



PR NO: 73003878/UTL

RFx NO: 2600003435

RASHTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
(A Govt. of India Enterprise)

W03 - T J RAO

WORKS CONTRACTS DEPT, VISAKHAPATNAM STEEL PLANT,
VISAKHAPATNAM - 530031, ANDHRA PRADESH -
INDIA

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NOTICE INVITING TENDER (NIT)

NIT TYPE: 2-PRT % BID E-RFX

VSP/1200/UTIL(M)/2019/00073

NIT NUMBER & DATE: 2600003435 Dated 19.01.2019

OPEN TENDERS IN THE PRESCRIBED FORM ARE INVITED FROM THE REPUTED / EXPERIENCED TENDERERS FOR THE FOLLOWING

1. NAME OF THE WORK:

MAINTENANCE WORKS IN EXPANSION UNITS OF AIR SEPERATION PLANT-2 COMPLEXCOVERING HIGH SPEED ROTATING MACHINERY, PUMPS, TURBINE, FANS VALVES Etc.

2 KEY INFORMATION:

Type of Bid	Type of Submission	EMD in INR	Submission Dead Line date & time in	Bid Opening Date & time in Hours
TWO PART BID	E BID	75000.00	07.02.2019 15:00	07.02.2019 15:30

CONTRACT PERIOD : 12 MONTHS

DLP : 03 MONTHS

ENGINEER IN-CHARGE : AGM(UTILITIES)

ESTIMATION COST : Rs.67,41,242=40ps

WELFARE ALLOWANCE : APPLICABLE

3 OFFER VALIDITY DATE:

Your offer should be valid upto 06.06.2019.

4 CURRENCY:

INR.

5 ELIGIBILITY/EXPERIENCE CRITERIA :

Single Similar Work Order Value in INR	Annual Turnover in INR
3370621.20 [33.70 Lakh]	2022372.72 [20.22 Lakh]

AGENCY SHOULD HAVE EXPERIENCE IN MAINTENANCE OF AIR SEPERATION UNIT /ROTATING MACHINERY EQUIPMENTS LIKE TURBINES / CENTRIFUGAL COMPRESSORS /CRYOGENIC PUMPS

6. NATURE & SCOPE OF WORK:

7 ITEM DETAILS/BOQ:

8 LIST OF TENDER DOCUMENTS:

This document along with those available in cFolders as below, constitute the complete Tender (NIT)

1. TENDER SCHEDULE
2. UNDERTAKING LETTER

9 E-RFX SUBMISSION PROCEDURE - 2 PART:

RINL is employing SAP SRM 7.0 for Electronic Tendering System. E-RFx Response to be submitted electronically through System only. No physical paper/print needs to be submitted. Bidders need to have UserID and Password to participate in SRM E-Tenders. All enlisted vendors of RINL would be provided User ID and password for participating in RINL E-Tenders. If a Bidder who wish to participate is not presently enlisted with RINL or not having User ID Password can obtain the same through Registration of Suppliers (RoS) system by providing requisite details well before the RFX Submission deadline. Bidders to go through the User Manual of RoS system available in SRM Portal for detailed steps for obtaining User ID & Password.

In 2-Part E-RFx, Technical RFX Response is uploaded to PQC/Tech RFX cFolder and Price RFX is quoted in Biding Engine. E-Tendering User Manual available in SRM Portal contains the procedure participating in RINL E-Tenders.

Bidders to ensure the following before submitting the 2-Part E-RFx Response

- a.All Mandatory questions are answered and Requisite documents are uploaded into PQC cFolder including the EMD Submission proof.
- b.All Techno-Commercial documents required as per tender document are uploaded into "Tech RFX" cFolder.
- c.Prices and Taxes (Conditions) are quoted in the bidding engine.

Then upon ensuring confirmation of RFX response is complete and contains no errors, RFX Response to be Submitted.

Bidders to ensure that E-RFx Response submission is done before "Submission deadline date & Time" indicated in the NIT Key information at 2 above. RFX can be "withdrawn" and modified as long as "Submission deadline date & Time" is not over. RFX Response cannot be modified once Submission deadline time passed.

10 E-RFX OPENING PROCEDURE - 2 PART:

E-RFx Responses are opened in the system Electronically.

System allows opening of RFX responses only after the specified date and Time as indicated at 2 Key information above. Authorized Tender opening officers through the process of "Simultaneous Log-on" shall open the RFX Responses in System.

