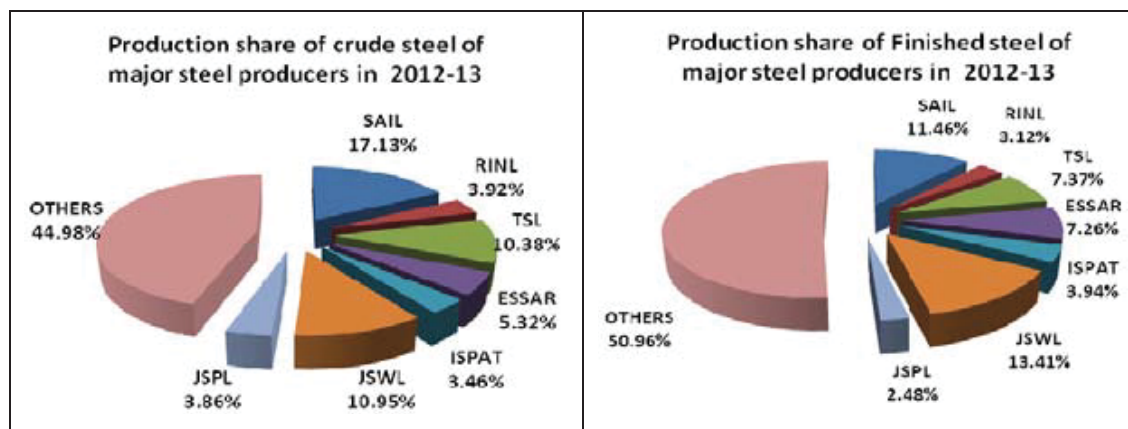


## CHAPTER –1 INTRODUCTION

### 1.1 INDUSTRY PROFILE

At the time of independence in 1947, India had only three steel plants – the Tata Iron & Steel Company, the Indian Iron and Steel Company and Visveswaraya Iron & Steel Limited with one million tons capacity and a few Electric Arc Furnace-based plants. During the initial planning years i.e., from 1950 to 1970, large Integrated Steel Plants were set up in the public sector. The steel industry was de-licensed and decontrolled in 1991 and 1992 respectively. The liberalization of industrial policy and other initiatives taken by Government of India (GoI) have given an impetus to entry, participation and growth of private sector in the steel industry. With this, the fledgling one million tonne capacity status at the time of Indian independence had increased to 87.18 million tonne during 2012-13. Rapid rise in production made India the fourth largest producer of steel consistently for the five years ending 2012 with 76.70 million tonne of production out of total 1,547.80 million tonne world-wide<sup>1</sup>.

The National Steel Policy 2005, envisaged steel production to reach 110 million tonne by 2019-20. The production share of crude steel and finished steel of Rashtriya Ispat Nigam Limited, Visakhapatnam (RINL) for 2012-13 was 3.92 per cent and 3.12 per cent of total production in India respectively. The production share of RINL compared with that of other major steel producers in India during 2012-13 was as given below:



### 1.2 COMPANY PROFILE

RINL, the first shore based Integrated Steel Plant in the country was incorporated on 18 February 1982 under the administrative control of the Ministry of Steel (MoS), Government of India (GoI) with an installed capacity of 3 MTPA<sup>2</sup> of liquid steel. RINL also has four captive mines at Madharam, Khammam District; Jaggayyapet, Krishna District; Garbham & Nellimarla, Vizianagaram District respectively situated in Telangana and Andhra Pradesh to meet its requirement of dolomite, limestone, manganese and sand respectively. It also has a captive power plant to meet its power requirement. The main objective of RINL is production

<sup>1</sup> As per the statistics of World Steel

<sup>2</sup> Million Tonne per annum

and sale of iron and steel products. It commenced full-fledged operations from 1992-93. RINL incurred losses since beginning and started earning profits from 2002-03 onwards and the accumulated loss of ₹4,982 crore (up to 2001-02) was wiped off by 2005-06. Navratna status was conferred on RINL in November 2010. It had accumulated profit of ₹ 6,390.38 crore at end of March 2014. The authorized and paid up capital of RINL were ₹ 8,000 crore and ₹ 5,739.85 crore respectively as on 31 March 2014. During 2013-14, it has recorded sales turnover (gross) of ₹ 13,431.48 crore with profit after tax of ₹ 366.45 crore.

### **1.2.1 PRODUCT PROFILE**

The product profile of RINL comprises long products such as wire rods, bars, angles, channels / beams, rounds and billets. It also produces pig iron, granulated slag, coal chemicals as by-products. The actual production of liquid steel during 2013-14 was 3.39 million tonne representing 113 *per cent* of the installed capacity. From the liquid steel, a total of 3.02 million tonne of saleable steel was produced, which included bar products (0.87 million tonne), wire rods (1 million tonne), MMSM<sup>3</sup> products (0.94 million tonne) and billets (0.21 million tonne) respectively.

