raw materials during 2002-03 to 2004-05 (average price of coke/ coal increased by 24.30 per cent to 64.55 per cent over the preceding years while similar increase in case of HR coils was 24.25 per cent to 52.33 per cent) had resulted in this growth in the value. Volume of business in quantitative terms increased only in case of coke/

coal and HR coils while in case of Heavy Melting Scrap and Pellets there had been no steady growth in volume. Thus, growth in sales (excluding the sales made to HPL) had been basically price driven and not volume driven. As the Company excessively relied on limited number of products and a single customer i.e. HPL there was attendant loss of flexibility and risk of sudden decline in volume of business in future and in the event of commodity market stabilizing at lower price levels, the existing volume (in value terms) would shrink drastically. The Management accepted the risk involved in banking on a few large customers but was silent on other issues viz. spreading of risk, growth in sales only due to price rise and lack of steady growth in volume of heavy melting scrap and pellets during the period 2000-01 to 2004-05. The Management also stated that the resource constraint primarily in terms of manpower was more acute for MSTC than it was for other trading concerns. The Management's contention of manpower constraint for High Seas Sale is not acceptable as the Management can always consider deployment of skilled personnel, if warranted by its business plan.

Recommendations

- Operational Plans need to be drawn up specifying the concrete measures/actions to be taken and quantifying the levels of various activities required to achieve the MOU targets.
- Management should develop competence in the area of procurement of materials at competitive prices to be able to carry out full-fledged trading activity as envisaged in the Strategic Plan
- Cost Records may be maintained so that product-wise, marketing/selling agency wise performance is ascertainable which will provide the Management with information for control and decision-making and help in developing Strategic Business Unit (SBU) concept.
- The Company needs to diversify its products basket and widen its customer base to spread risk.

11.7.2 Control Environment

11.7.2.1 Internal Audit Department.

Although the company has been in existence since 1964, no Internal Audit manual, guidelines or standards had been prepared (August 2005). Internal audit for regional and branch offices was carried out departmentally but there was no full-fledged Internal Audit wing. Internal audit of International Marketing Division (IMD) was conducted by an external agency from 2002-03 onwards. The findings of Internal audit were discussed in Annual Regional Managers meeting. However, the Board was not apprised of the major findings. Further, no follow up action for remedying the weaknesses/deficiencies was on record till 2003-04. The Management (August 2005) stated that preparation of Internal Audit manual was in progress.

11.7.2.2 Delegation of Power

Activities of the IMD were mainly carried out by the Corporate Office situated at Kolkata with limited assistance for follow up action from the Regional Managers/ Branch Managers. All financial powers were vested in the CMD. The Company made no adequate and appropriate delegation to officials at different levels. This was contrary to

the fundamental rule of internal control that the work of one person should be independently checked and authorised by another. The Management stated (May 2005) that delegation of power of the Company was under revision.

11.7.2.3 Ascertainment of deal-wise Cost

In the absence of costing records the Company could not segregate costs incurred in respect of each consignment or compute profit/ loss on consignment-to-consignment basis. Proper consignment wise costing was necessary to exercise financial control over the various deals and to determine the profit trend, viability of a deal and scope for improvement. This could also facilitate future planning on a realistic basis. The Management stated (October 2005) that this was followed as cost of materials plus actual expenses other than overhead plus markup was the issue price for each consignment. However, in the absence of a system for ascertaining and allocating the incidence of actual overhead costs, budgetary control could not be made meaningful and control-oriented. The Management further stated (December 2005) that in view of the number of contracts executed annually, consignment wise apportionment of indirect costs like overheads including salary and wages might not be possible. The Management's reply is not acceptable as proper consignment wise costing is necessary to exercise financial control over the various deals and to determine the profit trend, viability of a deal and scope for improvement.

11.7.2.4 Non-maintenance of Order Book and quantity records

The Company did not maintain any records/statistics of total quantity of orders received, quantity of orders executed, quantity of orders not executed and the reasons thereof. The Management was also aware of the fact that the records were not readily available especially those pertaining to the earlier periods. As such MIS and maintenance of records was an area of weakness. This was important for analysing the performance on individual transaction. The Management stated (October 2005) that order book position was maintained customer wise in the form of a stock statement. A review in audit revealed that the order book quantity vis-à-vis orders executed was not maintained and the same was also confirmed by the Management (September 2005). The Management while reiterating its reply of October 2005 further stated (December 2005) the accounts department also maintained a customer ledger. The reply is not acceptable as the records maintained by the Company do not show the details of orders received but not executed.

Recommendations

- Delegation of powers should be so devised that a single authority cannot initiate, authorise and conclude a transaction.
- Costing system needs to be devised so that consignment-wise profitability is ascertainable.
- Data and records of orders received and executed may be compiled in a systematic manner for the information of the top management and for use in fixation of target, evaluation of performance of suppliers etc. Necessary format may be devised in consultation with peer organisations/outside consultant.

11.7.3 Market intelligence and awareness of environment

11.7.3.1 Selection of seller

As per the prescribed procedure tender inquiries were hosted on the Company's website for procurement of material. Scrutiny of records did not reveal existence of any process of verification of rates quoted by the suppliers with the prevailing market price to ensure acceptance of competitive rates. While the Management remained silent on the issue of methodology followed for ensuring competitive rates, it contended (October 2005/December 2005) that since the Company worked on the basis of cost plus mark up, the cost of materials would not affect the performance of the Company. Further, since the orders were placed after taking concurrence of the buyers to the rate quoted, it was reasonable to expect the buyer to negotiate the best price. The reply of the Management is not tenable as dependence on the buyer to negotiate the best price would hinder the capability of the Company to procure at competitive rates which is vital for its development as a direct trader. It was also observed that PSUs like the State Trading Corporation subscribed to Reuter Terminal, Coal portal etc. to obtain international prices of major commodities. Further, non-competitive procurement of material would make it difficult to find alternative buyer if the original buyer failed to lift the material.

11.7.3.2 Formation of Market Research Team

One of the objectives in the area of marketing as per the Strategic Plan (2003-07) was to do import trade in at least eight items which were to be chosen every year because demand supply equation and imported versus indigenous material price equation change very fast. Accordingly, it was envisaged in the strategic plan to further develop the market research function in order to compete, analyse real time information and select eight items for import. However, the company had not developed the market research function till October 2005. While indicating resource constraints in conducting market research the Management (December 2005) noted the audit views for compliance.

11.7.3.3 Non-maintenance of Customer database

The Company had not developed any customer database for sale of various products. In case of buyers failing to lift imported material, such a database would help the Company in identifying alternate buyers. Management contended (October 2005) that it was not always possible to find alternate buyers as the Company imported raw materials for industry and the specifications were often customized. The main strategy was to secure a deposit in advance to cover any possible consequence of variation in the market price in the short-run. The Management further stated (December 2005) that the information about customers was easily obtainable and the resources required to maintain and update an all India customer base might not be justified in view of its possible scant use. Management's reply is not tenable as MMTC, one of the Trading Houses in the Public Sector adopted (January 2005) a policy of conducting preliminary study of the mode of disposal to alternate buyers/ users in case the original buyer failed to lift the material within the prescribed period and incorporated the same in the purchase proposal while taking approval from competent authority. As the commodity market is volatile and procurement cost is not always competitive, booking customized materials without any alternative buyer involves an element of risk. Management while accepting the audit contention replied that the level of risk inherent in the business was acceptable to it.

