

BHARAT HEAVY ELECTRICALS LTD.
CENTRAL FOUNDRY FORGE PLANT
RANIPUR, HARDWAR
 MAINTENANCE & SERVICES DEPARTMENT
 MAINTENANCE-MACHINE SHOP

TENDER FORM FOR “ANNUAL MAINTENANCE CONTRACT”

(PRICE BID)

PRICED/UNPRICED

(PRICED PRICE BID TO BE SEALED IN SEPARATE ENVELOP)

Name & Address of Bidder	:	
Tender Notice No.	:	CFFP/M&S/RMS/2K18/AMC/01/NIT Dated: February 15, 2018
Last Date & Time for receipt of Tender	:	14:00 hrs on 12/03/2018
Date & Time for opening of Tenders	:	14:30 hrs on 12/03/2018
Place for opening of Tenders	:	Tender Room, CFFP
Nature of Contract	:	Annual Maintenance Contract
Period of Contract	:	Two Years

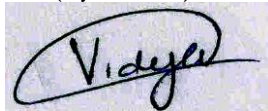
Description of Work

Name of Work	Period of Contract	Cost of Work for One Year Excluding Taxes (To be quoted by the Contractor)		Cost of Work for Two Years Excluding Taxes (To be quoted by the Contractor)	
		Figure	Words	Figure	Words
Annual Maintenance Contract for the machines in Machine Shop & QM Work Shop	Two Years				

Encl:

- Location wise List of Machines, Equipment & installation in Machine Shop & QM work shop (Annexure-A1)
- Manpower Deployment, Extent & Scope of Work and Scope of supply of Material (Annexure-B)
- Special Terms and Conditions (Annexure-C)
- Payment Terms (Annexure-D)
- Qualification Criteria (Annexure-F)
- Business Rules For Reverse Auction (Annexure-G)

Any Other (By Bidder):



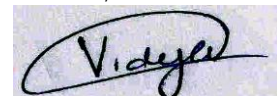
Signature of Issuing Officer

Signature of Bidder/Tenderer

Declaration by Bidder

I/We hereby confirm that I/we have carefully read and understood Attachment-A to the Tender Notice and Annexures-A1, B, C, D, F & G respectively and have complied/will comply with the same.

Signature of Bidder/Tenderer



(Accounts Officer)

(Opening Officer)

(Issuing Officer)

BHARAT HEAVY ELECTRICALS LTD.
CENTRAL FOUNDRY FORGE PLANT
RANIPUR, HARDWAR
MAINTENANCE & SERVICES DEPARTMENT
MAINTENANCE-MACHINE SHOP

NO. : CFFP/M&S/RMS/2K18/AMC/01/NIT

Date: February 15, 2018

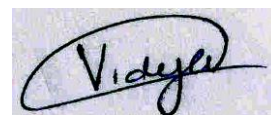
TENDER NOTICE – OPEN TENDER

Two part Tenders in Sealed Envelopes are invited from technically and financially capable parties, having experience in work similar to- and interested in- the under mentioned works. The tender documents are available at website www.bhel.com/www.bhelhwr.co.in in Tender Notification Section which can be downloaded. Earnest Money Deposit (EMD) & Tender cost, as mentioned in the Tender Documents is to be deposited along with the tender itself. Earnest money/Tender cost should be deposited in form of Cash Receipt or Demand Draft, **payable at Haridwar**, in favour of **Accounts Officer, CFFP, BHEL, Haridwar** and must be enclosed with the tender. Failure of Earnest Money & Tender cost submission will lead to rejection of the tender. The tender should reach the Tender Room, CFFP on or before **12/03/2018 at 2:00PM**, which will be opened on the same day in the Tender Room, CFFP at **2:30 PM** in presence of the bidders who wish to be present.

Bidders are advised to inspect the site/machines before quoting their rates. Bidders are also advised to go through the Special Instructions attached to this notice. (Placed at Attachment A).

BHEL reserves the right to reject any or all of the tenders without assigning any reason thereto.

Tender No. & Date	Description of Work	Earnest Money	Period of Contract	Tender Cost (Rs.)
CFFP/M&S/RMS/2K18/AMC/01/NIT Dated: February 15, 2018	Annual Maintenance Contract for the machines in Machine Shop & QM Work Shop	2,64,000/-	Two Years	500/-



(Vidya Sagar)
Dy. Manager./M&S
CFFP, BHEL
Ranipur, Haridwar-249403
(Uttarakhand)
Contact No. 01334-284507
E-mail ID: sagar11@bhelhwr.co.in

Copy To. : Sr. DGM (Works): for deputing finance representative for tender opening.

BHARAT HEAVY ELECTRICALS LTD.
CENTRAL FOUNDRY FORGE PLANT
RANIPUR, HARDWAR
MAINTENANCE & SERVICES DEPARTMENT
MAINTENANCE-MACHINE SHOP

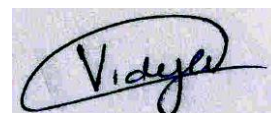
ATTACHMENT A

NO. : CFFP/M&S/RMS/2K18/AMC/01/NIT

Date: February 15, 2018

SPECIAL INSTRUCTIONS

1. Kindly read this set of Special Instructions carefully before filling up the tender form.
2. **Pre Qualification Requirements placed at Annexure F must be fulfilled by the vendor to participate in the tender and submitted along with Techno-Commercial Bid.**
3. The bidders are to submit the tender form along with following Annexure- A1, B, C, D, F & G as well as this set of Special Instructions (Attachment A); **all pages duly signed with clause wise confirmation/acceptance & stamped.**
 - a. Location wise List of Machines, Equipment & installation in Machine Shop & QM work shop (Annexure-A1)
 - b. Manpower Deployment, Extent & Scope of Work and Scope of supply of Material (Annexure-B)
 - c. Special Terms and Conditions (Annexure-C)
 - d. Payment Terms (Annexure-D)
 - e. Qualification Criteria (Annexure-F)
 - f. Business Rules For Reverse Auction (Annexure-G)
4. The tender is to be submitted in two parts, viz.: i) Techno Commercial Bid and ii) Price Bid.
5. Both the Techno Commercial Bid and Price Bid are to be sealed separately in separate envelopes super-scribed with "Techno Commercial Bid for Tender no. : CFFP/M&S/RMS/2K18/AMC/01/NIT" and "Price Bid for Tender no. : "CFFP/M&S/RMS/2K18/AMC/01/NIT" respectively and then placed in a common envelope super-scribed with "Tender for Tender No.: CFFP/M&S/RMS/2K18/AMC/01/NIT". The Techno Commercial Bid must also contain an unpriced copy of Price Bid.
6. Only the Techno Commercial bid will be opened on the day of tender opening. The Priced Bid will be opened only if Techno Commercial Bid(s) are found Technically Suitable & Acceptable. Date of opening of Price Bid or Reverse Auctioning will be intimated to all technically suitable and acceptable bidders at a suitable time.
7. **It is strongly recommended to all potential bidders to visit the site and the machine under consideration. Any presumption by the bidders in this regard will not be entertained after opening of the tender.**
8. No accommodation facilities will be provided by BHEL to any of the staff of the contractors.
9. Apart from the "Special Terms & Conditions", placed at Annexure-C, the contractor will have to comply with other Terms & Conditions including "General Terms & Conditions" & "Safety Norms", BHEL's Works Policy as modified from time to time and Government rules.
10. Once Price Bids are opened and accepted by BHEL, the same cannot be withdrawn by the bidder for whatsoever reasons. In case a bidder withdraws his/her/their tender, suitable action may be taken by BHEL as deemed fit. This may include black listing of bidder or legal action.
11. If there is a difference found in the figures & words of the offered price. The price given in the words will be considered.