For 2-Part E-RFx first "PQC" & "Tech RFX" cFolders are opened in the system through Simultaneous Log-on Process. Then Price RFX responses will be opened on a specified Date & Time through Simultaneous Log-on process for Techno-Commercially Accepted Responses on intimation to Bidders.

11 DOCUMENTS TO BE UPLOADED IN TECH BID C FOLDER:

A) For Earnest Money Deposit: Agencies to transfer the Earnest Money to the Account No. 915020053600067 of Axis Bank Ltd., payable at Gajuwaka Branch (Branch Code 075). The IFSC Code is UTIB0000075 and SWIFT Code is AXISINBB075.

CASH DEPOSITS TOWARDS EARNEST MONEY DEPOSIT (EMD) IN THE ABOVE SAID AXIS BANK WILL NOT BE ACCEPTED AND SUCH OFFERS WILL BE REJECTED.

(i) Agency has to indicate the Bank UTR Numbers (NEFT Transaction Id Numbers) of Earnest Money Deposit (EMD) in the Questions tab section which is mandatory.

If the agency seeks exemption from submission of EMD, the agency needs to submit the following:

- (i) District Industries Centre [Acknowledge of Entrepreneur Memorandum ie. EM (Part # II)
- (ii) Khadi and Village Industries Commission
- (iii) Khadi and Village Industries Board
- (iv) Coir Board
- (v) National Small Industries Corporation (NSIC)
- (vi) Directorate of Handicrafts Handloom
- (vii) Any other body specified by Ministry of MSME

B) Statutory Documents to be submitted, wherever required

- i) Electrical License (For Electrical contracts) Agencies having valid Electrical license issued by any State Licensing Board / Authority will only be considered
 - ii) Boiler License (For cases wherever required) Agencies should have boiler repair license, Category-1 issued by the Directorate of Boilers, Andhra Pradesh
 - iii) Competency Certificate issued by Director of Factories, AP
- For Persons competent to carry out Inspection & Certification of Lifting Equipments, Pressure Vessels and Elevators etc

VSP reserves the right to reject the offer in case the required documents are not submitted.

12 E-RFX EVALUATION PROCESS:

- (a) Pre-qualification evaluation shall be done based on the documents submitted by the bidders in PQC & Tech RFx cFolders.
- (b) All the RFxs shall be evaluated on the basis of landed cost only which includes all taxes and duties but excluding Goods & Service Tax (GST).
- (c) TAL1 (Technically accepted L1) price arrived by the system shall follow automatically to Auction document as start bid price for all cases of Reverse Auction and will be visible in the system only after the start time of Live Auction (E-Reverse Auction).
- (d) On completion of Live Auction, composite comparative statement is generated by the system considering the RFx Prices and Reverse Auction Prices. Placement of Order shall be considered on the L-1 price so arrived.
- (e) Notwithstanding anything specified in this tender documents, RINL, in its sole discretion, unconditionally and without having to assign any reason, reserves the following rights:
 - (i) To reject the response whose performance is poor in awarded / ongoing works if any.
 - (ii) To give purchase preference to Public Sector Undertakings wherever applicable as per Government Policy / Guidelines
 - (iii) To extend purchase preference to Local MSEs (Micro & Small Enterprises) as per prevailing guidelines of RINL subject to submission of documents as stipulated in Detailed Terms & Conditions of NIT.

13 REVERSE E-AUCTION PROCESS:

RINL shall have the option of resorting to reverse e-auction on SAP SRM LIVE AUCTION PLATFORM. All technically and commercially acceptable bidders would be required to participate in the reverse e-auction and quote from a start Price. In reverse e-auction the bidders would be required to quote prices on the basis of landed cost but excluding GST. Definition of key terms for RINLs SAP SRM Live-auction (E-Reverse Auction) user manual is available in SRM Portal. No separate User ID and Password is required for participating in Live Auction. User ID and Password used for Participating in E-Tendering to be used for Live Auction also.

14 GENERAL INSTRUCTIONS:

- 1) The documents submitted by the tenderers in respect of pre-qualification evaluation criteria are final and no further correspondence / clarifications / submissions in this regard shall be entertained.

2) Scope of work, Bill of Quantities (BOQ), Terms and Conditions, given in the tender documents (placed in the cFolder Publisher area) is final. On verification, at any time, whether the tenderer is successful or not, if any of the documents submitted by the tenderer including the documents downloaded from our website are found tampered /altered/ incomplete, they are liable for actions like rejection of the tender, cancellation and termination of the contract, debarring etc., as per the rules of the company.