Recommendations

- A Market Research Team needs to be formed for addition/deletion of items approved in the Import List keeping in view the changes in the business environment.
- A list of alternate customers should be prepared for products imported. Prior to dealing in new items the Company should develop knowledge base and ascertain availability of alternate customers.
- To obtain international prices of all major commodities, the Company may subscribe to Reuters Terminal, Coal portal etc. which is being done by the other PSUs like STC.
- Sound mechanism needs to be developed to have constant vigil on the movement of prices of materials in the market.

11.7.4 Contract Management

While reviewing the MOA's entered into by the Company the following deviations from best practice, prescribed manuals and the terms and conditions of the MOA's were observed in audit:

11.7.4.1 Delay in revalidation of MOA

The Company entered into MOA with buyers generally for one year and revalidated the same in the succeeding year, if the buyer so desired. It was noticed in seven cases* is that the revalidation of MOA was not done in time which was an indication of lack of adequate follow up and control over documentation. Although as per Contract Act, continued performance by both the parties ipso facto connotes continuation of the contract, delaying the revalidation of MOA was not desirable as it did not conform to sound business practice.

11.7.4.2 Deficiency in Manual for Import

The practices for High Seas sale followed by the Company and the Manual for Import as adopted in January 2001 did not provide for:

- i. Establishment of credentials of new buyers through a renowned credit rating agency before entering into any MOA with them.
- ii. Checking of the credentials of the foreign sellers through independent rating agencies like Standard & Poor, Dunn & Bradstreet, etc.
- iii. Manual did not specifically indicate occasions/ situations where issue of tender for procurement of materials from overseas was not to be resorted. Rather it left the decision to initiate action for procurement of the items from overseas sources for tendering or otherwise to be "mutually agreed" upon between the Management and the customer.

* *Usha Ispat, Balasore Industries, Haldia Petrochemicals Ltd, Uttam Galva, Ispat Industries, Maharashtra Steel Rolling Mills and Maheswari Brothers*

Although the necessity for revision of the Import Manual (2001) was felt in March 2003, revised manual became available only in September 2005. Even the revised marketing manual introduced was silent on the necessity for establishment of credentials of new buyers through a renowned credit rating agency, a practice that would reduce the transaction risk before entering into MOA with these organisations. MMTC adopted this practice in January 2005.

11.7.4.3 Audit observed that the Company frequently failed to ensure adherence to the condition of the MOA by the customers. The details of important cases in which such irregularities were noticed in audit are given in para 11.7.4.4 to 11.7.4.7. A summary of such deviation from MOA terms is given below -

- i. As per MOA terms subsequent orders were to be placed only after regular lifting of goods received in current consignment. However subsequent order was placed in six cases[♦] before regular lifting of current consignment.
- ii. As per MOA the materials were to be warehoused in stockyards controlled by the company but the goods were kept at the buyer's premises in three cases[♥]
- iii. No bank guarantee was taken in four cases[▲] and in one case[•] it was not sufficient.
- iv. No third party inspection of material was done leading to dispatch of wrong material in one case (RSIL).
- v. As per the MOA, the goods were issued initially at a provisional price and the final price was decided taking in to consideration the actual cost of material overheads and margins. In two cases[♦] it was observed that materials were issued at a price lower than the provisional issue price at the request of the buyers.

Further, the following irregularities were also observed in the execution of MOAs:

- i. Post dated cheques received from buyer towards payment for goods bounced in four cases[♥]
- ii. The Company did not obtain competitive price and placed contract on L-2 bidder at the instance of buyers in two cases[⇔].

11.7.4.4 Important cases of individual irregularities in executing and implementing the MOA are detailed below.

11.7.4.5 Reliance Silicones (India) Pvt. Ltd. (RSIL) approached (May 2002) the Company to import Volatile Silicone Cyclic Mixture (Hyper pure) from RMSP (UK) Limited and MOA was signed in July 2002. The selection of RSMP (UK) and waiver of critical conditions of third party inspection and certificate of quality and quantity given by the seller were done at the instance of RSIL. Material worth Rs.5.97 crore imported in

[♦] Reliance Silicones (RSIL), Shamon Ispat (SIL), Sarbati Steel Tubes Ltd (SSTL), Mukund Ltd (ML) and Marmagoa Steel Ltd (MSL), Yeses International Ltd (YIL)

[♥] SSTL, YIL, Usha Ispat Limited (UIL)

[▲] RSIL, SIL, Uttam Galva Steel Limited, YIL

[•] SSTL

[♦]SSTL and YIL

[♥] RSIL, SIL, SSTL, YIL

[⇔] RSIL and UGSL

three shipments was cleared under advance license. The material was not lifted by the buyer. Subsequently, it was observed that the actual material dispatched was different from what was intended to be bought. In fact, in the petition filed in the High Court by the Company (May 2004) for recovery of outstanding dues, the Company stated that the material purchased was nothing but water. Consequently the Company failed to recover the dues and provided as bad and doubtful debts an amount of Rs.4.03 crore in the annual accounts of 2004-05. Deficiencies/lapses committed by the Company in this transaction were as follows:

- i. No third party inspection was carried out leading to dispatch of wrong material.
- ii. Credit report of RMSP (UK) Ltd. was not obtained through bank though the issue was raised internally.
- iii. Although the material of first shipment was not lifted, second and third shipments were imported which was contrary to the provisions of MOA (clause 4.9).
- iv. The Management relied entirely on the buyer in respect of the price of the imports.

This case is an example of managerial failure at the initial stage itself where the credentials of both the buyer and seller had not been checked prior to placement of purchase order.

The Management, inter alia, replied (December 2005) that the allegations regarding the quality of the cargo in the Affidavit were made as a part of legal strategy. This indicates lack of business ethics and absence of professionalism. Further, the Management's contention regarding acceptance of liability by RSIL is not tenable as the buyer (RSIL) had clearly denied the liability in its letter to Chairman cum Managing Director (June 2004).

11.7.4.6. An agreement was entered into with Shamon Ispat Limited (SIL), a 100 *per cent* Export Oriented Unit (EOU), for import of HR coils in December 2000. As per clause 2.2.2 of MOA quantity to be ordered and placement of subsequent orders would depend on regular lifting by SIL. However, the progress of lifting of the material by the customer was not satisfactory from third shipment onwards resulting in accumulation of HR coils. This aspect was not considered by the Company while placing further orders leading to further piling up of stock. The material could not be sold to alternative buyer as it was purchased for a 100 *per cent* EOU and was cleared under advance licence*. This issue was not considered while entering into MOA with SIL. Post-dated cheques obtained from SIL bounced. The Bank Guarantee was encashed to cover material value and part of interest. The Company finally settled the case by waiver of interest of Rs.82.00 lakh. The Management's contention that there was no loss as principal together with interest had been recovered from SIL was not tenable as interest of Rs.82.00 lakh recoverable as per MOA had to be waived. The Management further stated (December 2005) that adjustment of interest was a common commercial practice to be adopted depending on the changing realities of the market situations. The Management did not however, give

* *Materials cleared against advance licence are to be used for production of items for export by the individual/organisation clearing the goods under such license*

any explanation for the lapse that occurred due to deviation from the lifting clause of the MOA and the remedial action being considered to put in place adequate safeguards required in dealing with EOU clients.