### **1.2.2 PROCESS DESCRIPTION**

The iron ore fines along with coke, limestone, dolomite, sand and metallurgical wastes are charged in the Sinter Plant to produce sinter. The sinter along with coke, sized ore and manganese are heated up in the Blast Furnace to produce hot metal by removing impurities in the Iron ore. The hot metal is transferred to Steel Melt Shop (SMS) for conversion into liquid steel and balance hot metal is used for producing pig iron. Liquid steel is poured into the Continuous Casting Machines to produce bloom-part of which is converted into billets in billet mill. Blooms and billets are rolled in the mills to produce finished products.

### **1.2.3. ORGANISATIONAL SET UP**

RINL is governed by the Board of Directors (BOD) headed by the Chairman-cum-Managing Director (CMD). CMD is assisted by five functional Directors of operations, commercial, projects, personnel and finance. The Projects Division was to be headed by a Director from 1 August 2006 and it was held as additional charge by other functional directors and CMD till 1 June 2009. A full-time Director (Projects) was available from 1 June 2009 to 31 July 2011. From 1 August 2011 to April 2012, the post of Director (Projects) was vacant and only thereafter a regular post of Director (Projects) is being operated. Executive Director (Projects) assisted by General Managers / Deputy General Managers, reports to the Director (Projects).

## **1.3 CAPACITY EXPANSION**

RINL intended to increase its capacity from 3 MTPA to 6.3 MTPA. Accordingly, with the approval of the BOD, RINL submitted Draft Public Investment Board (PIB) note along with project report and feasibility report to take up the capacity expansion in two stages, to MoS *3 Medium Merchant and Structural Mill*

in December 2004. The estimated project cost of the capacity expansion was ₹ 8,259 crore (base December 2004) with completion schedule of Stage-I being 36 months and Stage-II 48<sup>4</sup> months from the envisaged 'Go-ahead date' (1 April 2005). The project proposal was approved by GoI with updated estimated cost of ₹ 8,692 crore (base June 2005) with 'Go-ahead date' as 28 October 2005. Accordingly, the scheduled dates of completion of Stage I and Stage-II were October 2008 and October 2009, respectively.

### 1.3.1 REVISED COST ESTIMATES (RCE)

As per OM No.1 (3) PF II/2001 dated 18 February 2002 of Ministry of Finance (MoF), a mandatory review of cost estimates was needed to be carried out at the stage, when funds to the tune of 50 *per cent* of original project cost were expected to be spent. The said review of cost estimates was to be done to assess whether the total project costs would be within the original cost estimates. In case the increase in the revised cost estimates is expected to cross 20 *per cent* of the original cost estimates, the revised cost estimates shall be posed to EFC/PIB for appraisal and thereafter to CCEA for approval. RINL submitted the Revised Cost Estimates (RCE) to the Ministry in June 2008 in line with the said OM of MoF and again, at the instance of the MoS, in PIB memorandum in April 2010 for the approval of GoI. At that stage, MoS advised (February 2011) RINL to obtain the approval of RINL's Board of Directors (BOD) since RINL was conferred with Navratna status. Accordingly, BOD approved (July 2011) the RCE at ₹ 12,291 crore (base February 2011) with IRR of 14.02 *per cent*. As on 31 March 2014, the cumulative commitments made and expenditure incurred by RINL were ₹ 12,447.15 crore and ₹ 10,259.80 crore respectively (against RCE of ₹ 12,291 crore).

### 1.3.2 EXECUTION OF THE CAPACITY EXPANSION PROJECT

BOD of RINL approved (July 2011) a revised completion schedule for Stage-I as October 2011 and for Stage-II as October 2012. The execution of capacity expansion was under various stages and has not yet reached the stage of commercial production (March 2014). The scheduled completion dates were revised from time to time and as per the latest schedule for commissioning schedule (August 2014), various production units in Stage - I & II would be commissioned during March 2014 to February 2015. This situation arose as the time schedule provided for completion of Stage-I and Stage –II in the RCE approved by BOD did not specify definite timelines for various activities contained in the left over works. The Stage-I of the project was completed in March 2014 against the time schedule of October 2011 i.e. with a delay of 29 months and Stage-II was still in progress and the delay as of August 2014 worked out to 22 months against the time schedule of October 2012.

Audit observed that the major reasons for the time overrun were delay in engagement of consultant, absence of appropriate sub-activity wise timeframes for finalizing the contracts, delay in formulation of tender conditions or inadequate tender conditions, delay in constitution of board level sub-committees with adequate financial powers, extension of time for submitting price bids, post tender deviations (like change in vital commercial conditions relating to contract

<sup>4</sup> 45 months for Special Bar Mill and 48 months for Structural Mill

completion period, date of commencement of work etc., at the request of parties selected under the eligibility criteria) and inconsistencies in decisions by competent authority in respect of calling for revised price bids / revision in price bids etc.

