

Name of Contractor: _____

TENDER NO. : FF/19/MSM/RV/19-20/T-02

DTD: _____

WORK: Assistance to maintenance of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boiler Electrical Maint., Ladle Pre-heater and other allied equipments & Overhauling of Vacuum System in SMS.

DATE OF OPENING: _____

TIME OF : 6 months.
COMPLETION

E.MONEY REQD.: Rs. 17045 DETAILS: _____

CONTRACTOR'S PF NO. _____ ESI NO. _____

LICENCE NO. _____ VALID UPTO _____

SCOPE OF WORK :

Work Schedule	DESCRIPTION OF WORK	QTY	RATE	AMOUNT
1.	<p>Breakdown and Preventive Maintenance of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint. Ladle Pre Heater and other allied equipments in SMS:</p> <p>A. Repair and fitting of Hydraulic power Pack, Cleaning and changing of filter unit, checking and making of oil level, Hydraulic and Pneumatic cylinders, Pilot Valve, Pump motors along with complete assembly. Cleaning/repair/fitting of Copper insert, Bus Tube, insulation change, tightening of bolt of all the water cooled cable, water leakage/blockage rectification, Roof/water cooled panels testing/repair & changing work and other mechanical and hydraulic maintenance related work of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint., Ladle Pre Heater and other allied equipments in SMS.</p>	424 Nos. of Heat A	Rs. Per Heat	

	<p>B. Repair/ Maintenance of PLC Controlled DC Drive/Thyristor control system, Resistance box, winch motors, Limit switch, MCC and Control Desk. Repair/Maintenance of 33KV/11 KV Substn., 400sq mm/300sq mm XLPE Cable, Making of transformer oil level, Heat Exchanger cleaning, Maint. of Furnace Transformer, riser, water cooled cable repair/change and other allied maintenance work of HT and LT power/control system of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint. Ladle Pre Heater and other allied equipments in SMS.</p> <p>C. Repair/Maintenance of Temperature measuring instruments, Temperature and Pressure Gauge, Making/Repair of Lance and other allied electronic instrumentation work of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint. Ladle Pre Heater and other allied equipments in SMS.</p> <p>Note:</p> <p>1. Persons under this works contract may be called for support to maintenance of other equipments in SMS.</p> <p>2. For efficient preventive and breakdown maintenance of equipments, minimum 04 Nos. & maximum of 06 Nos. of Skilled Mandays & minimum 1 & maximum 3 Nos. of unskilled Mandays to be engaged per day (ie. In A & B shift).</p>			
2.	<p>Preventive Maintenance on Sunday/Holydays/“C” Shift:</p> <p>Preventive maintenance work all mechanical, hydraulic, electrical and electronics part of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boiler Electrical Mint. Ladle Pre Heater and other allied equipments in SMS.</p>	24 Nos. of Preventive Maintenance	Rs. _____ Per Preventive Maintenance	

	<p>Note:</p> <p>1. Persons under this works contract may be called for support to preventive maintenance of other equipments in SMS.</p> <p>2. For efficient preventive and breakdown maintenance of VAD-1, VAD-2, VOD and 70T EAF, minimum 1 No. of Skilled Mandays & minimum 1 & maximum 3 Nos. of unskilled Mandays to be engaged per Sunday/Holydays/“C” Shift.</p>			
3.	<p>Work Schedule 3: Supervision, Overhauling/cleaning of New ejector System in installed in Heavy Forge Shop, Old Ejector System installed in Pit Side & WRP unit in SMS: Supervision, Overhauling/Cleaning of New Ejector System and Old Ejector System each comprises of 3 Nos. of Ejectors, Nozzles, condenser and its connecting Pipe Line (Water, Steam and vacuum pipe line) along with Overhauling/Cleaning of WRP unit (Pump, Motor & Cyclone precipitator) and connecting Pipe Line (Water & Vacuum Pipe Line) to ensure less than 1 Torr vacuum in blank. Repair & maintenance of pipelines & platforms, dust cleaning of platforms & extension of pipelines & platforms on as & when required basis.</p> <p>Note:</p> <p>1. Persons under this works contract may be called for support to preventive maintenance of other equipments in SMS.</p> <p>2. For efficient preventive and breakdown maintenance of Vacuum Systems in SMS, minimum 1 & maximum 3 No. of Skilled Mandays & minimum 1 & maximum 3 Nos. of unskilled Mandays to be engaged per per day (ie. In A & B shift).</p>	392 Nos. of Heat B	Rs.	
	Total :		_____	Per Heat
	GST EXTRA			