11.7.4.7 The Company processed (April 2003) an indent from Uttam Galva Steel Ltd (UGSL), requesting it to float a tender for 10000 Metric Tonne (MT) HR coils for supply in April/May, 2003. The tender was hosted on 4 April 2003 on the Company's website. Three parties participated and the bids were opened on 16 April 2003. The lowest price was quoted by Vinar Overseas Trading Pvt. Ltd at US \$ 290 per MT CFRLO (Cost Freight Liner Order), Mumbai. However, UGSL advised acceptance of bid of Europa Import Export Ltd. who was L-2 with a bid price of US \$ 360 per MT. Although the Company did not suffer any loss, this deal resulted in additional outgo of foreign exchange of US \$ 690183. The Management, inter-alia, stated that Vinar Overseas did not agree to extend the validity of the offer and the same had expired before purchase order was placed in 3 May 2003. In this context, it may be stated that in the volatile commodity market no supplier keeps its offer open for long. Accordingly, Strategic Plan (2003-07) of the Company noted 'while floating the tender, give a definite commitment that the decision will be communicated within a certain date preferably within two days'. Despite that the Management took a lackadaisical approach and took one month in finalisation of the purchase order.

11.7.4.8 Modus operandi for High Seas sale provides that after effecting High Seas sale the materials are to be warehoused in stockyards controlled by Company authorised custodians. However, in case of Usha Ispat Ltd. (UIL), the material was shifted from dockyard into their plant directly instead of unloading and storing the same at the warehouse managed by Ferro Scrap Nigam Limited (FSNL), a subsidiary of the Company. Such deviations from contracts may complicate matters in case of default by the buyers when possession of goods is not with the Company. The Management contended (October 2005) that material was kept in the premises of UIL but under custody of FSNL. However, such custody may not be very effective as the Company was not in full control of the materials that might make it difficult to dispose of the materials to alternative buyers if the original buyer defaults. The Management further contended that no buyer might be willing to incur the additional transportation cost and rent involved in keeping the material out of premises of the buyer. In this regard it is stated that in terms of the MOA generally entered into by STC with its buyers, STC may keep pledged materials at a stockyard plot/godown nominated by the buyer and accepted by STC under physical control of Central Warehousing Corporation, State Warehousing Corporation or any other agency to be nominated by STC. The Management stated (December 2005) that as the Company received full payment from UIL, there was no issue. This undermines the need to frame a sound policy to avoid recurrence of such practices in future.

Recommendations

- The Company should be stringent in compliance of terms of MOA especially while dealing with new customers.
- The adherence to the lifting schedule as per the MOA should be strictly observed and a penal interest needs to be levied on expiry of the lifting schedule as per MOA.

- The Company should put in place a system for checking the credentials of new associates as well as the foreign sellers through renowned rating agencies.
- Performance Guarantee Bond as required to be obtained as per manual had not generally been obtained from foreign vendors, as the terms of Purchase Agreement did not provide for such requirement. As such bonds confirm the performance of contract the Company should strictly follow the manual in this regard.
- Suitable additional safeguards to protect the interest of the Company in case of failure to lift material may be incorporated in the MOA in the case of 100 *per cent* EOU clients.
- The option of paying the warehousing charges to the custodian of the goods from the Company's own corpus and recovering the same from the buyers to have a direct and better control over the activities of the custodian should be explored.
- Pledged material should not be stored at the customer's premises.
- Credibility of the buyer, their past track record, market share in the industry concerned and volatility of the commodity market determine the risk involved. The quantum of Bank Guarantee as security should be decided accordingly. Additional safeguard in the form of increasing the quantum of Bank Guarantee in case of decrease in price of material to cover the fall in price may be provided in the MOA

Conclusion

It was observed that the main function of IMD was facilitating import i.e. calling bids, placing orders, opening Foreign Letter of Credits, arrangement of Foreign Banks' Credit, etc. Excessive reliance on back to back sales in a few products and with limited customers was to the detriment of marketing activity like sourcing of product at internationally competitive rates and providing value added services like port clearance activities and stevedoring. The Company could find it difficult to maintain its volume of business/growth in the days to come unless it elevates itself from the role of an import facilitator to that of one carrying out marketing activities in the true sense. To ensure its emergence as a diversified trading house, the Company needs to actively identify buyers' needs and attune the activities of its Marketing Division to the market trends.

The review was issued to the Ministry in December 2005; its reply was awaited (February 2006).

CHAPTER: XII

Steel Authority of India Limited

Import of Coking Coal

Highlights

Due to the shortage of coking coal, there was a decline of 12 per cent (0.31 million tonnes) in SAIL's production of saleable steel for the first quarter of 2004-05.

(Para 12.3.2)

Between November 2000 and December 2004, SAIL floated 13 spot tenders for 3.625 million tonnes for different types of coal, but received only 45,000 tonnes of coal, which represented just one per cent of the tendered quantity.

(Paragraph 12.4.2.1)

Failure by SAIL to take adequate and timely action through properly planned purchase of hard coking coal resulted in avoidable expenditure of Rs. 344 crore.

(Para 12.4.3.2)

In view of SAIL's current time frame for spot tendering, its poor track record in tendering, and lack of adequate testing and quality assurance, it should consider spot tendering as the least preferred option for meeting its planned or urgent requirements of coking coal.

(Para 12.4.4.1)

SAIL incurred avoidable additional expenditure of Rs. 87 crore and Rs. 89 crore, by signing term agreements for hard and soft coking coal with Xstrata/ MIM and Xstrata/ Oceanic respectively, and simultaneously keeping deliveries under the Long Term agreements in abeyance.

(Para 12.5.1.2 and 12.5.2.4)

SAIL did not obtain adequate evidence to indicate that the impact of force majeure was borne proportionately by other customers of Xstrata/ MIM, and SAIL did not have to bear an undue burden.

(Para 12.6.2.4)

Failure by SAIL to exercise the mutual option quantity of 0.150 million tonnes in time in the LT agreement with Xstrata/ Oceanic for soft coking coal for 2003-04 resulted in a loss of Rs. 32 crore

(Para 12.6.3.4)

Failure by SAIL to take advantage of existing offers for hard coking coal at a low price, resulted in excess expenditure on spot purchases of hard coking coals of Rs.232 crore.