3) It will be presumed that the tenderers have gone through the General Conditions, Special Conditions and Instructions to tenderer etc., of the contract available in the website which shall be binding on him / them.

4) The tenderer shall download the NIT documents etc (TENDER SCHEDULE) available in Tech RFx cFolder Publisher Area on the RINLs SRM Portal in totality and upload the same along with the Undertaking letter in Tech RFx cFolder.

5) The bidder shall be governed by the General Conditions of Contract of Supply which is available on VSPs website which can be freely accessed and downloaded.

6) Tenders submitted against the NIT / Tender shall not be returned in case the tender opening date is extended / postponed. Tenderers desirous to modify their offer / terms may submit their revised / supplementary offer(s) within the extended TOD.

7) (i) Tenderers shall submit GST Registration Certificate under GST act if available. If not available successful tenderer shall produce Registration Certificate under GST Act, wherever applicable, before signing the Work Order / Letter of Acceptance and submit a copy of the same.

(ii) Tenderers shall submit the PF Registration Certificate if available, if not available successful tenderer shall submit PF Registration Certificate before commencement of the work.

8) VSP after opening of tender/bid document may seek in writing, documents/ clarifications which are necessary for evaluation of tender / bid document from the Tenderers/ bidders or issuing authority for confirmation of eligibility/ pre-qualification stipulated in the NIT.

9) If it comes to the notice of VSP at any stage right from request for registration/ tender document that any of the certificates/ documents submitted by applicant for registration or by bidders are found to be false/ fake/ doctored, the party will be debarred from participation in all VSP tenders for a period of 05(FIVE) years including termination of contract, if awarded. E.M.D/ Security Deposit etc., if any will be forfeited. The contracting agency in such cases shall make good to VSP any loss or damage resulting from such termination. Contracts in operation any where in VSP will also be terminated with attendant fall outs like forfeiture of E.M.D./ Security Deposit, if any, and recovery of risk and cost charges etc., Decision of V.S.P Management will be final and binding.

10) The date of opening of the PQC and Tech RFx response shall be the date of tender opening.

11) Successful tenderer should be in a position to produce, after opening of the price bids, the Original Certificates in support of the attested copies of relevant documents submitted along with tender document. Failure to produce the original certificates at this stage in support of the attested copies of Electrical License/ any other documents etc. submitted earlier would result in disqualification and forfeiture of EMD and also liable for debarring from participation in VSP tenders.

12) RINL will not be responsible for any delay/ loss/ any website related problems in downloading the tender documents etc. RINL reserve the right to (A) Split and award the work to more than one agency, (B) Reject any or all the tenders or to accept any tender wholly or in part or drop the proposal of receiving tenders at any time without assigning any reason there of and without being liable to refund the Tender fee thereupon.

	RINL VIGILANCE TOLL FREE NUMBER: 1800 425 8878	
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1 INSTRUCTIONS TO TENDERERS:

1) Tender shall be submitted in the prescribed form issued by VSP in the RINL SRM Portal, Government Portal. The Tender documents issued are not transferable. Tender documents downloaded shall be submitted wholly without detaching any part.

2) The Tenderer shall agree to VSPs terms and conditions, specifications/ scope of work, etc., and quote their Total Amount in figures only. Tender shall be for the entire scope of work mentioned in the tender documents.

3) Price condition: Tenderers shall quote the price of the goods or services, excluding GST. Applicable GST shall be indicated against each item and will be paid extra on submission of tax invoice.

In case tenderer opted for composition scheme, GST will not be charged extra and the price quoted includes the GST applicable to composite scheme. Tenderers have to specify that they have opted for composition scheme and GST is included as applicable for composition.

Evaluation criteria:

1. In case of supply of goods or services on which RINL / VSP is eligible to avail GST input Tax Credit, evaluation of tender shall be on the basis of landed cost excluding GST.

2. In case of supply of goods or services on which the employer (RINL/VSP) is not eligible to avail GST input tax credit, the applicable GST payable by RINL/VSP (in case of unregistered taxable supplies) or GST to be charged by the registered taxable supplier as applicable, shall be added to the landed cost for evaluation purposes.

4) If by any reason the tender opening is postponed to any other date, the same will be placed in RINLs SRM Portal and in the Notice Board at Works Contracts Department. Tenderers shall see the SRM Portal / Notice Board regularly and keep themselves informed in this matter.