(Issuing Officer)

**LOCATION WISE LIST OF MACHINES, EQUIPMENTS &
INSTALLATIONS IN
MACHINE SHOP AND QM WORKSHOP**

Sl. No.	Name of Machine	Location	GROUP	WEIGHT	NORMAL WORKING HOURS	EXTENDED WORKING HOURS
A.	PRIMARY HORIZONTAL BORERS					
01.	Horizontal Borer 220-A	C-16	A	93	07:00-00:30	00:30-06:00
02.	Horizontal Borer 220C	D-11	A	93	07:00-00:30	00:30-06:00
03.	Horizontal Borer 220B	D-14	A	93	07:00-00:30	00:30-06:00
04.	Horizontal Borer WD-200	C-12	A	86	07:00-00:30	00:30-06:00
05.	Horizontal Borer-200	E-20	O	90	07:00-00:30	00:30-06:00
06.	Horizontal Borer WD-160	B-16	A	87	07:00-00:30	00:30-06:00
				542		
B.	SECONDARY HORIZONTAL BORERS					
07.	Horizontal Borer 1-30	D-11	B	69	07:00-00:30	00:30-06:00
				69		
C.	DEEP HOLE BORING MACHINES					
08.	DHB-1	A-11	C	78	07:00-00:30	00:30-06:00
09.	DHB-2	D-20	O	90	07:00-00:30	00:30-06:00
				168		
D.	PLANO MILLERS					
10.	Plano Miller-A	C-4	D	96	07:00-00:30	00:30-06:00
11.	Plano Miller-B	C-14	O	41	07:00-00:30	00:30-06:00
				137		
E.	LARGE VERTICAL BORERS					
12.	Vertical Borer VTB-6.3	E-11	E	93	07:00-00:30	00:30-06:00
13.	Vertical Borer VTB-7.1	E-15	E	93	07:00-00:30	00:30-06:00
14.	VTB-1540A	C-7	E	86	07:00-00:30	00:30-06:00
15.	Vertical Borer VTB-1540B	E-13	E	83	07:00-00:30	00:30-06:00
				355		
F.	MEDIUM & SMALL VERTICAL BORERS					
16.	Vertical Borer 2.5A	B-8	F	61	07:00-00:30	00:30-06:00
17.	Vertical Borer 2.5B	B-8	F	61	07:00-00:30	00:30-06:00
18.	Vertical Borer 2.5C	D-8	F	69	07:00-00:30	00:30-06:00
19.	Vertical Borer 2.5D	D-6	F	69	07:00-00:30	00:30-06:00
20.	Vertical Borer 2.1	B-11	F	44	07:00-00:30	00:30-06:00
21.	Vertical Borer 1.5	B-12	F	26	07:00-00:30	00:30-06:00
				330		
G.	LARGE LATHES					
22.	Lathe - 10m (FR-100)	A-7	G	78	07:00-00:30	00:30-06:00
23.	Lathe 8m (SR-2000B)	A-16	G	78	07:00-00:30	00:30-06:00
24.	Lathe 8m (SR-2000A)	B-9	G	78	07:00-00:30	00:30-06:00
25.	Lathe 10M (1A-665)	C-12	G	78	07:00-00:30	00:30-06:00
26.	Lathe 8m (SRM-2000)	D-7	G	78	07:00-00:30	00:30-06:00

**LOCATION WISE LIST OF MACHINES, EQUIPMENTS &
INSTALLATIONS IN
MACHINE SHOP AND QM WORKSHOP**

Sl. No.	Name of Machine	Location	GROUP	WEIGHT	NORMAL WORKING HOURS	EXTENDED WORKING HOURS
27.	Lathe 14m (Beco)	E-7	G	90	07:00-00:30	00:30-06:00
28.	Lathe - 7m	A-3	G	65	07:00-00:30	00:30-06:00
				545		
H.	MEDIUM & SMALL LATHES					
29.	Lathe - 6m-C (1-46)	C-5	H	50	07:00-00:30	00:30-06:00
30.	Lathe - 6m A	B-12	H	40	07:00-00:30	00:30-06:00
31.	Lathe - 5m A	B-13	H	40	07:00-00:30	00:30-06:00
32.	Lathe - 6m B	B-6	H	40	07:00-00:30	00:30-06:00
33.	Lathe - 5m B	C-7	H	40	07:00-00:30	00:30-06:00
34.	Lathe - 4.5m	C-8	H	37	07:00-00:30	00:30-06:00
				247		
I.	FURNACE					
35.	Thermal Stability Furnace	E-17	I	51	07:00-00:30	00:30-06:00
				51		
J.	AUXILARY MACHINES					
36.	Facing & Centring Machine	B-7	J	65	07:00-00:30	00:30-06:00
37.	Circular Saw	A-5	J	54	07:00-00:30	00:30-06:00
38.	Band Saw-A	E-4	J	68	07:00-00:30	00:30-06:00
39.	Band Saw-B	D-5	J	51	07:00-00:30	00:30-06:00
40.	Drill Machine RM-60	B-13	J	19	07:00-00:30	00:30-06:00
41.	Self Aligning Rotator	B-4	J	37	07:00-00:30	00:30-06:00
42.	MP Testing Machine-1	B-3	J	61	07:00-00:30	00:30-06:00
43.	MP Testing Machine-2	B-4	J	61	07:00-00:30	00:30-06:00
44.	Transfer Trolley-1	D-17	J	33	07:00-00:30	00:30-06:00
45.	Transfer Trolley-2	E-2	J	33	07:00-00:30	00:30-06:00
				482		
K.	ELECTRICAL INSTALLATIONS					
46.	Substation-West	Western End, Bay-1	K	75	07:00-00:30	00:30-06:00
47.	Substation-East	Eastern End, Bay-2	K	75	07:00-00:30	00:30-06:00
48.	Substation-North	North of Shop	K	75	07:00-00:30	00:30-06:00
49.	Power Distribution Board-1	A-10	K	54	07:00-00:30	00:30-06:00
50.	Power Distribution Board-2	B-9	K	54	07:00-00:30	00:30-06:00
51.	Power Distribution Board-3	B-12	K	54	07:00-00:30	00:30-06:00
52.	Power Distribution Board-4	B-16	K	54	07:00-00:30	00:30-06:00
53.	Power Distribution Board-5	C-15	K	54	07:00-00:30	00:30-06:00
54.	Power Distribution Board-6	C-9	K	54	07:00-00:30	00:30-06:00
55.	Power Distribution Board-7	C-7	K	54	07:00-00:30	00:30-06:00
56.	Power Distribution Board-9	D-14	K	54	07:00-00:30	00:30-06:00
57.	Power Distribution Board-10	E-15	K	54	07:00-00:30	00:30-06:00