(Para 12.6.4.2)

Gist of Recommendations

- SAIL should take adequate and timely decisions to ensure adequate supply of coking coal as per the desired specifications in a cost-effective manner.
- The policy and associated procedures for import of coal should be reviewed in the light of the practicability of the alternative procurement options especially spot procurement.
- The use of term agreements to purchase coking coal from suppliers with existing LT agreements should be reviewed.
- All coking coal, irrespective of the mode of procurement, should be subjected to the same standards of industrial testing and quality assurance.

12.1 Background

12.1.1 Coke and Coking Coal

12.1.1.1 Blast Furnace (BF) based iron making, which is the technology used in SAIL's Integrated Steel Plants (ISPs), involves the conversion of iron oxides to iron in liquid form. This is achieved through the use of coke – a form of carbon – which serves two primary purposes:

- (i) acts as a reducing agent for reduction of iron oxide to iron.
- (ii) provides the heat for the reduction reaction.

12.1.1.2 Coke is created from coking coals, by heating suitable blends of such coals to a high temperature in a coke oven battery. SAIL produces almost all its requirements of coke internally*.

12.1.1.3 However, not all coals will form coke, which is suitable for iron-making purposes. The quality of coke is determined, among other things, by the quality of coals used. Very few individual coals possess all the required properties for making BF coke of the desired quality. Different coals are thus blended together in the desired proportion, formulated on the basis of the coke quality requirements. Depending on the strength of the coke produced, internationally, coking coals are broadly categorised into hard coking coals (which are crucial for producing high strength coke) and soft coking coals. Indian coking coals are broadly categorised into prime coking coals (equivalent to hard coking coals), medium coking coals and semi-coking or blendable coking coals.

12.1.2 SAIL's Requirements of Coking Coal

12.1.2.1 SAIL has no captive coking coal mines and is dependent on outside suppliers. While SAIL's main suppliers of indigenous coking coal are the subsidiaries of Coal India Limited (CIL), it has been importing hard coking coal since 1978-79. The import of hard coking coal serves two purposes:

- (i) meeting the gap between actual requirement of coking coal and indigenous availability; and
- (ii) improving the technical parameters of the coking coal blend.

12.1.2.2 The following table depicts the rising trend in consumption of imported coking coal by the four ISPs of SAIL over the period 2001-02 to 2004-05:

	2001-02	2002-03	2003-04	2004-05
Imported	5.89	6.83	7.16	7.06
Indigenous	4.85	4.38	4.77	4.15
Total Consumption	10.74	11.20	11.93	11.21
Imported -Percentage in Blend	55%	61%	60%	63%

12.1.3 Procurement Methods

12.1.3.1 SAIL procures imported coking coal using the following methods:

* Except for Durgapur Steel Plant, which purchases limited quantities of coke from Durgapur Projects Limited (a West Bengal Government undertaking)

- (i) Long Term (LT) agreements– These are agreements with international suppliers for established brands of coal[♦]. The agreements are typically for three years, extendable for two more years, and renewed thereafter. While the agreements specify the annual delivery quantities[♥], the prices are fixed on an annual basis through negotiations; no tendering is involved. The delivery period is from July to June of the next year.
- (a) As of 2001, SAIL had six LT agreements for a total annual base quantity of 4.4 million tonnes and 0.54 million tonnes of hard and soft coking coal respectively.
- (b) Subsequently, between October 2003 and March 2004, SAIL finalised three additional LT agreements[♣], resulting in a total annual base quantity of 5.75 million tonnes and 0.84 million tonnes of hard and soft coking coal respectively.
- (ii) Spot Tenders – These are short-term purchases of coking coal, which are procured through Global Tenders.
- (iii) Term Agreements – This method of procurement covers supplies of imported coking coal for only one delivery period (i.e. one year) or for one trial shipment[♠], with a view to broad-base supplies and/or meet urgent requirements. Term agreements do not involve tendering.

12.1.4 Organisational Structure

12.1.4.1 The Coal Import Group (CIG) of the SAIL Corporate Office is responsible for ensuring timely contracting of the required quantities of the materials, ensuring broad basing of supplies, and providing marketing information to assist in decision making.

12.1.4.2 However, actual decision-making powers vest in two Committees of Directors:

- (i) Committee of SAIL Directors (SDC), which is responsible for Spot Tenders, Trial Shipments and Term Agreements; and
- (ii) Empowered Joint Committee (EJC), which includes Directors of RINL[⇔]; this Committee is responsible for LT agreements of both SAIL and RINL.

12.1.5 Coal Import Policy

12.1.5.1 Prior to January 1999, SAIL did not have a prescribed policy for import of coking coal. The SAIL Board at its meeting held on 30 January 1999 approved a procurement policy for import of coking coal. This policy was reviewed and amended in October 2000 and August 2001. A comprehensive amendment of the policy for import of

[♦] *Established coals are those coals which have undergone industrial testing in SAIL (i.e. actually been used in live coke ovens in SAIL plants) and been found suitable. By contrast, pre-qualified coals are those coals, which have passed pilot coke oven testing with a quantity of 500 kgs.*

[♥] *Base quantities are specified, generally with tolerance (i.e. quantity variation in percentage terms) at either the buyers' option or mutual option (agreement of both buyer and seller)*

[♣] *One LT agreement for 0.15 million tonnes of hard coking coal had expired*

[♠] *For a new or pre-qualified coal, the first shipment is to be treated as a trial shipment.*

[⇔] *Rashtriya Ispat Nigam Limited, another PSU under the Ministry of Steel*

coal and coke took place in March 2004, with further changes taking place in December 2004 and January 2005.

12.1.5.2 The main features of the current policy for import of coal and coke are summarised below:

- (i) Annual requirement of imported coal for the next financial year would be decided by Director (Technical), preferably by October of the current year.
- (ii) SDC/EJC would decide the quantities to be procured under Long Term Agreements (with efforts to have optional quantities), with the balance to be procured through Spot Tenders and Term Agreements.*
- (iii) SDC may decide to procure up to 15-20 per cent requirement in order to build up stocks and/or take care of contingent situations.

12.1.6 Audit Scope and Methodology

12.1.6.1 A field audit of the purchase of imported coal covering the period from April 2002 to October 2004 was conducted during November 2004. The objective of this audit was to verify whether SAIL's policies and procedures for import of coking coal ensured the following:

- (i) Adequate supply of coking coal as per the desired specifications, with a view to maintaining continuity of production;
- (ii) Broad basing the number of suppliers as well as coal brands;
- (iii) Cost-effectiveness of coal supplies; and
- (iv) Quick and timely response in cases of uneven supplies as well as disruption of supplies, with specified stock levels at ports and plants triggering corrective action e.g. emergency procurement, pressure on foreign suppliers, expediting local logistical issues

12.1.6.2 Preliminary audit findings were issued to Management on 17 December 2004, and the response was received on 24 March 2005. The draft audit report was issued to SAIL on 31 May 2005. An interactive meeting with SAIL top management was held on 20 July 2005, and a detailed response dated 8 August 2005 was received from SAIL.

12.1.6.3 The report was issued to the Ministry on 7 October 2005; their response was received on 14 February 2006. The responses of the Management and Ministry have been incorporated, as appropriate, in this report.