5) Before quoting, the tenderer shall necessarily contact the Engineer and fully understand the job, scope of work, unit of measurement, mode of measurement, scope of supply of materials by VSP if any, working conditions, shutdown arrangements, Labour deployment requirements, risk contingencies and such other factors which may affect their tender.

6) Tenders shall be kept open for acceptance for a period 4 (Four) MONTHS from the date of opening of tender.

7) Corrections/ amendments/ replacement to/ of the Deficient documents / Financial Instruments for EMD shall not be sought in the following cases where:

- i) There is evidence of Tampering/ Unauthorized correction.
- ii) The value of Financial instrument(s)/ document(s) is falling short of the value stipulated in the NIT.
- iii) The Validity of the BG(s) as on Initial TOD is falling short of the minimum Validity period stipulated in the tender.
- iv) Discrepancy exists in the name of Payee/ Beneficiary.
- v) The Bidder fails to submit EMD or submission of UTR No./ Receipt No.

2 EMD SUBMISSION PROCESS:

1) In case of Earnest Money Deposit being less than or equal to Rs. 5 Lakhs, Earnest Money Deposit shall be by means of NEFT. No other mode of payment will be accepted. However, in case EMD exceeds Rs.5 Lakhs, tenderers have the option to submit the same in the form of Bank Guarantee (In the format as enclosed to the GCC) from any Scheduled Commercial Bank, encashable at Visakhapatnam. Bank Guarantees shall be valid for a minimum period of 04(Four) months from the Bid opening date. The above shall supercede the instructions regarding Form of EMD elsewhere in the tender document.

2) Public Sector Enterprises of State / Central Government Undertakings are exempted from submission of Earnest Money Deposit (EMD) provided they submit a letter requesting for exemption from submission of EMD along with their offer.

3) EXEMPTIONS / PREFERENCES FOR MICRO AND SMALL ENTERPRISES:

1. Micro and Small Enterprises (MSEs) are exempted from submission of Cost of Tender Documents / Tender Processing Fee (CTD), Earnest Money Deposit (EMD), and Security Deposit (SD), irrespective of whether the service is to be carried out within or outside their premises subject to submission of proof of enlistment / registration with any of the following agencies:

- (i) District Industries Centre [Acknowledge of Entrepreneur Memorandum ie. EM (Part # II)
- (ii) Khadi and Village Industries Commission
- (iii) Khadi and Village Industries Board
- (iv) Coil Board
- (v) National Small Industries Corporation (NSIC)
- (vi) Directorate of Handicrafts Handloom
- (vii) Any other body specified by Ministry of MSME

Note:

(a) Tender documents are uploaded in the websites (www.vizagsteel.com; www.pubtenders.gov.in; <http://eprocure.gov.in>) and are to be down loaded from there only.

(b) The Micro and Small Enterprises registered for the particular trade/items for which the tender is relevant, would only be eligible for exemption.

(c) As regards Security Deposit (SD) exemption, the MSEs shall be required to submit a #Performance Guarantee Bond# of requisite value in the prescribed pro-forma in lieu of Security Deposit. It may be noted that waiver of SD is permitted only up to the monetary limit as specified in the proof of enlistment for which the unit is registered.

2. Preference to MSEs shall be considered under the following conditions:

- (i) When the work is to be awarded to more than one tenderer, as stated in NIT.
- (ii) In such cases the package size / value is pre-decided and indicated in the NIT.
- (iii) MSEs shall have valid enlistment / registration with specified agencies (as above), in relevant category. The successful tenderer should ensure that the same is valid till the end of the contract period.
- (iv) The offer / bid of MSE shall be within the price band of L1 +15% and upon their matching with the final negotiated price of (L1 being other than MSE).

On fulfilling the above conditions, the eligible MSEs shall be considered for award of the rest of the package(s) (after negotiating the final L1 price) of aggregate value not less than 20% of the total tendered value, in the order of their ranking in the bid. In case there are more than one eligible MSEs with one or more owned by scheduled caste and scheduled tribe entrepreneurs, package(s) not less than 4% of the tendered value shall be considered for awarding to MSEs owned by SC and ST Entrepreneurs. The preferential award of work shall cease once the limit of 20% of tendered value is attained. Further allotment / award would be based on inter-se ranking of the rest of the tenderers other than who are already considered for allotment/award of package, subject to their matching with the final L1 negotiated price.

4) EMDs of unsuccessful tenderers will be refunded after reasonable time without interest.