**LOCATION WISE LIST OF MACHINES, EQUIPMENTS &
INSTALLATIONS IN
MACHINE SHOP AND QM WORKSHOP**

Sl. No.	Name of Machine	Location	GROUP	WEIGHT	NORMAL WORKING HOURS	EXTENDED WORKING HOURS
58.	Power Distribution Board-11	E-13	K	54	07:00-00:30	00:30-06:00
59.	Power Distribution Board-12	E-22	K	51	07:00-00:30	00:30-06:00
				816		
L.	AUXILARY MACHINE TOOLS					
60.	Saw Sharpening Machine	A-14	L	19	07:00-00:30	00:30-06:00
61.	Pedestal Grinder-1	A-14	L	12	07:00-00:30	00:30-06:00
62.	Pedestal Grinder-2	B-13	L	12	07:00-00:30	00:30-06:00
63.	Pedestal Grinder-3	D-14	L	12	07:00-00:30	00:30-06:00
64.	Pedestal Grinder-4	E-8	L	12	07:00-00:30	00:30-06:00
65.	Pedestal Grinder-5	A-7	L	12	07:00-00:30	00:30-06:00
66.	Pedestal Grinder-6	B-6	L	12	07:00-00:30	00:30-06:00
67.	Lathe LB-20G	D-15	L	37	07:00-16:00	16:00-12:30
68.	Lathe LB-20	D-15	L	37	07:00-16:00	16:00-12:30
69.	Lathe H-26	D-15	L	37	07:00-16:00	16:00-12:30
70.	Russian Lathe	D-16	L	37	07:00-16:00	16:00-12:30
71.	Tool Cutter-1	C-16	L	23	07:00-16:00	16:00-12:30
72.	Tool Cutter-2	C-16	L	23	07:00-16:00	16:00-12:30
73.	Milling Machine-1	C-16	L	34	07:00-16:00	16:00-12:30
74.	Milling Machine-2	C-16	O	34	07:00-16:00	16:00-12:30
75.	Cylindrical Grinder	C-16	L	23	07:00-16:00	16:00-12:30
76.	Power Hacksaw	D-14	L	40	07:00-16:00	16:00-12:30
				416		
M.	ILLUMINATION & OTHERS					
77.	Shop Illumination System and others*	BAY-1	M	46	07:00-07:00	-NA-
78.	Shop Illumination System and others*	BAY-2	M	46	07:00-07:00	-NA-
79.	Shop Illumination System and others*	BAY-3	M	46	07:00-07:00	-NA-
80.	Shop Illumination System and others*	BAY-4	M	46	07:00-07:00	-NA-
81.	Illumination System and others*	ANNEXE	M	36	07:00-07:00	-NA-
				220		
N.	QM Workshop & Labs					
82.	Power Hexa Machine no.01	QM Workshop	N	40	07:00-16:00	16:00-12:30
83.	Power Hexa Machine no.02	QM Workshop	N	40	07:00-16:00	16:00-12:30
84.	Power Hexa Machine no.03	QM Workshop	N	40	07:00-16:00	16:00-12:30
85.	Lathe Machine (LB 17)	QM Workshop	N	37	07:00-16:00	16:00-12:30
86.	Lathe Machine (LB 20)	QM Workshop	N	37	07:00-16:00	16:00-12:30
87.	Milling Machine (HMT)	QM Workshop	N	34	07:00-16:00	16:00-12:30
88.	Milling Machine (BATLIBOI FN2)	QM Workshop	N	34	07:00-16:00	16:00-12:30
89.	Tensile Machine (ZD-40)	QM Building	N	12	07:00-16:00	16:00-12:30
90.	Tensile Machine (UTES-20)	QM Building	N	12	07:00-16:00	16:00-12:30
91.	Impact Machine (IT-30)	QM Building	N	12	07:00-16:00	16:00-12:30
92.	Impact Machine (IT-30)	QM Building	N	12	07:00-16:00	16:00-12:30
93.	HRC Machine (EHR-AC)	QM Building	N	12	07:00-16:00	16:00-12:30
94.	BHN Machine (HPO-3000)	QM Building	N	12	07:00-16:00	16:00-12:30
95.	BHN Machine (HPO-250)	QM Building	N	12	07:00-16:00	16:00-12:30
96.	BHN Machine (B-3000)	QM Building	N	12	07:00-16:00	16:00-12:30

**LOCATION WISE LIST OF MACHINES, EQUIPMENTS &
INSTALLATIONS IN
MACHINE SHOP AND QM WORKSHOP**

Sl. No.	Name of Machine	Location	GROUP	WEIGHT	NORMAL WORKING HOURS	EXTENDED WORKING HOURS
97.	Profile projector 1	QM Building	N	6	07:00-16:00	16:00-12:30
98.	Profile projector 2	QM Building	N	6	07:00-16:00	16:00-12:30
99.	Drop Test Machine	QM Building	N	12	07:00-16:00	16:00-12:30
100.	Bend Testing machine	QM Building	N	12	07:00-16:00	16:00-12:30
101.	Belt Grinding Machine	QM Building	N	12	07:00-16:00	16:00-12:30
102.	Disc Cutting Machine (UNIMAT)	QM Building	N	6	07:00-16:00	16:00-12:30
103.	"U" Notch Broaching Machine	QM Building	N	6	07:00-16:00	16:00-12:30
104.	"V" Notch Broaching Machine	QM Building	N	6	07:00-16:00	16:00-12:30
105.	Surface Grinding (Horizontal)	QM Building	N	12	07:00-16:00	16:00-12:30
106.	Pedestal Grinder	QM Building	N	12	07:00-16:00	16:00-12:30
107.	Band Saw	QM Building	N	12	07:00-16:00	16:00-12:30
108.	Muffle Furnace No.1	QM Building	N	6	07:00-16:00	16:00-12:30
109.	Muffle Furnace No.2	QM Building	N	6	07:00-16:00	16:00-12:30
110.	Muffle Furnace No.3	QM Building	N	6	07:00-16:00	16:00-12:30
111.	Oven No.1	QM Building	N	6	07:00-16:00	16:00-12:30
112.	Oven No.2	QM Building	N	6	07:00-16:00	16:00-12:30
113.	Oven no 3	QM Building	N	6	07:00-16:00	16:00-12:30
114.	Hot Plates No.1	QM Building	N	6	07:00-16:00	16:00-12:30
115.	Hot Plates No.2	QM Building	N	6	07:00-16:00	16:00-12:30
116.	Hot Plates No.3	QM Building	N	6	07:00-16:00	16:00-12:30
117.	Hot Plates No.4	QM Building	N	6	07:00-16:00	16:00-12:30
118.	Hot waterbath equipment	QM Building	N	6	07:00-16:00	16:00-12:30
119.	Polishing & Grinding Machine No.1	QM Building	N	6	07:00-16:00	16:00-12:30
120.	Polishing & Grinding Machine No.2	QM Building	N	6	07:00-16:00	16:00-12:30
121.	Polishing & Grinding Machine No.3	QM Building	N	6	07:00-16:00	16:00-12:30
122.	Electric Furnace No.1	QM Building	N	6	07:00-16:00	16:00-12:30
123.	Electric Furnace No.2	QM Building	N	6	07:00-16:00	16:00-12:30
124.	Tubular Muffle Furnace	QM Building	N	6	07:00-16:00	16:00-12:30
125.	Creep Testing Machine No.1	QM Building	N	6	07:00-16:00	16:00-12:30
126.	Creep Testing Machine No.2	QM Building	N	6	07:00-16:00	16:00-12:30
127.	Creep Testing Machine No.3	QM Building	N	6	07:00-16:00	16:00-12:30
128.	Creep Testing Machine No.4	QM Building	N	6	07:00-16:00	16:00-12:30
129.	Creep Testing Machine No.5	QM Building	N	6	07:00-16:00	16:00-12:30
130.	Creep Testing Machine No.6	QM Building	N	6	07:00-16:00	16:00-12:30
131.	Creep Testing Machine No.7	QM Building	N	6	07:00-16:00	16:00-12:30
132.	Creep Testing Machine No.8	QM Building	N	6	07:00-16:00	16:00-12:30
133.	Sample Grinding machine 1	QM Building	N	6	07:00-16:00	16:00-12:30
134.	Sample Grinding machine 2	QM Building	N	6	07:00-16:00	16:00-12:30
				622		
			Total	5000		
O.	Expected Additional Machines					
135.	Horizontal Borer BH-130	C-10	O	44	07:00-00:30	00:30-06:00
136.	New Vertical Borer Machine	D-5	O	83	07:00-00:30	00:30-06:00
				127		