12.2 Chronology of Events

12.2.1 A brief chronology of selected events related to the import of coking coal during the period under review is as follows:

Date	Category	Coal Type	Event	Audit Findings Paragraph Reference
April/ May 2003	LT Agreement	Hard Coking Coal	Offers for hard coking coal received from RAG and BHP (Illawarra); no	12.6.4.1

* Prior to March 2004, the policy specified the ratio of LT Agreements to Spot Purchases as 80:20, with buyer's option of +/- 20 per cent in the LT Agreements.

Date	Category	Coal Type	Event	Audit Findings Paragraph Reference
			action taken	
June/ July 2003	LT Agreement	Hard Coking Coal	First force majeure declared by Xstrata/ MIM	12.6.2.1
September 2003	LT Agreement	Soft Coking Coal	Internal approval for exercising mutual option with Xstrata/ Oceanic obtained, but not communicated	12.6.3.2
October 2003	Spot	Coke	Order placed on MMTC for 30,000 tonnes of coke	
	Term Agreement	Hard Coking Coal	Term agreements for 140,000 tonnes on RAG and BHP (Illawarra)	12.6.4.1
November 2003	LT Agreement	Hard Coking Coal	Second <i>force majeure</i> declared by Xstrata/ MIM	12.6.2.1
January 2004	LT Agreement	Soft Coking Coal	Mutual option with Xstrata/ Oceanic exercised; not successful	12.6.3.2
April 2004	Spot	Coke	Orders placed for 165,000 tonnes of coke	12.7
	Term Agreement	Soft Coking Coal	Term Agreement with Xstrata/ Oceanic for 130,000 tonnes	12.6.3.3
April – July 2004	12 per cent shortfall in production due to shortage of coal			12.3.2
April - September 2004	Spot	Hard Coking Coal	0.77 million tonnes purchased	12.4.3.1
June 2004	Term Agreement	Soft Coking Coal	Term agreement for 0.70 million tonnes with Xstrata/ Oceanic	12.5.2
July 2004	Term Agreement	Hard Coking Coal	Term agreement for 0.50 million tonnes with Xstrata/ MIM	12.5.1.2

12.3 Loss of Production due to Shortage of Coking Coal

12.3.1 The following table depicts the shortage of coking coal, arising out of the mismatch between requirement and actual import for the delivery period 2003-04:

(All figures in millions of tonnes)

	Annual Requirement	Receipt			Shortfall
		LT	Spot	Total	
Hard Coking Coal	7.00	5.31	0.36	5.67	1.33
Soft Coking Coal	1.00 ¹	0.88		0.88	0.12

12.3.2 Due to shortage of coking coal, there was a decline of 12 per cent (0.31 million tonnes) in SAIL's production of saleable steel for the first quarter of 2004-05.

12.3.3 In response, Ministry/ Management stated that:

- (i) Immediately after finalising LT deliveries for 2003-04 in September 2003, global tenders were issued in September 2003 itself.

¹ Including 0.195 million tonnes of CDI (Coal Dust Injection) coal

- (ii) Arising out of the second MIM force majeure, the coking coal situation was reviewed in the Chief Executives meeting held on 28 November 2003 and it was decided to make an action plan to improve availability of coking coal.
- (iii) On 10 December 2003, the SAIL Board decided that the procedures for purchase of coal be reviewed to facilitate faster procurement, and a revised policy for import of coal and coke was approved on 17 March 2004.
- (iv) A high level team visited Australia in February 2004 to explore the possibility of procurement of additional coal, but no firm commitments for supply of coal could be obtained.
- (v) In view of the continuing shortage aggravated by force majeure, SAIL made all efforts to procure coal and coke on spot basis. Even then they were forced to curtail production.

12.3.4 This reply is not tenable. As evident from audit's comments in the subsequent paragraphs, SAIL did not take adequate and timely action after the declaration of the first force majeure by Xstrata/ MIM in June 2003 to counter the shortage of coking coal and suffered a substantial loss of production and profit margins, at a time of upswing in the iron and steel industry.

12.4 Spot Tendering for Coking Coal

12.4.1 Impracticable Timeframe

12.4.1.1 As per the experience of the Company, the likely time required by SAIL to move a trial shipment of coking coal to the plant, in the case of procurement through a spot tender is indicated in the following table:

Floating of global/ limited tender, receipt and opening of offers	2-3 weeks
Bid evaluation and placement of orders	3-4 weeks
Submission of PG bond by Supplier	3 weeks
Making the ship available and loading of coal by the supplier	4 weeks
Time required for the ship to reach Indian ports from China/ Australia/ USA	2-5 weeks
Time required after ship discharge and for the wagon to reach the plant	1 week
Total	15-20 weeks

12.4.1.2 In its response, Ministry admitted (February, 2006) that even after compressing the schedule for all activities related to tendering, the minimum time required was 15 weeks for coal to reach SAIL plants from the issue of a tender enquiry.

12.4.1.3 In short, without considering additional delays in the procurement process, even an urgent procurement through tendering (without industrial testing) would take 105-140 days from start to finish. If testing was also included, the total period from start to finish would take 135-200 days.

12.4.2 Poor Record in Spot Tendering

12.4.2.1 Between November 2000 and December 2004, SAIL floated 13 spot tenders for 3.625 million tonnes* for different types of coal, but received only 45,000 tonnes of CDI[♦] coal, which represented just one per cent of the tendered quantity.

12.4.2.2 Out of the 13 tenders (details available in **Annexure – 30**),

- (i) no valid offers were received in four cases;
- (ii) in one case, the offer was found to be technically unsuitable;
- (iii) in two cases, offers were received, but management decided to re-tender
- (iv) in four cases, offers were received, but orders were not placed;
- (v) in one case, the order was placed for 50 per cent of the offered quantity.

12.4.2.3 In response, Ministry stated that:

- (i) If the offers did not meet the coal specifications or other terms and conditions, SAIL had no option but to reject the offers and scrap the tender.
- (ii) Further, if the prices offered were higher than the prevailing market prices, orders were not placed.
- (iii) Poor response against SAIL tenders had nothing to do with SAIL but was due to the prevailing market conditions.

12.4.2.4 The reply of the SAIL Management is not tenable, since repeated tendering without finalisation of orders clearly indicated failure of the procurement processes. By contrast, other Central PSUs like MMTC and STC were able to act as trading agents for supply of coking coal, and, in fact, supplied coking coal to SAIL, when SAIL failed to procure coking coal on its own through spot tenders.

12.4.3 Avoidable Expenditure of Rs.344 crore

12.4.3.1 The spot purchases of hard coking coal made from April 2004 were as follows:

Supplier	Country of Origin of Coal	Shipment Period	Quantity (MT) [♦]	CIF Rate (US\$)/ MT	Total Amount
MMTC	USA	Apr-Aug 04	228,211	\$198.85	\$45,379,909
AMCI	USA	Aug-Sep 04	126,471	\$160.00	\$20,235,360
STC	Poland/ USA	Apr-04 onwards	345,667	\$200.01	\$69,135,360
Logan	USA	Aug-04	71,217	\$160.00	\$11,394,720
Total			771,566	\$189.41	\$146,145,349

12.4.3.2 In contrast, the highest rate for 2004/05 deliveries under LT agreements did not exceed US\$ 60.00/MT FOB i.e. US\$ 88/MT CIF[♦]. Thus, failure by SAIL to take

* This quantity excludes one tender with open quantity option, and one tender with variable quantity.

