Chapter VI: Conclusion and Recommendations

6.1 Conclusion

The modernisation and expansion plan (MEP) was formulated by the Company in the backdrop of a buoyancy in the steel market and the Company aimed to take advantage of the prevailing market conditions to increase steel production. The MEP aimed at enhancing SAIL's market share; improve profitability through higher productivity, cost reduction, value addition in its products, and higher customer satisfaction. It also aimed at improving the availability of key raw materials; and alleviating infrastructure bottlenecks.

The Company decided (2006-07) to implement the entire MEP to enhance hot metal production capacity from 13.83 million tonnes per annum (mtpa) during 2006-07 to 23.46 mtpa by including corresponding upstream and downstream production facilities across all the steel plants. It also compressed the implementation period by two years to year 2010 against 2012 as planned in the Corporate Plan.

It was, however, noted that the Company could not implement the MEP within the planned timelines. Capacity expansion could only be completed by September 2010 in only one of the Steel plants namely Salem Steel Plant. The capacity expansion projects in five integrated steel plants have been delayed by over four years and are now scheduled for completion during 2015. In view of such delays and the fact that the MEP would only be completed by 2015, we are unable to comment as to how far SAIL succeeded in achieving the objectives of increase in steel production, reduction in costs, higher productivity, removal of infrastructure bottlenecks etc.

We, however, noted a number of issues which have been discussed in the report and these are in the nature of interim findings. We would be in a position to present a full view regarding the impact of MEP only after the modernisation and expansion is completed across all the plants. Main audit findings are as under:

6.1.1 Against planned increase of 9.63, 8.56, and 9.16 mtpa in production capacity of hot metal, crude steel and saleable steel respectively, the company could add 1.86 mtpa (0.66 mtpa in BSL and 1.20 mtpa in RSP) of hot metal; 1.24 mtpa (1.06 mtpa in RSP and 0.18 mtpa in SSP) of crude steel; and 1.30 mtpa (1.14 mtpa in RSP and 0.16 mtpa in SSP) of saleable steel up to March 2014. Table 13 below shows capacity of hot metal, crude steel and saleable steel at the beginning of the MEP, total capacity envisaged after completion of ongoing MEP, and total capacity as of March 2014.

Table 13: Capacity envisaged after completion of MEP and achieved up to March 2014

(Production Capacity in million tonne per annum)

Plant	Total capacity at the beginning of MEP			Total capacity after completion of ongoing MEP			Total capacity as of March 2014		
	Hot Metal	Crude Steel	Saleable Steel	Hot Metal	Crude Steel	Saleable Steel	Hot Metal	Crude Steel	Saleable Steel
ISP	0.85	0.50	0.42	2.91	2.50	2.39	0.21@	0.50	0.42
BSP	4.08	3.93	3.15	7.50	7.00	6.56	4.70#	3.93	3.15
BSL	4.59	4.36	3.78	5.77	4.61	4.18	5.25	4.36	3.78
DSP	2.09	1.80	1.59	2.45	2.20	2.12	2.09	1.80	1.59
RSP	2.00	1.90	1.67	4.50	4.20	3.99	3.20	2.96	2.81
SSP	-	-	0.18	1	0.18	0.34	ı	0.18	0.34
ASP	-	0.23	0.18	-	0.48	0.43	ı	0.23	0.18
VISP	0.22	0.12	0.10	0.33	0.23	0.22	0.22	0.12	0.10
Total	13.83	12.84	11.07	23.46	21.40	20.23	15.67	14.08	12.37

[#] Increase in 0.62 mtpa was due to up-gradation of Blast Furnace-7 completed in 2006-07. It was not included in our analysis as this was not part of MEP. @ Reduction was due to closure of three old Blast Furnaces.

The Company had spent ₹ 16,641 crore in ISP, ₹13,835 crore in BSP, and ₹ 2,455 crore in DSP up to December 2014, without any capacity increase in hot metal, crude steel and saleable steel. RSP has however shown an increase in hot metal, crude steel and saleable steel. In BSL, ₹ 4,952 crore were spent but there was capacity increase in hot metal only and there was no addition in crude steel and saleable steel capacity.

6.1.2 Due to non-synchronisation in projects execution, some facilities were completed and sitting idle while others were in work-in-progress. Capacity utilisation of some commissioned projects was very limited to keep the plants going and the output was largely used internally or sold as semi-finished. Due to delays in MEP implementation, major techno-economic indices envisaged in the MEP like blast furnace productivity, coal to hot metal ratio and fuel rate could not be achieved as on March 2014.