**LOCATION WISE LIST OF MACHINES, EQUIPMENTS &
INSTALLATIONS IN
MACHINE SHOP AND QM WORKSHOP**

Sl. No.	Name of Machine	Location	GROUP	WEIGH TAGE	NORMAL WORKING HOURS	EXTENDED WORKING HOURS
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Shop Illumination System and others include all shop lightings and fans within Machine Shop, its Annexe and other buildings associated with shop, Man Coolers, Heaters, etc. irrespective of their location.

The weightage of machine group is based on weightage of included machines in the group. Weightage of machines themselves is based on size, complexity and criticality of machines. Machines of similar nature have been included in same group except machines and other utilities of QM Workshop and other utilities of Machine Shop which. The group weightage is to be considered only for penalty purpose as detailed under 'Payment Terms' in Annexure-'D'.

Machines under 'O' Group is not under operation or to be Erection & Commissioned. These machines is to be Overhauled/ Commissioned and may be added in the course of AMC. Initially total weightage for deduction of payment will be 5000. If any machine from Group 'O' is added, New total weightage for deduction of payment will be 5000 + weightage of the respective machine. Total Payment value will be remain unchanged. In spite of this if any new machine is added in Machine Shop & QM-Workshop in the course of AMC will also be considered under AMC.

Mechanism for deduction of payment to account for inferior performance has been built in the 'Payment Terms' (Annexure-'D').

**MANPOWER DEPLOYMENT, EXTENT & SCOPE OF WORK AND,
SCOPE OF SUPPLY OF MATERIAL**

A. MANPOWER DEPLOYMENT: The main responsibility of the contractor will be smooth operation of the machines and allied tools & auxiliaries under consideration. For this, the contractor will deploy adequate no. of persons with adequate knowledge and experience. The desirable manpower and their minimum qualification criteria required to be deployed by the contractor at the site are as listed below:

1. **Site In-Charge:** The site in-charge will primarily be responsible for all the works as mentioned in the extent and scope of work and will be the nodal agency from contractors' side for all the communication. He must be well qualified and experienced in handling maintenance and retrofitting/reconditioning of similar machines. The site in-charge must be a degree holder with a minimum 05 years' experience/ Diploma Holder with 10 years' experience/ ITI with 15 years' experience in maintaining/installing/retrofitting/reconditioning of such machines. The site in-charge must be easily available to the maintenance and production departments on 7 X 24, single call basis. During his/her absence from site, he/she will nominate another person of at the most one rank below with prior intimation to the maintenance department. The contractor will mandatorily provide a mobile cellular phone to the site in-charge for ease of contact.
2. **Shift Supervisors:** There will be four supervisors of which at least two must be from Mechanical side, one from Electrical side. Fourth supervisor must be from Electronics. The shift supervisors will basically act as team leaders for the workforce deployed on any work. The supervisors must be well qualified and experienced. The minimum qualification for Shift Supervisors will be Diploma (in respective engineering) with minimum 2 years' experience or ITI (in respective discipline) with minimum 5 years' experience in maintenance/reconditioning/retrofitting of similar machines. (Please also refer A.1 above). The Supervisor for Electronics Maintenance must necessarily be minimum diploma holder with minimum 2 years' experience.
3. **Fitters:** There will be six fitters deployed in A-shift, B-shift & C- Shift as per requirement, each having a qualification of ITI and an experience of minimum 3 years/ High School and an experience of min. 5 years/ 8th pass and an experience of 8 years in mechanical maintenance.
4. **Electricians:** There will be four electricians deployed in A-shift, B-shift & C- Shift as per requirement, each having a qualification of ITI and an experience of minimum 3 years/ High School and an experience of min. 5 years in electrical/electronic maintenance.

5. **Helpers:** Contractor will deploy adequate number of helpers (eight nos. in A-shift, B-shift & C- Shift as per requirement) for assisting the above staff.
6. **Others:** Contractor will deploy one no. of skilled employee for office assistance & computer feeding work in maintenance office & one number of skilled employee for assistance work for Material Management. The contractor may also employ staff for minor welding repair work and under certain special circumstances. However, the overall responsibility of all the persons including regular and temporary workforce, the supervisors and the site in-charge will be that of the contractor.
7. The overall team must be experienced in Maintenance/Reconditioning/Retrofitting of such machines including Lathes, Vertical Boring Machines, Horizontal Boring Machines and other machine tools, LT Electrical Panels, High-Bay Luminaries etc. The team must also be capable of handling maintenance activities w.r.t. PLC, Drives and CNC based systems. If contractor wishes to depute any person having lesser qualification as mentioned above but technically sound for the work, it may be allowed only after getting prior approval from the executive in charge.

The deployment of workforce will be in two shifts on regular basis and in the third shift & Sundays/ Holidays as per the requirement of the work. Contractor will be allowed to detain the workforce working in 'A', 'B' or 'C'-Shift for working in period beyond the normal hours subject to the condition that workmen will be allowed to work for not more than 12Hrs at a stretch in normal conditions and not more than 16Hrs at a stretch in the condition of emergencies, determination of which shall be from the competent authority of BHEL. The Contractor may increase or decrease manpower strength as per requirement but the monthly manpower average should not less than 23 per day & total yearly manpower average should be greater than 25 per day. Non- fulfillment of the mentioned condition may leads to a suitable action from BHEL.