Total Amount in words: _____

- Note:
1. Material will be issued free of cost.
 2. L1 will be decided on comparing the total value of work quoted (ie. Sum of Work Schedule 1, 2 & 3)
 3. Work is to be completed in 6 months.
 4. Work will be governed by BHEL WC rules & Work policy-2016.
 5. Safety rules are to be followed strictly.
 6. The terms and conditions attached to be followed strictly.
 7. EMD submitted against NIT No: - FF/19/MSM/RV/19-20/T-01 shall be accepted in NIT No: - FF/19/MSM/RV/19-20/T-02.

SCOPE OF WORK & MANPOWER DEPLOYMENT, QUALIFICATION & EXPERIENCE

A. SCOPE OF WORK:

Work Schedule 1: Breakdown and Preventive Maintenance of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint. Ladle Pre Heater and other allied equipment in SMS:

a) Repair and fitting of Hydraulic power Pack, Cleaning and changing of filter unit, checking and making of oil level, Hydraulic and Pneumatic cylinders, Pilot Valve, Pump motors along with complete assembly. Cleaning/repair/fitting of Copper insert, Bus Tube, insulation change, tightening of bolt of all the water cooled cable, water leakage/blockage rectification, Roof/water cooled panels testing/repair & changing work and other mechanical and hydraulic maintenance related work of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint., Ladle Pre Heater and other allied equipment in SMS.

b) Repair/ Maintenance of PLC Controlled DC Drive/Thyristor control system, Resistance box, winch motors, Limit switch, MCC and Control Desk. Repair/Maintenance of 11 KV Substn., 300sq mm XLPE Cable, Making of transformer oil level, Heat Exchanger cleaning, Maint. of Furnace Transformer, riser, water cooled cable repair/change and other allied maintenance work of HT and LT power/control system of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint. Ladle Pre Heater and other allied equipment in SMS.

c) Repair/Maintenance of Temperature measuring instruments, Temperature and Pressure Gauge, Making/Repair of Lance and other allied electronic instrumentation work of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boilers Electrical Maint. Ladle Pre Heater and other allied equipment in SMS.

Work Schedule 2: Preventive Maintenance on Sunday/Holydays/“C” Shift:

Preventive maintenance work of all mechanical, hydraulic, electrical and electronics part of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boiler Electrical Mint. Ladle Pre Heater and other allied equipments in SMS.

Work Schedule 3: Supervision, Overhauling/cleaning of New ejector System in installed in Heavy Forge Shop, Old Ejector System installed in Pit Side & WRP unit in SMS.

Supervision, Overhauling/Cleaning of New Ejector System and Old Ejector System each comprises of 3 Nos. of Ejectors, Nozzles, condenser and its connecting Pipe Line (Water, Steam and vacuum pipe line) along with Overhauling/Cleaning of WRP unit (Pump, Motor & Cyclone precipitator) and connecting Pipe Line (Water & Vacuum Pipe Line) to ensure less than 1 Torr vacuum in blank. Repair & maintenance of pipelines & platforms, dust cleaning of platforms & extension of pipelines & platforms on as & when required basis.

B. MANPOWER DEPLOYMENT: The main responsibility of the deployed work force will be smooth operation of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boiler Electrical Maint., Ladle Pre-heater and other allied equipment's in SMS. For this, contractor will deploy adequate no. of qualified and experienced work force for assistance to the maintenance staff for the maintenance of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boiler Electrical Maint., Ladle Pre-heater and other allied equipment's in SMS as per instructions of the Executive in charge. The desirable manpower and their minimum qualification criteria required to be supplied by the contractor at the site are as listed below:

1. **Fitters:** They should either have a qualification of ITI (Mechanical Fitter) or an experience of minimum 1 year in mechanical and hydraulic maintenance of machines.
2. **Electricians:** They should either have a qualification of ITI (Electrical/Electronics) or an experience of minimum 3 years in electrical and electronics maintenance of machines/equipments preferably including transformers, VCB Panels, Control systems, drives etc.
3. **Welder:** They should either have a qualification of ITI (Welder) or an experience of minimum 3 years in mechanical and hydraulic maintenance of machines.