♦ CDI coal is non-coking coal meant for Coal Dust Injection in Blast Furnaces.

♦ MT stands for Metric Tonnes

♦ An average difference of US\$28/tonne between CIF and FOB prices has been uniformly assumed throughout the review.

adequate and timely action of entering into LT agreements through properly planned purchase of hard coking coal resulted in avoidable expenditure of Rs. 344 crore.*

12.4.3.3 In response, Ministry/ Management stated that

- (i) There was a sudden global shortage of coking coal, and comparison of LT prices settled in January – February 2004 with spot market prices settled later in a rising market would not be correct.
- (ii) The C&F prices of US origin coals should not be compared with Australian origin coals, as the freight rate from USA to India was about US\$ 20-25 higher than freight rate from Australia to India. Hence, the loss worked out by Audit was notional.
- (iii) These quantities were tied up when other measures failed to improve the coal availability and the safety of plant and equipment was at stake; further, the Ministry of Steel had, in April 2004, approved the decision to go ahead for spot purchases at prevailing rates.

12.4.3.4 The reply is not tenable for the following reasons:

- (i) The fact that in October 2003 RAG and BHP were willing to supply only 0.14 million tonnes against their original offer of 0.60 million tonnes shows that the Ministry's claim of sudden global shortage after Jan- Feb 2004 is incorrect. Clearly, SAIL failed to take adequate and timely decisions to counter the shortage of coking coal.
- (ii) SAIL actually purchased US origin coals and paid the higher freight rates; hence the calculation of losses by audit is not notional.

12.4.4 Conclusion

12.4.4.1 In view of SAIL's current time frame for spot tendering (105-140 days), its poor past record in tendering, and lack of adequate testing and quality assurance, spot tendering has to be the least preferred option for SAIL for meeting its planned or urgent requirements of coking coal. The policy and associated procedures for import of coal should be reviewed in the light of the suitability and economics of the alternative procurement options to LT agreements.

12.4.4.2 In response, Ministry appreciated the suggestions given by audit and agreed that spot tendering was not a practicable choice for meeting SAIL's planned requirements. Substantive action by Management on this issue is awaited (January 2006).

12.5 Term Agreements

12.5.1 Term Agreements with Xstrata/ MIM² for Hard Coking Coal

12.5.1.1 As part of the annual negotiations for 2004-05 under LT agreements, in January 2004, Xstrata/ MIM offered to supply 0.50 million tonnes of Oaky Creek brand of hard coking coal at an FOB price of US\$ 65.65/MT. Further, it confirmed its offer on 22 March 2004, with validity up to end-March 2004. However, the EJC considered the price too high, and no agreement could be reached.

* An exchange rate of Rs.44 / US\$ has been uniformly assumed throughout the review.

² Mount Isa Mines Ltd., subsequently acquired by Xstrata Plc, an international mining group.

12.5.1.2 In July 2004, SAIL signed a term agreement with Xstrata/ MIM for the same quantity of 0.50 million tonnes of the same brand @ US\$105/MT FOB, keeping deliveries under the LT agreement in abeyance, reasons for which were not on record. Had deliveries under the LT agreement been finalised @ US\$ 65.65/MT FOB, additional expenditure of US\$ 19.68 million (Rs. 87 crore) could have been avoided.

12.5.1.3 In their response, Ministry/ Management stated that the price indicated by Xstrata/ MIM was much higher than the FOB price of US\$ 57.00-57.75/MT settled with the other two LT suppliers and had the higher price of Xstrata/ MIM been agreed to in the same EJC meeting for delivery during the same year, it would have jeopardised settlements under the LT. Shortage of coking coal forced SAIL to conclude a separate Term Agreement with MIM outside the LT framework, as the final price of US\$ 105/MT FOB was not in line with the LT prices settled with other suppliers.

12.5.1.4 The response is not tenable, since effectively, the term agreement with Xstrata/ MIM was in complete substitution of deliveries under the LT agreement. If the signing of the Term Agreement with the same supplier for the same quantity and for the same delivery period at a price nearly double that of the deliveries under LT agreement with other suppliers, could have no impact, Management did not make it clear how agreeing to a rate of US\$ 65.65/MT under the LT agreement would have jeopardized negotiations with other LT suppliers.

12.5.2 Term Agreements with Xstrata/ Oceanic³ for Soft Coking Coal

12.5.2.1 Discussions were held with Xstrata/Oceanic on 15 March 2004 to finalise quantities and prices for deliveries during 2004/05 under the LT agreement. The minutes of the EJC meeting indicated that the supplier had mentioned a rising trend in the price of soft coking coal and offered a price before the EJC, which considered it too high and requested the supplier to bring down the offered price. In its letter dated 22 March 2004, Xstrata/ Oceanic reiterated the prevailing tight market condition and again requested SAIL to consider the offered price, which was however again not considered by the EJC.

12.5.2.2 However, the minutes of the EJC meeting were silent about the specific price offered by Xstrata/ Oceanic. This lack of transparency in documentation was not an isolated case. Even in the case of the minutes of the EJC Meeting of 14, 15 and 22 January 2004, the price offered by Xstrata/ MIM for hard coking coal had not been documented in the final minutes although a draft copy of the minutes mentioned a specific offer of US\$ 65.65/tonne.

12.5.2.3 In response, Ministry/ Management indicated that the supplier did not indicate a firm price or a price band during the meeting, and only maintained its stand of seeking a high price. This was not documented in the EJC meeting as no firm price or price band was indicated in the EJC meetings by the supplier. Audit however noted that the minutes of the meeting stated that "...M/s Xstrata indicated a price for soft coking coal which was also considered by the Committee to be very high and falling in the spot market price range..." clearly indicating that a price was mentioned, but for reasons not on record, the fact was not documented.

12.5.2.4 This lack of transparency in negotiation and documentation assumes further significance in view of subsequent events as follows:

³ *Oceanic Coal Australia Ltd., subsequently acquired by Xstrata*

- (i) Two Term Agreements were signed by SAIL with Xstrata/ Oceanic in April and September 2004, keeping 2004/05 LT deliveries in abeyance. These agreements were for 0.13 and 0.70 million tonnes at the considerably higher FOB prices of US\$ 102/MT and US\$ 81/MT respectively, as against the price of US\$ 33/MT FOB for 2003/04 deliveries under the LT agreement kept in abeyance.
- (ii) Even for 2004/05 deliveries under the LT agreement signed with another supplier (BHP) in July 2004, the rate was only US\$60/MT FOB. Vis-à-vis the actual BHP prices of \$60/MT, the additional price paid for the term agreements with Xstrata/ Oceanic worked out to US\$ 20.16 million (Rs. 89 crore). Clearly, there was no logic in signing a term agreement for a total quantity of 0.83 million tonnes of soft coking coal, keeping in abeyance 2004/05 LT deliveries of a nearly equal amount.