B. EXTENT AND SCOPE OF WORK: The Extent and Scope for the work of Annual Maintenance of machines in Machine Shop, QM Workshop and Allied Areas is as detailed below:

1. **Running Breakdown Maintenance:** Running Breakdown Maintenance of the machines under consideration (Refer Annexure-A, List of Machines for Annual Maintenance Contract) will generally refer to attending all types of breakdowns of the machines under consideration irrespective of the cause of the breakdown. The breakdown maintenance will normally be carried out during A and B Shifts. However, if any machine is operated beyond B shift, the contractor will maintain a team comprising of sufficient members of adequate caliber to handle breakdowns during this period also. The tentative period of operation of the machines beyond 'B' Shift is indicated in Annexure-'A', List

of Machines for Annual Maintenance Contract The procedure for this activity will be as detailed below-

- 1.1. For this activity, all breakdowns will be referred to the site in charge of the contractor by maintenance department. This will be done on the standard Breakdown. The contractor's site in charge will deploy his team member(s) for resolving the breakdown in shortest possible time.
 - 1.2. The contractor will give a spare/machining requisition slip to maintenance department & will retain one signed copy from maintenance department. All the spare parts /consumables/machining for this purpose will be provided by the maintenance department as per requirement. However, any weld rectification of any broken part, where the contractor's site in charge independently or jointly with the maintenance department decide that the broken part can be weld repaired, shall be done by the contractor. Welding machine, electrodes & required accessories/ shall be provided by BHEL.
 - 1.3. After resolving the breakdown a trial run of the affected sub-system and/or the whole machine, to the satisfaction of the production department, will be performed and the machine will be handed over to the production department for normal production activities. Intimation of handing over the machine along with breakdown time and handing over time will be conveyed to the maintenance department.
 - 1.4. The site in charge of the contractor shall prepare a report of all the breakdowns in the online system as per the standard breakdown reporting system and will also maintain a detailed report of all the activities of the breakdown maintenance including the details and nature of breakdown, activities performed for resolution of breakdown, spares used, breakdown time, handing over time, suggestions/recommendations for avoiding similar breakdown etc.
2. **Preventive Maintenance:** The contractor will take up all the machines under consideration for General Preventive Maintenance at regular intervals. Normally, each machine will be taken up for the work of preventive maintenance on half yearly basis and as per the "Schedule of Preventive Maintenance". The procedure for this activity will be as detailed below-
- 2.1. For this activity, a detailed Schedule of Preventive Maintenance will be issued by the maintenance department within a month of start of the works contract.
 - 2.2. The preventive maintenance will be taken up following the "Schedule of Preventive Maintenance". However, contractor will intimate the production department every month for the machines to be covered in preventive maintenance. Preventive Maintenance will be carried out as per availability schedule provided by the production department.

- 2.3. On the scheduled date, the machine will be handed over to the contractor for the period as mentioned in the schedule.
- 2.4. The contractor will deploy its appropriate workforce for the work who will do the preventive maintenance work as per the guide lines specified in the “Schedule of Preventive Maintenance”.
- 2.5. The preventive maintenance work will in general include cleaning, lubrication, tightening of joints and fasteners, tightening of electrical connections and joints, cleaning of panels and control desks, checking of various parameters and checking of performance of machine etc.
- 2.6. Any deficiencies observed in the machine during the Preventive Maintenance shall be intimated to the maintenance department immediately and a corrective action shall be initiated. Depending upon the severity of the deficiency, the machine may be taken up further for corrective maintenance or planned for minor overhauling.
- 2.7. An execution report on standard format for the preventive maintenance work will be submitted by the contractor to the maintenance department. A proper and detailed record of the activities performed observations and suggested corrective/preventive measures will also be maintained by the contractor.
3. **Minor Overhaul:** Some machines may undergo minor overhaul during the contract period where minor overhauling will cover overhauling of Tail Stock, Carriage or Head Stock in Lathes, Overhauling of speed gear box of Table, left head/saddle gear box or Right head/saddle gear box in VTBs, Overhauling of Head Stock or Column Gear box in HBMs, Overhauling of Head or table Gear Box in Milling Machines or overhauling of complete lubrication system of any machine or replacement of box nut or lead screw or both of any of the machine. The machines to be taken up for this activity shall be decided jointly by the Maintenance Department, the Production Department and the Contractor, based on the observations and findings during the scheduled preventive maintenance.
 - 3.1. Based on information gathered during preventive and breakdown maintenance and general observation of the machine, a minor overhaul of the machine will be planned well ahead in time (at least four weeks before the actual execution). This will also include planning of all the activities required to be performed during the overhauling.
 - 3.2. A detailed list of all the spares and consumables required will be handed over by the contractor to the maintenance department.
 - 3.3. On the scheduled date, the machine will be handed over to the contractor for the overhauling work who will deploy its appropriate workforce for the work of overhauling. All the required spares and consumables will be supplied by the maintenance department free of cost. Minor welding/weld repair work will be carried out by the contractor.

- 3.4. The contractor will ensure that all the activities as planned and as required are carried out to the satisfaction of the Production and Maintenance Departments.
- 3.5. After the completion of overhauling, a trial run will be performed jointly by the maintenance department, the production department and the contractor. The job of overhauling will be deemed complete only after successful trial run.
- 3.6. A detailed report detailing all the activities performed and listing down the spares consumed will be prepared by the contractor and submitted to the maintenance department.
4. **Shifting of Spares and Consumables:** All the spares and consumables required for resolution of breakdowns, preventive maintenance, minor overhauls etc. will be provided by BHEL to the contractor, free of cost. However, shifting of the same from Central Plant Store, other Shop Sub-Stores, HEEP or Local Market to the Maintenance-Machine Shop Sub-Store and Maintenance-Machine Shop Sub-Store to the site of requirement will be responsibility of the contractor. For this, the procedure will be as detailed below:
 - 4.1. At the commencement of the contract, the contractor will study all the machines under consideration and submit a list of spares and consumables required for maintenance of the machines for the period of contract based on which, the maintenance department will arrange the material. A similar list will also be prepared in the intermittent period which shall be reviewed jointly by the contractor and the maintenance department.
 - 4.2. At the time of maintenance work, whether breakdown maintenance, preventive maintenance, minor overhaul, the contractor will raise a requisition note for all the required spares and consumables and get it approved by the maintenance department.
 - 4.3. The approved requisition note will then be put to the storekeeper of the M/c Shop Maintenance Sub-Store who will issue the material to the contractor directly or through regular maintenance staff. Shifting of all the material from sub-store to the site will be done by the contractor.
 - 4.4. In case a spare is not available in the Shop Sub-Store, Maintenance Department will process the need as per the existing practice and the contractor will deploy the required manpower for shifting of the material from Central Store/other Shop Sub-Stores/HEEP/local market to the Maintenance-Machine Shop Sub-Store. After which the material will be issued to the contractor as mentioned above.
 - 4.5. A detailed list of spares and consumables consumed during each day will be prepared by the contractor on the next day. In the third week of every month, the Contractor will also assist the maintenance department in preparing a separate list of material required but not

available/available in less quantum in the sub-store and submit the same to the maintenance department which will be taken up by the maintenance department for procurement action.

4.6. For shifting for machine/weld rectification of damaged spares, the contractor will deploy adequate manpower under the supervision of Maintenance Department.

5. **Maintenance of Records**: The contractor will maintain various records as listed below. All the records will be property of BHEL. Contractor may keep a separate record of activities for its own use.

5.1. **Breakdown Report**: A brief report of all the breakdowns will be generated by on line break down system. All the running breakdowns will be reported by production department & handed over by maintenance department by on line break down system. All the facts including action taken for resolution of breakdown, spares consumed, total breakdown hours will be recorded on on-line break down system.

5.2. **Preventive Maintenance Records**: An execution report will be initiated by the contractor in prescribed format. This will be verified and accepted jointly by Maintenance Department. At the end of the year or at the direction of the Maintenance Department, a concise execution summary record will also be prepared for all the Preventive Maintenance Executions. This also will be in the prescribed format in triplicate. Formats for both the Execution Report and the Execution Summary record will be supplied to the contractor by BHEL free of cost.

5.3. **Minor Overhaul Report**: At the end of each of minor overhauls a detailed report (in triplicate) will be generated by the contractor and approved by the maintenance department. All the activities performed will also be recorded. The stationary for this report will be arranged by the contractor themselves.

