

CHAPTER V

Project Monitoring

5.1 Project implementation

5.1.1 The company was assigned the task of executing Phase I of the Project within 10 years from 1995-96. The three lines proposed for implementation under Phase I were sub-divided into eight sections, to be commissioned at six-monthly intervals starting from September 2002. As the dates of commissioning for individual lines were not provided in the DPRs, the completion date of the last section of each line as given in the DPR concerned was taken in audit as the completion date for that line. Audit found that there was delay in completion as shown in Table 3 below:

Table 3: Delay in completion of the lines

Line No.	Last Section	Date of completion as per DPR	Actual date of completion	Delay in months
1	Inderlok – Rithala	September 2003	March 2004	6
2	Connaught Place – Central Secretariat	March 2004	July 2005	15
3	Barakhamba Road – Indraprastha	September 2005	November 2006	14

5.1.2 Contending that the Project was completed in seven years and three months, *i.e.*, two years and nine months ahead of what was envisaged in the DPR 1995, the management stated (April 2008) that the implementation schedule stated in the DPR had no meaning till the DPR had been sanctioned by the GOI. Phase I of MRTS was sanctioned by the GOI in September 1996 and the organisation for execution of such a gigantic project was put in place thereafter. Subsequently, the proposal for allotment and acquisition of land, preparation of standards and specifications and tender documents was done. Considering the fact that the work of such complex nature was done in India for the first time, certain delays at the initial stage of the project were inevitable.

5.2 Quality control

Audit analysis of quality control indicated scaling down of testing requirements, non-witnessing of tests by the company's representatives, testing of material in non-accredited laboratories and non-preservation of test reports. The audit findings are discussed below:

5.2.1 Scaling down of testing requirements

Testing requirements were scaled down in four contracts as these contracts were falling behind schedule (*Annexure XII*). The management stated (April 2008) that the testing was relaxed since the welding was being done by computerised submerged arc welding modern machines. As per past experience no pile had failed in load test and hence lateral load test was not conducted in contract No. 3C22. In case of contract 3C51R, the tests were not conducted by independent testing agency as the quality of steel was ultrasonically tested by the SAIL. The reply is not tenable because testing of weld joints

was reduced on the contractor's request to expedite activities at the plant, conducting lateral pile tests was the minimum requirement as per the IS code and independent testing of steel plates was done away with when the contract fell behind schedule.

5.2.2 Non-witnessing of tests by the company's representatives

The tests conducted by the contractors were accepted without being witnessed by the company's representatives in some cases in eight contracts*. The management's reply (April 2008) that the tests were witnessed by the company's representatives, is not correct as some of the test reports did not bear the signatures of the company's representatives.

5.2.3 Non-preservation of test reports

It was observed that test reports were not preserved. The management stated (April 2008) that it was not possible to keep records of all the tests conducted, as there were millions of tests and once the quality was certified by the engineers based on these tests, it was considered not necessary to keep the records of all these tests which would involve additional expenditure. In any case, the company was able to get the works done with international quality standards. The reply is not tenable because if any instance of failure occurs at a later stage, then the quality certificate of the engineer cannot be reviewed in the absence of test reports.

5.2.4 Non-submission of testing procedure plan by a contractor

In one contract, the testing procedure plan (TPP) was not obtained from a contractor as required by the Bill of Quantity. The management stated (April 2008) that the TPP adopted was exactly on the lines of previously accepted testing procedure plan for rail corridor contracts and no payment for the TPP was made to the contractor. They added that there was no laxity as the Quality Assurance Plan (QAP) was submitted by the contractor. The reply is not tenable as both the QAP and the TPP were to be submitted by the contractor and approved by the company for meeting the quality and testing standards.

5.2.5 Testing of material in non accredited laboratories

Examination of 222 test reports relating to five contracts* revealed that the tests were not conducted in accredited laboratories. The management stated (April 2008) that the tests were conducted for water, steel and cement from laboratories which were certified by/accredited to NABL/ISO and as it was not practical to conduct all tests independently, the manufacturers' test certificate needed to be relied on in many cases. The fact, however, remains that when such tests were required to be done independently, these needed to be got done through accredited laboratories, a view which has also been endorsed by the IIT.

Recommendation No. 14

In order to keep the records of test conducted, the company needs to lay down a preservation life for test reports. It also needs to evolve a mechanism for testing of material through accredited laboratories.

* 3C51R, 3C52R, RC2, RC2B lot2, RC2B lot5, 3C21R, 3C22 and 3C23

* RC2B lot2, RC2B lot5, 3C21R, 3C22 and 3C23