

CHAPTER-4

System of Award of Purchase Orders

BHEL framed (October 1998) a purchase policy (Policy) laying down broad directions and guidelines to be followed by all its units as well as delegation of financial powers (for procurement of materials/equipment and related services). The units had also formulated their unit specific Organisation and Methods Instructions (OMIs) and/or departmental procedures for various purchase activities, defining the duties and responsibilities of executives of various groups.

Audit examined implementation of 17 schemes valuing ₹ 4156.17 crore (*Annexure I*), out of 22 schemes valuing ₹ 4737.41 crore approved during 2007-12 for capacity augmentation from 10,000 MW to 20,000 MW during XI and XII Plans. Various stages of contract management, including *inter-alia*, cost estimation, tendering process, award of contracts, post-award implementation of purchase orders in respect of selected 174 high value purchase orders²¹ for capital items were examined in audit to evaluate the system of award of purchase orders for capital equipments. This revealed areas requiring strengthening and refinement of procedures as discussed in subsequent paras.

4.1 Inadequacies in cost estimation

Cost estimates are prepared to establish benchmarks for bid evaluation and to assess reasonableness of cost of award of purchase orders. Therefore, it is essential that the estimates are worked out in a realistic and objective manner by taking into account latest costs.

During review of 174 selected purchase orders, it was observed that in 59 purchase orders²², in the absence of laid down procedure for preparation of cost estimates in units, the rates were based on rates available in the Feasibility Reports (FRs) which, in turn, were based on budgetary offers and were 18 to 36 months old from the date of calling of bids for these purchase orders. Tender evaluation committees, which recommended the award of purchase orders, were not able to assess reasonableness of rates quoted by the bidders as the latest realistic cost estimates were not available for evaluation of rates offered by bidders. Audit observed that the price variations between budgetary offers and awarded price of 59 purchase orders ranged between (-) 63 per cent²³ to (+) 40 per cent as given in Table 9.

²¹ HEEP-Haridwar(23), HEP-Bhopal(23), TP-Jhansi (13),HPEP- Hyderabad (44), HPBP-Trichy (48) and EDN Bangalore (23) Purchase orders in respect of HEEP Haridwar, EDN Bangalore and HPBP Trichy were selected on Random basis using 'Random number seed 1965' through IDEA 8 software. However in case of HPEP Hyderabad and TP Jhansi nearly 100 per cent orders were selected. In HEP Bhopal high value orders (average value above ₹two crore) were selected.

²² HEEP-Haridwar (23), HEP- Bhopal (23) and TP-Jhansi (13)

²³ Implies that the purchase orders were awarded at a price which was up to 63 per cent less than the budgetary offers.

Table 9

Price variation between budgetary offers and awarded price (in per cent)	HEEP Haridwar	HEP Bhopal	TP Jhansi	Total
	(Figures in Numbers)			
20 to 40	2	1	0	3
20 to (-) 20	12	17	3	32
(-) 20 to (-) 40	7	3	4	14
(-) 40 to (-) 63	2	2	6	10
Total	23	23	13	59

Audit appreciates that guidelines on Estimates and Price Reasonability under Purchase Policy have been issued by Management on 3 August 2012 so as to reflect current market price and to improve the system. The revised guidelines stipulate that estimates should not be worked out just by applying a uniform yearly compounded escalation over the similar equipment purchased earlier and should be worked out on the basis of indicative market rates/budgetary offers/ last purchase prices economic indices, etc. However, there is scope for bringing more objectivity and transparency by laying down order of preference among various sources of information to be used for estimation of prices.

The Management added (September 2013) that order of preference among various sources of information cannot be specified as a holistic view had to be taken considering available information.

The reply of the management is to be viewed against the fact that the estimated cost and the system underlying the same are important in ensuring transparency and accountability in the procurement process.

4.2 Violation of Purchase Policy

As per the Clause No 4.3 of purchase policy of BHEL, bids for capital goods, where specifications of requirement are generally not very clear, may be invited in two parts viz., (i) Technical bid and (ii) Price bid. While both the bids were to be invited simultaneously, technical bids were to be opened first followed by opening of price bids of technically qualified bidders.

Audit observed that out of 23 purchase orders²⁴ of capital goods selected for examination, bids for 10 purchase orders valued ₹ 358.35 crore were called through expression of interest-cum-technical bid from Original Equipment Manufacturers (OEM). Price bids were called after technical qualification of bidders as per technical parameters which was against the purchase policy of BHEL. Accordingly, the interested technically qualified bidders submitted their price bids for these 10 purchase orders. Thus, the procedure of inviting above 10 bids through 'Expression of Interest-cum-technical bid' followed by

²⁴ In HEEP, Haridwar

HEEP-Haridwar was in violation of the procedure prescribed in the Purchase Policy of BHEL. This resulted in reduction in competition amongst bidders for submission of price bids as in seven out of ten cases only one or two bidders each were found to be technically qualified.

Management stated (April 2013) that in eight cases 'two part' bids were invited after inviting Expression of Interest (EOI). However, in two cases, price bids were invited subsequent to techno commercial bids. The approval note for calling two part bids was not clear on the process of EOI. In the new purchase policy issued in April 2013, a clause dealing with purchase through EOI route has been inserted as per CVC guidelines. Management added (September 2013) that limited tenders after calling EOI would also be addressed to shortlisted parties as well as those who had responded to the EOI.

Reply of the Management is to be viewed against the fact that even in eight cases where two parts bids were invited, technical evaluation of offers was completed at the stage of calling for 'Expression of Interest' itself and subsequent two part bids (comprising supplementary technical bid and price bid) were called for from only bidders who were found technically qualified during 'Expression of Interest' stage. This amounted to calling technical and price bids separately. However, Audit appreciates the corrective action taken by the Management to improve the systems as per CVC guidelines.