5.4. **Other Report**: This document will be in the form of General Daily Diary and will contain the details of all the activities as detailed in para 5.1 to 5.3 above and also reports of all other events including accidents, fire, safety failures etc. on daily basis. This will basically form the daily work record and will be basis of verification of all other reports and records. The stationary for this will be arranged by the contractor themselves.

5.5. **Machine History**: The Contractor will keep record of machines including events of breakdowns, preventive maintenance, spares consumed, modifications made and drawings created. However, no drawings and only reference to the drawings will form part of this document. All the drawings will be property of BHEL and the contractor will not be allowed to part the drawings to any agency/person in a manner against the interests of BHEL.

5.6. **Material Consumption Record:** The contractor will, at the end of each week, create a material consumption report to help forecast material requirements. Such reports will also be created at the end of each quarter.

C. SCOPE OF MATERIAL: The scope of material will be as detailed below:

1. **Spares and Consumables:** All the spares and consumables required for maintenance work will be supplied by BHEL free of cost. Shifting of all such material from stores to the site of requirement will be done by the contractor.
2. **Stationary:** All the stationary items excluding standard formats will have to be arranged by the contractor. All the standard formats as per requirement will be supplied to the contractor free of cost.
3. **Instruments and Tools & Tackles:** The contractor will arrange all the tools and instruments required for maintenance work.
4. **Safety Accessories and Appliances:** Safety items like Safety shoes, helmet, safety belt etc. required for the safety of the working staff will have to be provided by the contractor. Safety Gloves will be provided by BHEL.
5. **Office Accessories:** All the items required as office accessories including Computer, Mobile Phones etc. will have to be arranged by the contractor.

SPECIAL TERMS & CONDITIONS

The bidder has to follow following special terms and conditions in addition to the general terms and conditions as per BHEL's works contract policies as amended from time to time. In general, where there is a conflict between the BHEL's general terms and conditions, and the special terms and conditions mentioned herein, the special terms and conditions will supersede the general T&C. All the safety conditions as per BHEL's Safety Terms and Conditions are also to be observed and adhered to. The special terms and conditions are as mentioned below:

1. In all the text below, the phrase 'Executive In-Charge' or 'Executive In-Charge of Maintenance-Machine Shop' will mean Executive In-Charge of Maintenance-Machine Shop or any of his designated executive.
2. The contract will initially be for a period as mentioned in the tender notice and tender form. This period shall be called 'Contract Period'.
3. If required, the contract can be extended on same rates and 'Terms and Conditions' including 'Special Terms and Conditions' by mutual agreement as per BHEL works policy.
4. Irrespective of the state of operation of the machine, the contractor will deploy its team in the Machine Shop also on all Sundays and Holidays except National Holidays unless otherwise directed by the Executive In-Charge. During such days where operation of machines is not taken up by the Production department, the team will take up breakdown maintenance from previous days or preventive maintenance as per schedule or as per the instructions of the Executive In-Charge.
5. Normally no person is to be deployed during National Holidays (Dt. Jan 26 & Aug 15) however, in case of emergencies or special circumstances or decision of running production activities by Machine Shop Production, the contractors' team may be called for any work including support for production department or for breakdown maintenance work. No additional payment shall be made to the contractor for this. On holidays and Sundays, the normal working hours will extend from 07:00Hrs to 20:00Hrs IST.
6. The performance of the work will continuously be monitored by maintenance department. A poor performance/loss or damage of BHEL asset may result into monetary penalties or even premature termination of the contract and the security deposit made by the contractor w.r.t. this contract will be forfeited. Decision of the BHEL will be final in this regard.
7. The contractor will deploy a workforce, comprising of sufficient no. of adequately qualified and experienced team members for the purpose of maintenance of the machines under consideration. The team members must satisfy the criteria as mentioned in Part-A of Annexure-B "Manpower Deployment, Extent & Scope of Work and Scope of Supply of Material". The contractor will be responsible for the conduct of all its employees.
8. Contractor will deploy its team as per clause no.7 above, at Machine Shop. The same team will maintain the machines in both the Machine Shop and the QM Workshop.
9. The contractor will necessarily deploy minimum two people from Mechanical, one supervisor from Electrical background and one supervisor from Electronics Engineering background. The Executive or Supervisor with electronics background must necessarily be well versed and experienced in

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- maintenance of systems with Siemens make CNC, PLC & Drives and familiar with other makes of PLCs, Drives and CNCs.
10. The contractor will have to ensure that none of their employees indulge in activities detrimental to the interests of BHEL. In case any employee of the contractor is found indulging in such activities, contractor will immediately replace him/her by another employee. A second such incidence may result into **Immediate Negative Performance Report** leading to premature termination of the contract as per clause 6 above and/or penalty/legal action.
 11. The Site in-Charge of the contractor must be available to the Maintenance and Production Departments through a suitable means of communication which has to be arranged by the contractor.
 12. The contractor will ensure safety of all its employees and will observe all standard safety norms. For this, the safety devices/appliances will have to be issued by the contractor. Only Safety gloves will be providing by BHEL.
 13. The payment of the work will be made on monthly basis based on performance report generated by the maintenance and/or production department. Refer Annexure-D, Payment Scheme for details.
 14. All the direct consumables and spares for maintenance of machines will be supplied to the contractor by BHEL, free of cost. This however does not include stationary items other than standard formats of BHEL. The standard formats will be supplied free of cost.
 15. All types of maintenance work of machines under consideration including breakdown & preventive maintenance and minor overhauls whether electrical, mechanical or electronic will be under the scope of contract and will be part of work to be carried out by the contractor. This however does not include any machining work of any component including machining of weld repaired components. All the minor welding work required for maintenance will be under the scope of contractor's work. The machining of all types of components will be arranged by BHEL. The scope of the welding will jointly be decided by the Executive In-Charge and the Site In-Charge of the contractor on case to case basis.
 16. All the tools and tackles including hand tools and instruments will have to be arranged by the contractor.
 17. In general, various drawings of the machine tools, their assemblies, sub-assemblies, circuit diagrams and panel wiring diagrams etc. will be supplied by BHEL to the extent possible and subject to availability. Non availability of any drawing or diagram will however not be considered as attributable factor for delay in any maintenance work.
 18. Completion time for repair, maintenance work etc. shall be decided jointly by Executive In-Charge of Maintenance-Machine Shop and the Site In-Charge of the Contractor. All efforts are to be made to complete the work within the estimated time.
 19. Any lapse in attending any maintenance work shall be treated as non compliance from contractor's side and a penalty may be imposed in the form of reduction of % availability of machine.
 20. Any machine(s) added in Machine Shop and/or QM Workshop in future (during the contract period) will have to be maintained by the contractor (during the contract period) without any change in the contract value, irrespective of the nature and size of the machine. In such cases, suitable weightage, same as the most closely related existing machine, will be assigned to the new machine. (Refer Annexure-D Payment Terms and Conditions). Two machines for this purpose have already been considered in the list of machines (Group 'O', Annexure-A1).

