

## SCOPE OF WORK

## ANNEXURE-II

**TENDER REF.M&S/P&C/2020/26 DT.08/07/2020**

**WORK: OPERATION AND MAINTENANCE CONTRACT FOR 2 x 20 TON CAPACITY LPG ESTABLISHMENT AND DAILY MAINTENANCE AND REPAIR OF LP GAS OPERATED EQUIPMENT'S WITH RESPECT TO GAS LEAKAGES INSTALLED IN ALL SHOPS OF BHEL, RC PURAM.**

LPG EQUIPMENT SCOPE		
SL.NO.	Description of item	Vendors acceptance
A	PURPOSE :Daily maintenance and repair of LP gas operated equipments (furnaces, ovens, ladles, centrifugal die preheaters, heating torches , Boilers and down comers) installed in all shops of BHEL, RCPURAM with respect to gas leakages. List of Equipments is given in Annexure'A'. Maintenance Contract is for Two years from the date of awardal	
B	SCOPE OF WORK:To repair and maintain GAS Leakages in all LP Gas operated equipment in safe working condition includes replacement of listed spares in all production shops at BHEL, R.C. Puram.The LPG line and its spares starts from main supply line ball valve to the burners.	
<b>1.0</b>	<b>MECHANICAL &amp; ELECTRICAL</b>	
1.1	Arrestring of gas leaks by changing gaskets,welding and threaded joints with teflon tape or anabond.	
<b>2.0</b>	<b>ATTENDING THE GAS LEAKS / REPAIRS</b>	
2.10	All LP Gas operated equipment from main supply line ball valve to the burners installed in the equipment are to be maintained and repaired by the vendor. The parts/items installed in the equipment gas line are listed below.	
2.11	PRESSURE GAUGE	
2.12	GAS PRESURE SWITCHES	
2.13	SOLINOID VALVES	
2.14	PRESSURE RELIEF VALVES	
2.15	NEEEDLE VALVES	
2.16	MODULATING MOTORS	
2.17	UV FLAME SENSORS AND FLAME RELAYS	
2.18	BALL VALVES	
2.19	THERMO COUPLES	
2.20	GAS FILTERS	
2.21	PILOT BURNERS	
2.22	FLEXIBLE JOINTS	
2.23	SLAM SHUT OFF VALVES	
2.24	DIFFERENTIAL PRESSURE TRANSMITTERS AND PRESSURE TRENSMITTERS	
2.25	PRESSURE REGULATING VALVES	
2.26	BUTTERFLY VALVES	
2.27	COMPLETE SET OF BURNER ASSEMBLIES	
2.28	MOT. CONTROL VALVES	
2.29	CPI SWITCHES	
2.30	IGNITION TRANSFORMERS AND SPARK PLUGS	
2.31	FLEXIBLE BELLOWS	
2.32	FLAME SWITCHES	
2.33	NON RETURN VALVES	
2.34	ELECTRIC ACTUATORS	
2.35	DIFFERENT SIZES OF FITTINGS AND CONNECTORS.	
2.36	LPG HOSES	
2.37	BALL VALVES	

2.38	FLASH BACK ARRESTORS	
2.39	BURNER SEQUENCE CONTROLLERS	
<b>3.0</b>	<b>CONSUMABLES</b>	
3.1	All consumables and spares which are required for repair & maintenance is in the scope of BHEL and will be provided by shop M&S.	
<b>4.0</b>	<b>Vendor scope:</b>	
4.1	Vendor should bring his own serviceable and calibrated portable gas leak detector, welding M/C, tools and testers for carrying the work.	
<b>5.0</b>	<b>ROUTINE CHECKS &amp; RECORD KEEPING</b>	
5.1	Proper monthly repair and maintenance record to be maintained by the vendor.	
<b>6.0</b>	<b>MANPOWER REQUIREMENT AND SHIFT TIMINGS</b>	
6.1	Manpower at site must be available on all the working days of BHEL. Emergency breakdowns are to be attended round the clock, all days of the year.	
6.2	Shift timings are as per BHEL circular first shift, Extended hours in case of breakdowns can be compensated with off duties on other working days with the prior permission of the contract executing officer.	
6.3	Agency shall engage sufficient qualified workers with ITI qualification in Fitter, Welder trade to carry out above work on daily basis. The persons should have experience in maintaining LP Gas operated industrial equipment mentioned above.	