4.3 Evaluation of bids

As per instruction no. 5.8 of Purchase Work Instruction of HEEP- Haridwar, whenever negotiations are held with any vendor, the committee must prepare either minutes of the meeting or record notes of discussions immediately after negotiations are over. As per CVC instructions of March 2007, justification and details of negotiations with the L-1 should be duly recorded and documented, without any loss of time.

Audit observed that HEEP, Haridwar unit had conducted negotiations in 11 purchase orders valued at ₹ 420.57 crore. Minutes of meetings were, however, signed by the members of the Committees much after negotiation dates (after 3 to 8 days of negotiation).

The Management accepted (April 2013) the audit observation for compliance.

4.4 Delay in placement of purchase orders

With a view to monitoring the performance of units, BHEL has been following a system of 'Balance score card'²⁵ indicating targets and achievements of units against identified parameters. Balance Score card 2008-09 for HEEP-Haridwar included a parameter for conversion of purchase indent to purchase order within 75 days. HEP-Bhopal, HPEP-Hyderabad and TP-Jhansi units did not fix any norms for the same. A review of 174 purchase

²⁵ 'Balance Score Card' is the system for judging the achievement of the Units for the year

orders²⁶ in respect of capital items procured by these four units revealed that there were delays in conversion of purchase indent to purchase orders. Table 10 has the details.

Table 10

Sl. No.	Time taken from Indent to Purchase Order	No. of Purchase Orders						
		HEEP-Haridwar	HEP-Bhopal	TP-Jhansi	HPEP-Hyderabad	EDN-Bangalore	HPBP-Trichy	Total (percentage)
1	Upto 75 days	1	2	0	3	2	4	12(7)
2	Between 76 days to 4 months	0	1	0	1	4	1	7(4)
3	Between 4 to 6 months	1	2	0	2	12	8	25(14)
4	Between 6 to 12 months	13	12	7	9	4	31	76(44)
5	Between 12 to 18 months	7	5	5	11	1	3	32(18)
6	Above 18 months	1	1	1	18	0	1	22(13)
	Total	23	23	13	44	23	48	174 (100)

Thus, only seven *per cent* of the selected purchase orders were finalized within the norm of 75 days. Units took more than 12 months in 31 *per cent* cases. Audit observed that delay in placing purchase orders had contributed to the delivery dates getting delayed in 23 purchase orders²⁷ much beyond the scheduled date of completion of respective manufacturing capacity augmentation schemes with consequent delays in completion of the capacity expansion schemes as detailed in Table 11:

Table 11

Name of Scheme	Scheduled date of commissioning of scheme	Date of placement of last purchase order (PO Number) for scheme	Date of delivery as per purchase order/actual delivery
Steam turbine augmentation at HPEP Hyderabad	December 2009	27 February 2010 (M209PO1026)	15 July 2011
New Blade shop at HPEP Hyderabad	December 2009	18 June 2010 (M 209P003)	15 October 2010
Increase in manufacturing capacity of control equipment EDN Bangalore	December 2009	January 2011 (4000031392)	6 April 2011
Enhancement of manufacturing capacity for power transformer up to 220 KV class from 8500 MVA to 15000 MVA TP Jhansi	October 2009	16 March 2010 (7198186)	5 March 2011

²⁶HEEP-Haridwar(23),HPEP- Hyderabad(44), HEP- Bhopal(23),TP Jhansi(13) EDN Bangalore (23) and HPBP-Trichy (48)

²⁷ HPEP Hyderabad (7), EDN Bangalore (5) HEEP-Haridwar (2), HEP- Bhopal (3) and TP Jhansi (6)

New Block for manufacturing of 765 KV class HVDC and higher rating transformers HEP Bhopal	June 2008	23 June 2009 (8090002)	25 October 2009
Steam turbine including advance blade facilities augmentation to 10,020 MW HEEP Haridwar	October 2009	27 January 2010 (C9T6570)	29 February 2012

Examination in Audit revealed:

- 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) as detailed in Table 12

Table 12

PO NO	Date of opening technical bid	Date of resolution of technical issues and opening of price bid
HEEP Haridwar		
6611	19 July 2008	11 November 2008
6368	12 February 2009	3 August 2009
6570	20 July 2009	12 January 2010
6419	31 October 2007	18 March 2008
6006	22 July 2008	26 December 2008
6557	26 July 2008	22 October 2008
6738	7 June 2008	22 October 2008
6265	12 February 2009	18 May 2009
TP Jhansi		
7198121	29 July 2008	27 February 2009
7198128	10 December 2008	11 May 2009
7188106	6 June 2008	15 December 2008
7198186	30 December 2008	8 January 2010
7198126	25 April 2008	18 February 2009
HEP Bhopal		
8070E76	15 May 2007	6 December 2007
8070D94	10 May 2007	6 October 2007

- Long delivery periods quoted by vendors against the period mentioned in the indents by 'end users' departments in 14 cases (HEEP, Haridwar: 7 cases, TP Jhansi: 4 cases and HEP Bhopal: 3 cases) which BHEL had to agree after discussions as indicated in Table 13.

Table 13

PO No	Delivery period as per Indent (in months)	Delivery period agreed as per Purchase order (in months)
HEEP Haridwar		
6738	17	24
6265	22	26
6365	25	29
6419	12	14
6345	22	23
6611	2	18
6335	25	26
TP Jhansi		
7198124	7	8
7198121	8	13
7188106	6	14
7198126	7	9
HEP Bhopal		
8070029	11	22
8070012	11	13
8070004	11	13

Management noted the observation and stated (April 2013) that delays were attributable to finalization of technical specifications, technical evaluation and retendering.