21. All the employees of the Contractor working under this contract shall be covered by the contractor under ESI and PF schemes.
22. The Contractor has to work in accordance with & abide by Labour Laws Stipulated by Government & BHEL works policy. This includes licensing by Central Govt./State Govt. as appropriate from time to time.
23. Reverse Auction (RA):
 - a. BHEL reserves the right to go for Reverse Auction (RA) (guidelines as available on www.bhel.com) instead of opening the sealed envelope price bid, submitted by the bidder. This will be decided after techno-commercial evaluation. Bidders to give their acceptance with the offer for participation in RA. Non-acceptance to participate in RA may result in non-consideration of their bids, in case BHEL decides to go for RA.
 - b. Those bidders who have given their acceptance to participate in reverse auction will have to necessarily submit 'Process Compliance Form' (to the designated service provider) as well as 'online sealed bid' in the Reverse Auction. Non-submission of 'Process Compliance Form' or 'online sealed bid' by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/contractors (as available on www.bhel.com).
 - c. The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with the offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, shall also be opened after RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. The bidder having submitted this offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rates.
 - d. If it is found that L1 bidder has quoted higher in online sealed bid in comparison to envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender in the unit, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/contractors (as available on www.bhel.com).
 - e. As a reminder to the bidders, system will flash following message (in red color) during the course of 'online sealed bid': "Bidders to submit online sealed bid less than or equal to their envelope sealed bid already submitted to BHEL"
 - f. For reference Terms & Conditions of Reverse Auction are given in Annexure-G.
24. All the activities will be governed as per the instructions of the Executive In-Charge, Maintenance-Machine Shop.
25. Complete off-loading of the contract is not permitted. Off-loading will be allowed for Electricians, Fitters & Helpers category only. However it will be the full responsibility of the contractor to fulfill the statutory conditions as per BHEL policy and all the acts applicable.
26. Contract shall be governed by the works policy, fraud prevention policy and the same shall be made available to the vendor in case of requirement expressed by the vendor. The Bidder along with its associate/collaborators/sub-contractors/sub-vendors/consultants/service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website and shall immediately bring

to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.

PAYMENT TERMS

This section details the Payment Terms & Conditions.

1. Earnest money deposit (EMD):

- 1.1. Vendors have to submit EMD as mentioned in tender notice. EMD may be deposited only in following forms:
 - 1.1.1. Cash deposit as permissible under Income tax Act (before Tender opening)
 - 1.1.2. Electronic Fund Transfer credited in to SBI BANK A/C NO – 10667995469, IFSC: SBIN0000586, A/C Name CFFP/BHEL, RANIPUR, HARIDWAR with proper remarks containing purpose & name of depositor (before Tender opening)
 - 1.1.3. Banker's Cheque/ Pay order/ Demand Draft, in favour of Account officer, CFFP, BHEL, Haridwar payable at Haridwar (along with offer).
- 1.2. EMD shall be converted to security deposit if the work is awarded.
- 1.3. EMD of unsuccessful vendors shall be refunded back normally within fifteen days of acceptance of award of work by the successful vendor.
- 1.4. EMD shall not carry any interest.
- 1.5. EMD by vendor will be forfeited as per tender document, if
 - 1.5.1. After opening the tender and within the offer validity period, the tenderer revokes his tender or makes any modification in his tender which is not acceptable to BHEL.
 - 1.5.2. The contractor fails to deposit the required Security Deposit or commence the work within the period as per LOI/contract.
- 1.6. Offers without EMD will be rejected and will not be considered for evaluation. However any valid document in line with BHEL Work policy 2016 may be considered.**

2. Security Deposit:

- 2.1. The successful bidder will have to submit a security deposit as per BHEL Works Policy, within 15 days of award of work. The total amount of Security Deposit will be 5% of the contract value.
- 2.2. At least 50% of Security Deposit, including EMD must have to be submitted before start of the work. Balance 50% will be deducted from the first payment.
- 2.3. Security Deposit is to be made in the form of Cash (as permissible under the extant Income Tax act) or Local Cheques of Scheduled Banks (subjected to realization)/ Pay order/ Demand Draft/ Electronic Fund Transfer in favour of CFFP, BHEL, Haridwar, payable at Haridwar or Bank Guarantee/ Fixed Deposit Receipt issued by Scheduled Bank/ Public Financial Institution as defined in the company act. Bank Guarantee format should have the approval of BHEL and

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FDR should be in the name of the contractor, A/C BHEL, duly discharged on the back or in the form of Securities available from Indian Post Offices such as National Saving Certificates, Kisan Vikas Patras etc. (held in the name of Contractor furnishing the security & duly endorsed/ hypothecated/ pledged, as applicable, infavour of BHEL).

2.4. If vendor fails to submit the Security Deposit with in specified time frame the Work Order may be treated as cancelled.

2.5. The security deposit shall not carry any interest.

3. **Criteria for Payment:** Payment to the contractor will be done on monthly basis within 30 days of submission of clear bill. Performance Report for monthly availability of machines and equipments will be prepared jointly by Maintenance Machine Shop & Machine Shop Production (for machines/equipments/installations under Machine Shop) and QM Work Shop (for machines/equipments/installations under QM Work Shop and allied areas). Contractor will submit proof of PF & ESI submission of deputed manpower for each monthly payment. Payment for second running bill onwards will be done only after producing the proof for submission of GST paid in the previous bill, along with verification of the same on GST portal online,

4. **Criteria for Penalty:** The deduction will be done on annual basis considering the % annual machine availability which will be calculated considering the monthly generated availability reports. Penalty will be deducted in the last monthly bill of the year (in 12th running bill and final bill). Machine/ machine group weightage as mentioned in Annexure A-1 will be considered for payment deduction. No deduction will be done for machine/machine groups having availability equal to or more than 95% and at reduced rates for availability between 75% & 95% (reduction on pro-rata basis). For availability <75%, amount equal to machine/ machine group weightage will be deducted. For details, refer table below:

SL. NO.	PARTICULAR		DETAILS
A.	MONTHLY PAYMENT BILL	:	Contract Value ----- Contract Period in Months
PENALTY CALCULATION FOR THE LAST BILL OF THE YEAR			

B	MACHINE/MACHINE GROUP AVAILABILITY IN A YEAR	:	$\frac{\text{Sum of Available Hrs} *}{\text{Sum of Total Working Hrs}} \times 100$ <p>For all machine in the group except those for which availability is less than minimum qualifying availability as per Annexure-A1 (Available Hrs taken from Breakdown Reports)</p>
C	PENALTY FACTOR FOR MACHINE/MACHINE GROUP	:	<p>0 if B > 95% 1 if B < 75% otherwise (95- B)/100</p>
D	MACHINE/MACHINE GROUP WEIGHTAGE	:	AS PER ANNEXURE-A1
E	PENALTY AMOUNT FOR A MACHINE/MACHINE GROUP	:	(Annual Contract Value X Machine Weightage X Penalty Factor)/Weightage of Total Machines
F	TOTAL DEDUCTION FROM LAST MONTHLY BILL OF A YEAR	:	Sum of E for all machine & machine groups + Penalty imposed by competent authority of BHEL if any based on performance report, (Refer Special Terms & Conditions)

5. While Calculating available hours of any machine/machine group, any time taken by BHEL for arrangement of spares will be considered as available hrs. e.g. if 8hrs are consumed in arranging spares for a particular breakdown that runs over a period of 14Hrs. the net breakdown time will be considered 14-8=6Hrs. Preventive Maintenance & Minor Overhauling period will also be considered as available hours. All such incidences will be recorded properly.
6. Final contract value will be fixed for the contract period & no price variation will be applicable during contract period.

