

## CHAPTER-9

### Monitoring Mechanism

#### 9.1 Monitoring Mechanism

Significant aspects of monitoring mechanism adopted by BHEL to monitor implementation of its capacity expansion schemes, securing and delivery of orders are discussed below.

##### 9.1.1 Monitoring of capacity expansion schemes

While approving the capacity expansion programmes, the Board of Directors directed (May 2007) that progress of implementation of these programmes should be reviewed by a Committee of Directors to ensure timely implementation without time and cost overrun. BHEL introduced (July 2007) a monthly information report to be furnished by the units to Corporate office for review of implementation of capacity expansion programmes. The units were advised to take corrective action wherever there were delays consequent to review of monthly information reports. Audit observed delays ranging between 7 and 62 months in implementation of 17 schemes selected for audit out of total 22 schemes implemented under Phase II and Phase III as indicated in Table 34.

Table 34

Period of delay	Number of schemes
7-12 months	1
12-24 months	2
24-36 months	9
36-62 months	5
<b>Total</b>	<b>17</b>

As already discussed in paras 4.5 and 5.1 *supra*, the following controllable factors had also contributed to delays:

- Delay in completion of pre-ordering activities *viz.*, change in technical parameters and scope of the equipments in 14 cases (HEEP Haridwar: 10 cases, EDN, Bangalore: one case and TP Jhansi: three cases)
- Delay in resolving technical issues due to mismatch in technical parameters offered by bidders with reference to BHEL's parameters as substantial time was taken in seeking and furnishing clarifications by BHEL/ vendors in 15 cases (HEEP, Haridwar: eight cases, TP Jhansi: five cases and HEP, Bhopal two cases).
- Non fixation of targets for vendors for erection and commissioning of machines in all the 174 selected cases resulting in longer than anticipated time taken by vendors in commissioning the machines.

- Delay in replacement of damaged equipment in execution of 7 out of 17 schemes.

Management stated (April 2013) that as a means to bringing about corrective action, they have reviewed the capacity expansion status on regular basis at the level of Unit Heads and in the Management Committee. Management added (September 2013) that system improvement has been done by way of implementation of new guidelines in May 2012 strengthening prequalification criteria and time period for erection and commissioning to prevent delays in future.

The fact remains that there was scope for expediting the implementation of capacity expansion schemes to the extent these were delayed due to factors that were possible to be controlled as stated above. However, Audit appreciates the action initiated by the Management to improve the systems.

### **9.1.2 Monitoring of securing and delivery of orders**

Based on inputs from various sources viz; CEA, customers, media reports, applications filed for coal linkages/environment clearances, expansion plans of the customers, a comprehensive list of possible projects is prepared by BHEL. Thereafter based on the progress of various factors, the probability of materialisation of these projects is worked out, so that advance planning for bidding for these projects is carried out. The list of projects so prepared is included in the Agenda of monthly Management Committee Meeting (MCM) chaired by CMD, BHEL and is attended by Heads of all the Units and Functions. Inputs are also provided by senior members of MCM through their own contacts, which are incorporated in the regular status report.

Orders which materialise after the above process (bidding/negotiation) are reported through updated 'order booking sheet' which is monitored by Director (Power), Head Corporate Planning & Development, Head Corporate Finance, MCM Members and CMD on monthly basis. A monthly report is also sent to the Ministry for review. Corporate Finance wing of BHEL prepares the consolidated order book based on inputs from PS-Marketing and other business sectors for the quarterly/annual results.

In addition, review of progress of supplies of critical equipment to Power Utilities is carried out by Ministry through monthly progress reports from BHEL. Ministry also periodically reviews the progress of projects along with Ministry of Power and concerned customers (SEBs/PSUs).

As discussed in para 6.1 *supra*, out of 151 sets delivered by BHEL during 2007-12, delivery of 126 sets to customers was delayed for periods ranging between 7 and 68 months (disaggregated details in para 6.1) mainly due to controllable factors like non adherence to BHEL's internal schedules for supplies of various modules/parts of the equipments, delays in finalization of engineering drawings, acceptance of sub-vendors' delivery period beyond BHEL's own delivery schedule, delay in placement of indents and conversion of indents into purchase orders.

Audit observed that delayed delivery of orders for power sector projects resulted in progressive accumulation of uncleared orders of customers from 151 in April 2007 to 230 at the end of March 2011 which came down to 197 as of March 2012 as detailed in Table 35.

**Table 35**

<b>Year</b>	<b>Opening balance of orders in hand</b>	<b>Orders received during the year</b>	<b>Orders delivered during the year</b>	<b>Closing balance</b>
2007-08	151	50	36	165
2008-09	165	40	26	179
2009-10	179	51	11	219
2010-11	219	38	27	230
2011-12	230	18	51	197
<b>Total</b>		<b>197</b>	<b>151</b>	

Reduction in closing balance of orders as of March 2012 was partly due to lesser inflow of orders as compared to previous years.

Management stated (September 2013) that deliveries under a project are spread over a period from about 8/10 months to 33/36 months. It was, therefore, difficult to conclude that there was accumulation of orders during the year as pointed out in Table 35.

The reply is to be viewed against the fact that opening balance of 151 outstanding orders as of April 2007 alongwith 90 orders received during 2007-09 were required to be delivered latest by March 2012 considering the maximum time of 36 months for deliveries indicated by the Management. As against 241 orders (151 + 90) that were required to be delivered during 2007-12, only 151 orders were delivered which is indicative of slow delivery rate and progressive accumulation of orders.

Thus, there was scope for expediting delivery of projects/orders.