The overall team must be experienced and must also be capable of handling maintenance activities and have basic knowledge of electrical, mechanical, hydraulic and electronics.

The deployment of work force will be in two shifts on regular basis and in third shift as per the exigencies of the work.

QUALIFYING CRITERIA

NIT NO.: FF/19/MSM/RV/19-20/T-02

Work: Assistance to maintenance of 10T, 30T EAF, Slide Gate Power Packs, VD Unit, Boiler Electrical Maint., Ladle Pre-heater and other allied equipments & Overhauling of Vacuum System in SMS.

This section details minimum requirement on part of the bidder for the Works Contract for Equipments in Steel Melting Shop, CFFP. In general, the bidder must satisfy following criteria:

1. **General Profile:** The bidder must have working experience in the field below:

- 1.1. Electrical & Mechanical Retrofitting/ Reconditioning of Machine consisting reconditioning of machines, hydraulic system, electrical switchgear, PLCs & Drive.
OR
Maintenance of Machine including mechanical, hydraulic, electrical and electronic maintenance. Maintenance of electrical switchgear 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 & 2016-17), must not be less than Rs. 2.56 Lacs.
- 2.2. Bidder must submit proof of having carried out successfully work of similar nature as per clause 2.3 during last 7 years (i.e. after 1st June 2012).
- 2.3. The value of such works must be:
- A. 3 similar completed works costing not less than the amount equal to 3.41 Lacs for each completed works with any reputed organization.
OR
B. 2 similar completed works costing not less than the amount equal to 4.26 Lacs for each completed works with any reputed organization.
OR
C. 1 similar completed works costing not less than the amount equal to 6.82 Lacs for each completed works with any reputed organization.
- 2.4. Similar work is defined as per Clause 1.1.

As a proof of experience, completion and performance certificate(s) from the original client(s) must be submitted.

**CFFP:BHEL:RANIPUR:HARDWAR
SMS-M&S**

NIT NO.: FF/19/MSM/RV/19-20/T-02

Information to be filled by the contractor:

1. Name, address & Ph No. of the contractor:
2. GSTIN OF CONTRACTOR: _____
3. Approximate No. of labours for work schedule 1, approx..... No. of labours for work schedule 2 & approx..... No. of labours for work schedule 3 are to be deployed for the works (Proposed no. of labours- 5 Skilled & 2 Un-skilled manpower for work Schedule 1 & 1 skilled & 2 Un-skilled manpower for work schedule 2 & 2 skilled & 2 Un-skilled manpower for work schedule 3 approximately).
4. Tender box in sealed condition will be present at Centralized Tender Room, CFFP till tender opening date.
5. The tender to be submitted in two part bid in two separate envelopes with clearly mentioning technical/Price Bid over envelope by the bidders.
6. If it is found at any time that the particulars submitted by the contractor are false, suitable action will be taken & contract registration may be cancelled.
7. In case the price indicated in words and figures are different, the values indicated in words will be taken into consideration.
8. **PVC:** Price Variation clause is not applicable.
9. **GST:** GST shall be payable extra as applicable at the time of billing. However, taxes (where ITC applicable) shall be reimbursed only against the proof of deposit of the same to Govt. Account and fulfilment of other legal requirements by the contractor.
In case of rejection of Input Tax Credit (ITC) due to any default of Contractors the same shall be recovered by BHEL from the contractor.
10. **Payment:** Payment to the contractor will be made on achieving monthly milestone/ on the basis of work carried out by him, within 15 days of production of clear bills/invoice.
 - Payment against work schedule 1 shall be made as per no. of heat of 30T, 10T EAF & VD unit (A).
 - Payment against work schedule 2 shall be made as per no. of preventive maintenance.
 - Payment against work schedule 3 shall be made as per no. of heat of VAD, VOD & VD unit (B).
11. **Criteria for Penalty:**