QUALIFYING CRITERIA

This section details minimum requirement on part of the bidder for the Annual Maintenance Contract for Machine Tools in Machine Shop & QM Work Shop. In general, the bidder must satisfy following criteria:

1. **General Profile:** The bidder must have a working experience in any of the fields listed at 1.1,1.2 and 1.3 below and must be in the fields listed at 1.4 & 1.5 below consist of following machine tools:
 - a) Vertical Boring Machine of Table dia. 2500 mm or higher size
 - b) Horizontal Boring Machine of Spindle dia. 160 mm or higher size
 - c) Lathe Machine of bed length 2500 mm or higher
 - 1.1. Supply, Erection and Commissioning of Machine Tools
 - 1.2. Electrical & Mechanical Retrofitting/ Reconditioning of Machine Tools
 - 1.3. Maintenance of Machine Tools including mechanical, hydraulic, electrical and electronic maintenance
 - 1.4. Maintenance of LT switchgear
 - 1.5. Maintenance of PLCs, Drives, etc.
2. **Turnover and Financial Position:**
 - 2.1. Average annual financial turnover for the last 3 financial years ending 31st March (i.e. for the financial years 2014-15, 2015-16 and 2016-17), must be not less than Rs. 20 Lacs.
 - 2.2. Bidder must submit proof of having carried out successfully work of similar nature during last 7 years ending last date of the month previous to the one in which NIT for this work is issued. Similar work means “Retrofitting of Machine Tools” OR “Reconditioning of Machine Tools” OR “Renovation of Machine Tools” OR “Uprooting, Shifting & Installation of Machine Tools” OR “Maintenance of Machine Tools on AMC basis” where machine tools will be considered as per clause 7.
 - 2.3. The value of such works must be:

Not less than Rs. 27Lacs for each of minimum three similar completed works with any organization of repute but not the bidders own organization

OR

Not less than Rs. 33Lacs for each of minimum two similar completed works with any organization of repute but not the bidders own organization

OR

Not less than Rs. 53Lacs for each of minimum one similar completed works with any organization of repute but not the bidders own organization

As a proof, completion certificate(s) from the original client(s) must be submitted. In case of AMC, order value per annum will be considered for evaluation. Any work supporting or facilitating to above work will not be considered.

3. **Team:** The bidder must have a good team, experienced in maintenance or reconditioning or retrofitting of equipments and machine tools of similar nature. The bidder is to submit the tentative category wise list of team members proposed to be deputed for the purpose of execution of the contract, mentioning their qualification and experience along with the bid for assessment by BHEL. BHEL, at its discretion may ask any or all bidders to submit documents in support of the qualifications/experience of any or all the team members mentioned in the list submitted. All the members must be ready and willing to work beyond normal working hours.
4. **Compliance to Govt. Rules:** The bidder must have proper registration for PF, ESI, Income Tax, Service Tax, Labour license etc. as per Govt. Rule. The bidder shall also have to comply with the Government as well as BHEL rules and regulations. Bidder has to fill & submit the enclosed Performa.
5. Documents supporting the aforementioned qualifying criteria MUST be submitted by the bidders along with the Techno-Commercial Bid. **If it is found at any time that the particulars submitted by the contractor are false, suitable action will be taken. This may lead to cancellation of contract/registration from all the BHEL units & forfeiting of Earnest Money Deposit (EMD) /Security Deposit (SD).**
6. Bidder's acceptance for opening price bid through reverse auction process must be submitted as per Annexure G. However, BHEL may opt to decide L-1 through Reverse Auctioning or by opening the price bid.
7. In the above descriptions following machines will be considered in Machine Tools:
 - 7.1. Vertical Boring Machine of Table dia. 2500 mm or higher size
 - 7.2. Horizontal Boring Machine of Spindle dia. 160 mm or higher size
 - 7.3. Lathe Machine of bed length 2500 mm or higher
8. Bidder must submit Earnest Money Deposit (EMD) along with Techno-Commercial offer. In case the EMD is not submitted with techno-commercial offer or less than that specified in NIT, tender will be rejected without any prior notice and any amount deposited will be forfeited. However, MSMED Act 2006 certificate will be considered along with a certificate by Chartered Accountant on Letter head with following matter:

DY. MANAGER (M&S)

Certificate by Chartered Accountant on letter head

This is to Certify that M/S..... (Hereinafter referred to as 'company') having its registered office atis registered under MSMED Act 2006, (Entrepreneur Memorandum No (Part-11 dated: Category: (Micro/Small) (Copy enclosed).

Further verified from the Books of Accounts that the investment of the company as on date as per MSMED Act 2006 is as follows:

1. For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.O.I722(E) dated October 5, 2006 : Rs.Lacs

2. For Service Enterprises: Investment in equipment (original cost excluding land and building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006:
RsLacs

The above investment of RsLacs is within permissible limit of RS.Lacs forMicro/Small (Strike off which is not applicable) Category under MSMED Act 2006.

Date:
(Signature)
Name –
Membership number –
Seal of Chartered Accountant

DY. MANAGER (M&S)

9. Following checklist to be filled by the bidder.

Sl. No.	Required Data	To be filled by the bidder	Remarks of Bidder for supporting documents (Enclosed/Not Enclosed)
1.	PF Registration No		
2.	Service Tax Registration No/ GST No.		
3.	PAN No.		
4.	ESI Registration No		
5.	Documents as per clause 1		
6.	Average Turnover of last three years 2014-15 2015-16 2016-17		
7.	Value & Year of Similar Contract/s Work Order as per clause 2		
8.	List of Team as per clause 3		
9.	Earnest Money (DD No.)		
10.	Tender Fee (DD No.)		
11.	Acceptance for Reverse Auctioning		

Terms & Conditions of Reverse Auction

Against this enquiry for the subject item/ system with detailed scope of supply as per enquiry specifications, BHEL is going for REVERSE AUCTION PROCEDURE i.e., ON LINE BIDDING (THROUGH A SERVICE PROVIDER). The philosophy followed for reverse auction shall be English Reverse (No ties).

1. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.

2. Those bidders who have given their acceptance for Reverse Auction (quoted against this tender enquiry) will have to necessarily submit 'online sealed bid' in the Reverse Auction. Non-submission of 'online sealed bid' by the bidder for any of the eligible items for which techno-commercially qualified, will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines in vogue.

3. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.

4. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.

5. Bidders have to email / fax the Compliance form (annexure II) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.

6. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties as applicable, Freight charges, Insurance and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.

7. Reverse auction will be conducted on scheduled date & time.

8. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.

9. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, if required, (Annexure III) as provided on case-to-case basis to Service provider within two working days of Auction without fail.

10. In case BHEL decides not to go for Reverse Auction procedure for this tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL shall be opened as per BHEL's standard practice.

11. Bidders shall be required to read the "Terms and Conditions" section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the 'Business Rules of Reverse Auction', which will be communicated before the Reverse Auction.

12. If the Bidder or any of his representatives are found to be involved in Price manipulation / cartel formation of any kind, directly or indirectly by communicating with other bidders, action as *per extant BHEL guidelines*, shall be initiated by BHEL and the results of the RA scrapped / aborted.

13. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.

14. BHEL reserves the right not to allow the H1 bidder(s) (whose quote is highest in online sealed bid) to participate in further RA process.