12.5.2.5 In response, Ministry indicated that the logic of signing a term agreement was a commercial decision, keeping in view the overall interest of SAIL. In case, no settlement had been reached with MIM/ Oceanic/ Xstrata, SAIL would have been forced to buy these required quantities at still higher prices. Consequently, the loss worked out by audit was notional.

12.5.2.6 The reply is not tenable for the following reasons:

- (i) The loss worked out by audit is not notional, but was calculated on the basis of the high prices actually paid under the Term Agreement with Xstrata/ Oceanic.
- (ii) The calculations were on the basis of actual payment and no further comparison with higher prices that may have been paid was made by audit.
- (iii) The benefit to the overall interest of SAIL of such a commercial decision was not clearly spelt out by Management/ Ministry.

12.5.3 Conclusion

12.5.3.1 In effect, SAIL purchased coking coal under term agreements from the existing LT suppliers for 2004-05 at higher prices (closely linked to spot prices) for the same delivery, but without resorting to tendering, by keeping in abeyance equivalent deliveries under the LT agreement.

12.5.3.2 Management/ Ministry stated that these quantities were tied up to meet emergent requirements due to disruption in supplies; at that stage, running of the plants and health of the equipment was of more importance than the ruling market price. The responses indicated SAIL's failure to take planned, adequate and timely action to counter the shortage of coking coal.

12.6 Long Term Agreements

12.6.1 Background

12.6.1.1 As of July 2004, SAIL had eight LT agreements in place:

Supplier	Coal Type	Base Quantity (MT)
BHP Billiton, Australia	Hard Coking Coal (Goonyella B, Malvern and Barwon)	2.50
BHP Billiton – Illawarra Coal	Hard Coking Coal (Illawarra A)	0.50
Anglo Coal Australia Pty Ltd	Hard Coking Coal (German Creek/ Isaac)	1.50

Xstrata/ MIM	Hard Coking Coal (Oak Creek)	0.50
RAG Australia Coal Pty. Ltd.	Hard Coking Coal (Red Hill)	0.50
Solid Energy New Zealand Ltd.	Hard Coking Coal (New Zealand Coking Coal)	0.25
Xstrata/ Oceanic	Soft Coking Coal (Teralba Premium)	0.54
BHP Billiton	Soft Coking Coal (Blackwater)	0.30

12.6.2 Force Majeure by Xstrata/MIM for Hard Coking Coal

12.6.2.1 In respect of its LT Agreement of May 2003 valid from 2003-04 to 2005-06, Xstrata/ MIM declared force majeure on account of natural calamity in respect of its Oaky Creek mine from 26 June 2003 to 21 July 2003 and again from 8 November 2003 to 19 December 2003. As per the LT Agreement, Xstrata/ MIM was required to supply

- (i) 1.5 million tonnes in the first delivery period (July 2003 to June 2004), and
- (ii) 0.5 million tonnes in the second and subsequent delivery periods, subject to a purchaser's option of 20 per cent.

12.6.2.2 As a result of the force majeure declaration, the contracted quantity of 1.5 million tonnes was not evenly supplied during the first delivery period. At the end of the first delivery period, there was a backlog quantity of 0.55 million tonnes.

12.6.2.3 Audit observed the following:

- (i) Despite the outstanding quantity on account of the force majeure, Xstrata/ MIM offered to make supplies of 0.5 million tonne under a term agreement, which was entered into in July 2004 for the delivery period July 2004 to June 2005.
- (ii) As per the detailed tour report of the visit of the high-level SAIL team to Australia in February 2004, the likely shortage during the contractual period from July 2003 to June 2004 would be approximately 0.4 million tonnes. No further force majeure declarations took place; yet SAIL ended with a backlog of 0.55 million tonnes as of end-June 2004, amounting to 37 per cent of the LT agreement quantity.

12.6.2.4 The extent of force majeure declared by Xstrata/ MIM was thus not proportionate to the suspension of deliveries by Xstrata/ MIM to SAIL. Further, SAIL did not obtain adequate evidence to indicate that the impact of force majeure was borne proportionately by other customers of Xstrata/ MIM and it was not passed on disproportionately to SAIL.

12.6.2.5 In response, Ministry/ Management stated that

- (i) The high level team was informed that the total shortfall in production during the period July 2003 to January 2004 was 40 per cent; also operations would not show a significant improvement till the panel change in April/ May 2004.
- (ii) Against the production shortfall of 40 per cent, the shortfall in supply to SAIL during the period July 2003 to June 2004 was 37 per cent, which indicated that the reduction in supply to SAIL was less as compared to their proportionate loss of production.

- (iii) Several letters were written to the suppliers, including some letters wherein SAIL indicated its rights under the agreement.
- (iv) The high level team noted that the impact of force majeure had affected supplies to all customers. Further, the contract did not provide any right to obtain evidence of equitable treatment from the supplier as long as the supplier fulfilled its contractual obligations. It was not commercially prudent to take legal action as the supplier was honouring the contract. Any legal action at that stage would have jeopardized the supply of backlog quantities at the old rate of US\$ 46.19 deliveries, and settlement could also not have been reached with them for 2004-05 deliveries.

12.6.2.6 The responses of Ministry/ Management are not tenable for the following reasons:

- (i) The force majeure duration was for a total of just 72 days between June 2003 and December 2004.
- (ii) The shortfall of 40 per cent in production for the period July 2003 to January 2004 indicated by the supplier to the high level team was for a period of seven months, as compared to the shortfall in supplies to SAIL of 37 percent for the entire delivery period of twelve months from July 2003 to June 2004
- (iii) As regards 2004-05 deliveries, in fact, no settlement took place against the LT agreement, and SAIL ended up with a term agreement @ US\$ 105/ MT – a price based on spot market prices rather than LT prices.
- (iv) Supply of balance quantity of 0.55 million tonne at the old rate by the supplier was only a fulfilment of the contractual obligation and not a concession to SAIL by the supplier.
- (v) The fact remains that SAIL did not ask Xstrata/ MIM for details of proportionality of impact on other customers. Further, SAIL's action on Xstrata/ MIM's force majeure was grossly delayed (February 2004). In fact, the short duration of the force majeure periods– 26 days and 46 days, as indicated by SAIL, was not commensurate with the impact by Xstrata/ MIM on its deliveries to SAIL.

12.6.3 *Delay in exercising Mutual Option for Soft Coking Coal*

12.6.3.1 In pursuance of the LT Agreement with Xstrata/Oceanic for soft coking coal, a total quantity of 0.75 million MT at an FOB rate of US\$ 33/MT was finalized for the delivery period 2003-04, with an additional mutual option quantity of 0.150 million tonnes.