RINL in its reply (April 2014) explained that major facilities of Raw Material Handling Plant, Caster and BF-3 were progressively commissioned in December 2011, January 2012 and April 2012 respectively. It was further stated that had the unfortunate accident not taken place in SMS-2, all units of Stage-1 & Stage-2 would have got commissioned progressively by October 2012 and October 2013 respectively. Ministry in its reply (December 2014) endorsed RINL's reply.

The reply of RINL/Ministry needs to be viewed against the fact that commissioning of SP-3 the upstream unit, which supplies feed material to BF-3 and SMS-2, was not ready till August 2013. Hence commissioning of units of Stage –I by October 2012 was not practicable, even if there was no fire accident in SMS-2 in June 2012. Further, the RINL's monthly project implementation progress report for August 2014 indicated that the expected date of completion was February 2015.

#### **1.4 AUDIT SCOPE**

The Performance Audit covers the capacity expansion project, intended to increase the production capacity of RINL from 3 MTPA to 6.3 MTPA that was initiated in 2004 and was still in progress as on date (August 2014) with specific emphasis on pre-implementation procedures, award of contracts, execution of contracts and project monitoring. The entry and exit conferences with the management of RINL were held in July 2013 and April 2014 respectively. Audit conducted a comprehensive study analyzing the reasons for delay/deficiencies in various stages of execution of the capacity expansion on which audit observations were issued to RINL. The report was also issued to the MoS for comments and the replies of MoS/RINL, wherever received, were considered while drawing audit conclusion and recommendations as discussed in subsequent chapters. A list of abbreviations used in the report is listed as a *Glossary* at the end of the report.

#### **1.5 AUDIT OBJECTIVES**

The main objectives of the performance audit were to assess whether:

- a) RINL had planned the project comprehensively by preparing detailed project report, specifying key milestones with timeframes, identifying implementing personnel with specific responsibilities and committing resources;
- b) RINL implemented the project within the planned milestones, timeframes and the approved project cost;
- c) RINL executed the contracts in a fair and transparent manner, by promoting competition; and
- d) The monitoring mechanism was in place to review the progress of project implementation and take remedial action and that this mechanism was effective in monitoring the project.

## 1.6 AUDIT CRITERIA

Audit criteria adopted for the performance audit were derived from :

- Project report for capacity expansion;
- Agenda and Minutes of the meetings of the Board of Directors and its sub-committees;
- Sustainability Plan, Corporate Plan, Annual Plans and Annual Budgets;
- Consultant and Committee Reports containing the progress of tender finalisation, order placement, execution of the capacity expansion;
- Monthly Progress Reports and other MIS containing the progress and commissioning schedules of the capacity expansion;
- Procurement and tendering procedures;
- Construction / works contract agreements; and
- Memorandum of Understanding (MOU) with MoS.

## 1.7 AUDIT SAMPLE

Audit had undertaken overall review of project planning and project implementation of the capacity expansion. In the review of contract management, out of 252 contracts, audit had selected 68 contracts for detailed review of various activities beginning from initiation of tenders to erection & commissioning (up to October 2013). 90 per cent of the contract value of ₹ 14,731 crore was selected for review as detailed below:-

**Table –1**

Sampling analysis of capacity expansion of RINL					
					₹ in crore
Particulars	Total Contracts	Value	Percent of selection	No. of contracts selected	Value
Contracts above ₹ 50 crore	39	12,575.27	100	39	12,575.27
Contracts between ₹ 25 to 50 crore	26	890.48	50	13	472.42
Contracts between ₹ 10 to 25 crore	49	769.39	20	12	208.97
Contracts between ₹ 1 to 10 crore	112	484.72	5	4	18.93
Less than ₹ one crore	26	11.38	0	0	0
<b>Total</b>	<b>252</b>	<b>14,731.24</b>		<b>68</b>	<b>13,275.59</b>
<b>Percentage of value selection</b>	<b>90.12</b>				

Out of the 68 contracts, tender files of three contracts were not furnished to audit on the plea that two contracts (of value ₹ 80.05 crore and ₹ 80.78 crore) were with the Vigilance department of RINL and one contract file (of value ₹ 18.60 crore) was missing.

## 1.8 ACKNOWLEDGEMENT

Audit acknowledges the co-operation and assistance extended by RINL and Ministry of Steel (MoS) at various stages of Performance Audit.

## **1.9 AUDIT FINDINGS**

The audit findings are discussed in the succeeding chapters as detailed below:

- **Chapter 2** includes issues relating to pre-implementation procedures and planning.
- **Chapter 3** deals with issues relating to implementation and contract management. Focus is on analysis of causative factors and deficiencies leading to delay in project implementation resulting in time and cost overruns.
- **Chapter 4** highlights inadequacies in project monitoring and impact of abnormal time overrun in project implementation.
- **Chapter 5** includes conclusion and recommendations.