- a) The deduction against shortfall in minimum no. of mandays deployed shall be calculated as per given ratio:-
Work schedule 1: 700 Mandays for 424 heats (A).
Work schedule 2: 72 Mandays for 24 Prev. Maint.
Work schedule 3: 400 Mandays for 392 heats (B).
The cost of shortfall of man days deployed with respect to No. of Heat and No. of Preventive Maintenance will be deducted as penalty @ Rs. 640.73 per Mandays (Cost of one Un-skilled manday).
Penalty will be calculated on annual basis or closure of contract whichever is earlier & the amount will be deducted from the final bill of works contract.
- b) In case the work specified in "Scope of Work" has not been carried by the contractor due to which the liquid metal production was not done by on that way, the penalty clause will be applicable as follows: -

Penalty Imposed on the contractor for the day

Amount of Penalty = No. of heat lost due to contractor's fault X Rate as per work order against Work schedule-1.

Penalty against heat loss due to contractor's fault shall be made from the running bill of the same month.

10. Tender Cost of Rs. 500 to be submitted additional to the EMD in the form of Demand Draft and Money Receipt Voucher from Finance Deptt. of CFFP/BHEL-Haridwar. Tender without Tender Cost will not be entertained.

(Signature and Seal of the Tenderer)

ANNEXURE - D

GENERAL TERMS & CONDITIONS

1. BHEL shall have the privity of the contract with the contractor only and will give instructions to the contractor or his authorized representative. BHEL has nothing to do or concerned with the employment of workmen working for the contractor. The relationship between BHEL and the contractor will be that of independent entities and nothing herein contained will amount to joint venture, partnership or an employer – employee relationship.
2. The Contractor shall maintain regular contact with the contract executing officer of BHEL and will interact on matters relating to the work awarded under this contract.
3. In case the Contractor does not carry out the Contractual/Statutory obligations or the services rendered by him are found to be unsatisfactory, BHEL shall bring the same to his notice and he will be obliged to discharge the obligations and rectify the deficiency/anomaly within three days time failing which, BHEL reserves the right to terminate the contract without assigning any reason whatsoever. In such an event, no damages will be payable for short closure of the contract. The BHEL shall have the right for risk purchase clause.
4. The Contractor shall deposit an amount of Rs. _____ as security to BHEL in the form of cash (As per Income Tax) pay order/bank guarantee (subject to maximum 50% VDC issued by Bank acceptable to BHEL or FDR in the name of the Contractor A/C – BHEL duly discharged on the back. EMD deposited can be converted/adjusted in to security deposit. Security deposit can also be recovered @ 10% from the running bills. However, in such cases at least 50% of the Security Deposit should be deposited before start of the work and 50% from the running bills. This Security deposit shall be liable to be returned to the contractor after termination of the contract or at the end of it subject to payment of final Bill after deduction on account of company dues and non-deposit of statutory dues, production of No Demand Certificate and fulfillment of Guarantee/Warranty, if any. No interest shall be payable on the security deposit.
5. The decision of BHEL regarding interpretation of any of the terms and conditions set forth in this agreement shall be final and binding on the Contractor.

6. Notwithstanding anything contained in this Agreement, the contract may be terminated by BHEL without assigning any reason thereof by giving a notice of 30 days to the contractor.
7. The contract will commence on _____ date and will remain valid for a period of _____ year(s) till _____ date. The parties reserve the right to extend the contract on mutually agreed terms and conditions.
8. All disputes arising in connection with the contract shall be settled by mutual consultation. If no agreement is reached the dispute shall be settled in accordance with the provisions of the Arbitration and Conciliation Act, 1996 and the rules made thereunder. The dispute shall be referred for arbitration to any arbitrator to be appointed by the Head of CFFP / BHEL. The award of the arbitrator shall be final and binding on both the Parties. The venue of the Arbitration shall be Haridwar (U.K.) in India. The Award to be given by the Arbitration shall be a speaking award. The questions, disputes, differences arising under, out of or in connection with this contract shall be to the exclusive jurisdiction of Haridwar Courts.