12.6.3.2 Although internal approval within SAIL for exercising the mutual option quantity for the 2003-04 delivery period was obtained in September 2003, the option was communicated to the supplier only in January 2004 (after more than four months). Xstrata/ Oceanic turned down (February 2004) SAIL's request for exercise of the mutual option quantity on the following grounds:

- (i) SAIL had failed to respond to their requests during September and October 2003 to exercise the mutual option;

- (ii) Since the market had become tight and the quantity had already been placed at higher rates, it would not be possible for them to supply the mutual option quantity to SAIL.

12.6.3.3 Subsequently, SAIL signed two term agreements for 0.130 and 0.70 million tonnes at FOB rates of \$102/MT and \$81/MT in April and September 2004 respectively. Of this, a quantity of 0.130 million tonnes @ \$102/MT FOB was actually shipped in May 2004, i.e. during the 2003/04 delivery period itself.

12.6.3.4 Thus, failure to exercise the mutual option quantity of 0.150 million tonnes by SAIL resulted in an estimated loss of Rs.32 crore*.

12.6.3.5 In response, Ministry stated that it was decided that the option would be exercised after assessing the responses against the global tender on soft coking coal. The tender was issued on 17 September 2003; the techno-commercial bids were opened on 5 November 2003 and assessment of the offers was completed on 9 January 2004, and it was noticed that no responsive offer was received. Thereafter, approval was obtained on 19 January 2004 and the option was exercised. In view of the prevailing easy market conditions, it was a prudent commercial decision to see the outcome of global tender before exercising the mutual option.

12.6.3.6 The reply of the Ministry is not tenable for the following reasons:

- (i) The fact that it took SAIL nearly four months after the issue of a global tender to conclude that no responsive offers were received to the tender indicates SAIL's failure to take quick and timely decisions.
- (ii) As explained in paragraph 12.6.4.4, the prevailing market conditions at that time were no longer easy. Despite that, SAIL showed no urgency to settle the issue.

12.6.4 Delay in taking advantage of available offers for hard coking coal

12.6.4.1 In April/May 2003, two offers for hard coking coal were received from RAG (Red Hill) and BHP (Illawarra) for a total quantity of 0.04 million tonnes in 2002-03 and 0.60 million tonnes in 2003-04. These two brands were also found to be suitable for SAIL plants, with BHP's Illawarra – A already being an established coal.

- (i) No action was taken on these offers till September 2003.
- (ii) After failing to receive any response to its global tender (September 2003) for procurement of hard coking coal, SAIL called RAG and BHP for negotiations, and signed term agreements for delivery of 0.09 (with RAG) and 0.05 million tonnes (with BHP) up to June 2004 at the rate of US\$ 46.30/ tonne FOB, which, according to SAIL Management, was the maximum quantity offered during negotiations.

12.6.4.2 Thus SAIL lost an opportunity to acquire 0.46 million tonnes of hard coking coal in 2003-04 at a low price of US\$ 46.30/ tonne FOB. Compared with the average price of US\$ 189/MT CIF⁴ which SAIL subsequently paid for spot purchases of hard coking coals, the estimated loss worked out to Rs. 232 crore.

* This calculation is conservative and is based on the lower rate of US\$ 81/MT rather than \$ 102/MT.

⁴ Assuming a difference between CIF and FOB rates of US\$ 28/ tonne, the comparable FOB rate works out to US\$ 161/tonne.

12.6.4.3 In response, Ministry stated that immediately after settlement of LT deliveries for 2003-04 in September 2003, a global tender was issued, against which no offer was received. Thereafter in October 2003, contracts were negotiated with RAG and BHP. The response is not tenable, since 94 per cent of LT deliveries for 2003-04 were finalised on 3 April 2003 itself and particularly in view of the declaration of the first force majeure by Xstrata/ MIM in June 2003, SAIL failed to take adequate and timely action on these offers

12.6.4.4 Ministry also stated that the supplies from RAG and BHP were contracted at the same prices as those settled in March 2003 with BHP, indicating that there was no shortage of coking coal in October 2003. The response is not tenable, since the fact that the quantity of 0.60 million tonnes offered in April/ May 2003 came down to only 0.14 million tonnes by October 2003 indicates that there was indeed a shortage of coking coal at that time.

12.7 Spot Purchase of Coke

12.7.1 During the period from October 2003 to September 2004, SAIL purchased from MMTC and China Coal and Coke Holdings Limited a total of 0.158 million tonnes of Chinese metallurgical grade coke at an average CIF price of US\$ 386.61/MT. However, this coke was not tested by SAIL, before procurement/supply. The multiple handling of coke at the coke oven, ship, ports, railways and plant was likely to result in creation of additional coke breeze from coke, and consequent deterioration of coke. The entire quantity of imported coke, after having been procured at very high costs, was neither dispatched nor used within a reasonable period of time for iron-making, as detailed in **Annexure -31**.

12.7.2 In response, Management/ Ministry stated that:

- (i) Availability of coke for uninterrupted Blast Furnace operation was more important than hypothetical comparison of prices.
- (ii) The coke received was dispatched and consumed at SAIL plants in the normal manner.

12.7.3 The reply is not tenable since the occurrence of handling loss has been confirmed in the Ministry's response.

12.8 Other Issues

12.8.1 Broad basing of Suppliers

12.8.1.1 In October 2001, the Committee of Directors (COD) decided to further broad-base the number of suppliers, in view of the gradual increase in the requirement of coking coal. However, SAIL failed to act at a time when the coking coal market was soft and only in October 2003 did it finalise two new LT agreements.

12.8.1.2 In response, Management/ Ministry stated that development of vendors and broad-basing of suppliers was a continuous process and took time. SAIL had been making efforts through various means to broad base suppliers, which yielded results in due course. As a result, new LT agreements were finalised in 2003-04 for three brands, besides trial orders for two brands.

12.8.1.3 The response is not tenable since SAIL's lack of efficiency in broad basing is borne out by the delay of more than two years in developing new sources.

12.8.1.4 SAIL needed to substantially improve its processes for broad-basing of suppliers in a time-bound manner, without compromising on testing, trial shipments and quality requirements. In response, management stated that while all out efforts were made to broaden the supplier base, the suggestions given by audit were appreciated. Substantive action by Management on this issue is awaited.

12.8.2 Internal Controls

12.8.2.1 Audit had pointed out that the Coal Information Group (CIG) of SAIL did not have processes and systems to ensure co-ordinated availability of current and updated information on all coking coal related aspects. In response, SAIL Management appreciated the suggestions of audit, and stated that they had started preparing a comprehensive monthly report, after collecting information from other Departments.

12.8.2.2 Audit also observed that minimum and optimum stock levels at different plants and ports had not been fixed. Subsequently, SAIL management stated (August 2005) that they had fixed the minimum and optimum stock levels of coking coal to be maintained at plants and ports.

12.9 Conclusions

12.9.1 Due to its failure to take adequate and timely decisions, SAIL suffered an estimated loss of Rs. 858 crore, on account of loss of production, spot purchases of hard coking coal at higher rates, failure to exercise mutual option for soft coking coal, and take advantage of available offers for hard coking coal.

12.9.2 SAIL suffered a further loss of Rs. 176 crore through signing term agreements at higher prices, by keeping the corresponding LT agreements in abeyance.