6.1.3 Total Steel Production capacity of crude as well as finished steel in the country grew substantially during the period 2007-08 to 2013-14 as given in Table 14. Likewise, steel consumption in the country also rose sharply as would be seen from Table 14. The market conditions were absolutely favourable for SAIL to sell its steel products had the MEP projects been completed by 2010 as planned. By failing to complete the MEP projects within the planned period, the Company ceded space to its competitors and SAIL's market share in saleable steel had decreased from 25 per cent in 2004-05 to 14.6 per cent in 2013-14.

Table 14: Steel production capacity, actual steel production and consumption in India

(Quantity in million tonnes per annum)

Total for India	2007-08	2013-14
Crude Steel Capacity	59.85	101.02
Finished steel production	58.09	78.47
Steel Consumption	56.39	83.78
Per capita steel use (Kg crude steel)	47.3	64.0

- **6.1.4** The Company had made financial projections which showed annual addition to gross margin of ₹ 9,438 crore from MEP. Due to delays in completion of capacity expansion by over four years, the finances of the Company were severely strained. Cash and bank balance which stood at ₹ 22,436 crore at the end of March 2010 has dried up to ₹ 2,305 crore at the end of March 2015, and profit before tax reduced from ₹ 10,132 crore in 2009-10 to ₹ 2,359 crore in 2014-15. Such dip in the financials could largely be attributed to delays in obtaining return on their substantive investment (₹ 49,565 crore as of 31 December 2014) made in implementation of MEP in five integrated steel plants.
- **6.1.5** The project planning, tender finalisation, project execution, and monitoring of MEP implementation were inefficient at all stages of project management cycle and across all the plants. Main causes which contributed to considerable delay in completion of MEP projects are as under:
- 1. Simultaneous implementation of all the MEP projects across all plants within the compressed timelines, coupled with limited spare capacity with the equipment suppliers and contractors had led to insufficient competition and significant increase in cost of MEP implementation. There was insufficient competition and 20 contracts of ₹ 100 crore or more totalling ₹ 10,556 crore were awarded on single qualified bid basis and other 20 contracts valuing ₹ 6,600 crore were awarded on two qualified bid basis. The prices at which such contracts were awarded were significantly higher than the estimated costs updated by the consultants for all scope creep and price escalation up to opening of the price bids.
- 2. While planning for MEP in July 2008, the Company did not factor in fund requirement for capacity enhancement of mines. To meet the additional capital expenditure of ₹ 10,264 crore for capacity enhancement of mines, the Company had to scale down (June 2009) the scope of MEP to ₹ 64,886 crore and MEP projects valuing ₹ 18,375 crore planned for BSP, BSL, DSP and RSP were excluded/deferred. Selection of MEP projects to be deferred was purely adhoc. The Company deferred only such projects which were not ordered at the time of review in June 2009. This created mismatch among integrated production streams.
- 3. Tender finalisation and contract execution was inefficient. Out of 153 projects of ₹ 20 crore and above awarded during 2008-13, the Company took more than two years in 25 cases and more than three years in 87 cases, in completing the tender finalization process.
- 4. All the 104 contracts of ₹ 100 crore or more were not completed within the scheduled completion time stipulated in the contracts. Delay in 21 contracts was between 1-2 years, in 39 contracts it was 2-3 years, while in 38 contracts it was more than three years. In 14 main technological contracts, there were delays ranging from 11 months to 53 months in handing over the front/site to the contractors for construction and erection of main plants.
- 5. Oversight of SAIL Board and Board sub-committee (BSC) on monitoring capital projects over implementation of MEP projects was not effective and they failed in containing the delays.

6.2 Recommendations

We recommend that:

- 1. The Company may review its policy for appointment of consultants through nominations. Selection of consultants through open tender would provide opportunity to conduct structured assessment of their project management capacity as well as to obtain fair market price.
- 2. The Company may adequately document the lessons learnt from the ongoing implementation of modernisation and expansion plan. This would be a useful document which would serve as a guide for future expansions.
- 3. The Company may revisit the existing policies, procedures and practices with regard to project management, and contract procurement and execution, and strengthen them to adequately mitigate the risks of time and cost overrun in future ventures.
- 4. The Company may strengthen their project monitoring system at all levels. There should be appropriate monitoring mechanism at the Plant and the Board level that would not only monitor but should have the authority to take corrective action as well as fix responsibility at each stage of delay.

New Delhi

Dated: 23 June 2015

(PRASENJIT MUKHERJEE)

Deputy Comptroller and Auditor General and Chairman, Audit Board

Countersigned

New Delhi

Dated: 23 June 2015

(SHASHI KANT SHARMA)
Comptroller and Auditor General of India