

## Chapter

## II

## Audit Framework

The present audit reviews the ‘Competitiveness of BHEL in Emerging Market’ in securing orders for projects/equipment, accelerated project execution and debtor management during the five years 2011-16.

### 2.1 Audit objectives

Objectives of performance audit were to assess whether:

- BHEL responded effectively to the changing business environment for enhancing its competitiveness;
- Cost estimation system for preparation of bids was effective in securing orders;
- Planning, co-ordination, manufacturing, supply and execution of project orders was done efficiently in time;
- Procurement of inputs for execution of projects was done efficiently, economically and effectively;
- Monitoring of execution of orders was effective; and
- Mechanism for revenue realisation and debtor management was efficient and effective.

### 2.2 Audit scope

This performance audit covers review of activities of four power sector regional offices, eight manufacturing units located at Trichy, Ranipet, Haridwar<sup>6</sup>, Bhopal, Hyderabad, Jhansi and Bengaluru, and three non-manufacturing units, viz., Project Engineering Management (PEM) at Noida, Industrial Systems Group (ISG) at Bengaluru and Corporate R&D at Hyderabad. Brief profile of these units is given in *Annexure 2.1*. Marketing activities of three business sectors were covered for the period from 2012-13<sup>7</sup> to 2015-16 while execution activities were covered from 2011-12 to 2015-16.

### 2.3 Audit methodology

In order to explain the objectives, scope and methodology, an Entry Conference with BHEL Management was held on 06 June 2016. Field audit was conducted from June to November 2016 and records maintained at Corporate Office, and units/offices of BHEL selected for performance audit were reviewed. After considering the responses to preliminary observations issued during the course of audit, wherever received, a consolidated draft Performance Audit Report was issued to BHEL Management on 02 January 2017. Reply to the draft Report received on 20 February 2017 and results of discussions in the Exit Conference with BHEL Management held on 22 February 2017 were suitably incorporated in the Report. Subsequently, the draft Report was issued to the Ministry on 10 March 2017. An Exit Conference with the Ministry was held on 14 June 2017. The

<sup>6</sup> Two units are located at Haridwar i.e. Heavy Electrical Equipment Plant (HEEP) and Central Foundry Forge Plant (CFFP)

<sup>7</sup> Marketing activities up to 2011-12 were covered in Audit Report No.26 of 2013

views expressed by the Ministry in its written replies and in the Exit Conference were also considered while finalising the Report.

## 2.4 Audit criteria

Audit criteria adopted for the performance audit included:

- Guidelines/norms for cost estimation for preparation of bids;
- Agenda and minutes of meetings of Board of Directors and its sub committees; Functional Directors Meetings, Management Committee meetings, Plant Council Meetings of units, etc.;
- Strategic Plan 2012-17;
- Memorandum of Understanding (MoU) entered into with Administrative Ministry;
- Research and Development Policy;
- Reports of Ministry of Power/Ministry of Heavy Industries and Public Enterprises/Central Electricity Authority;
- Bidding documents against which bids are submitted;
- Works and Purchase Policies and Supplier evaluation, approval and review procedure
- Terms and conditions of the agreements entered into with customers and vendors/contractors;
- Production Plans and Scheduling of Floor Shop;
- Guidelines on withheld dues and projects on-hold;
- Policy/procedures for billing and collection of revenue and debtor management;

## 2.5 Audit sample

The sample for the audit was selected applying a risk based approach. The sample selected for audit is given in **Table 2.1**.

**Table 2.1: Sample selected for performance audit**

| Description   | Total (Nos.) | Sample selected |           |
|---|--------------|-----------------|-----------|
|   |              | Nos.            | Per cent  |
| Projects secured by Power Sector                    | 43           | 43              | 100       |
| Projects secured by International Operations        | 16           | 16              | 100       |
| Projects secured by Industry Sector                 | 1838         | 90              | 5         |
| Projects commissioned by all three Business Sectors | 135          | 53              | 39        |
| Projects 'on-hold'                                  | 31           | 31              | 100       |
| <b>Total*</b>                                       | <b>2063</b>  | <b>233</b>      | <b>11</b> |

\* Includes 10 projects appeared in more than one categories.

## 2.6 Acknowledgement

Audit wishes to acknowledge the cooperation and assistance extended by BHEL Management and Ministry of Heavy Industries and Public Enterprises.