RASHTRIYA ISPAT NIGAM LIMITED	
VISAKHAPATNAM STEEL PLANT	
UTILITIES DEPARTMENT	
SCOPE OF WORK	
ANNEXURE - A	
TENDER NO:	DEPT: UTILITIES
ENGG. DIVISION: MECHANICAL	RESPONSIBILITY CODE:
PROPOSAL NO:	PAGE:
WORK DESCRIPTION: 'Maintenance works in expansion units of Air Separation Plant-2 Complex, ch-3 covering high speed rotating machinery, pumps, turbines, fans, valves etc'	

ITEM NO.	ITEM DESCRIPTION	UNIT DESCRIPTION	SCOPE OF WORK
1	Preventive Maintenance Inspection Of Equipment	No.	The scope of work includes the full/part activities not limited to the following: checking of equipment as per the checklist provided by VSP, filling up the checklist with observations. Any abnormality noticed shall be reported to the in charge immediately, arresting the small leaks if possible like gland leaks, oil leaks etc, submitting the report to in charge. The schedule of checking shall be decided by the VSP/ in charge. PM inspection of 5 nos Cryogenic pumps is treated as one Qty, PM inspection of 2 nos water pumps, 2nos refrigeration unit, 01 no LDVF, 2nos expansion turbines, PM of complete Re-circulated water Pump House, PM of complete Waste Backwash Water Pump House, PM of complete Fire Fighting Pump House, PM of complete LIN backup system, PM of complete LOX backup System, PM of complete cooling tower, PM of 01 nos. MP nitrogen compressor, PM of 01 no air compressor, PM of 5 nos RAD respectively are treated as one qty.

2	Condition Monitoring Of Equipment	No.	The scope of work includes the full/part activities not limited to the following: measuring the vibration and temperatures of equipment (both drive and driven equipment) with monitoring device like SPM Meter , noncontact temperature measurement device or any other suitable device (location of measurement point will be decided by the VSP in-charge). Condition monitoring of Air filters of Air Compressor, Recording the readings, generating report in proper format as suggested by the VSP in charge and submitting the reports to the VSP/ in charge. Any abnormality observed shall be reported to the in charge immediately. SPM meter, noncontact type temperature measurement device shall be provided by VSP free of
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			cost. The schedule of checking shall be decided by the in charge. 2nos chillers, 2nos turbines, 5nos cryo pumps of ASU, 2 nos water pumps, Condition monitoring of complete Fire fighting pump house, Complete waste backwash water pump house, 01 no MP nitrogen compressor, 01 no Air compressor, 01 no of LDVF, Complete cooling tower, respectively are treated as 01 BOQ quantity.
3	Fortnightly/ Monthly Scheduled Maintenance Jobs	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work on previous day of the scheduled day, collecting the permit to work on scheduled day, completion of scheduled maintenance on equipment, area cleaning after the completion of work, returning the permit to scheduled maintenance on equipment, area cleaning work. Trial run of the equipment and attending if any problem comes. The fortnightly/monthly scheduled maintenance jobs for each equipment are given at annexure-1 A.
4	Quarterly Scheduled Maintenance Jobs	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work on previous day of the scheduled day, collecting the permit to work on scheduled day, completion of scheduled maintenance on equipment, area cleaning after the completion of work, returning the permit to work. Trial run of the equipment and attending if any problem comes. Quarterly Scheduled Maintenance jobs for each equipment are given at annexure-1 B. Quarterly schedule maintenance on each equipment is treated as 1 no BOQ
5	Half yearly/ Annual Scheduled Maintenance jobs	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work on previous day of the scheduled day, collecting the permit to work on scheduled day, completion of scheduled maintenance on equipment, area cleaning after the completion of work, returning the permit to work. Trial run of the equipment and attending if any problem comes. Half yearly/ Annual Scheduled Maintenance jobs for each equipment are given at annexure-1 C. half yearly/ Annual scheduled maintenance on each equipment is treated as 1 no BOQ
6	Type-A trouble shooting jobs	No.	The scope of work includes the full/part activities not limited to the following: assisting VSP engineer in trouble shooting of mal-operation of equipment, valves, valve actuators etc. and execution of small jobs as per the directions of VSP engineer. All trouble shooting jobs which need 4hrs or less to complete the activity are considered as Type-A Trouble shooting jobs.

7	Type-B Trouble shooting Jobs	No.	The scope of work includes the full/part activities not limited to the following: assisting VSP engineer in trouble shooting of mal-operation of equipment, valves, valve actuators etc. and execution of small jobs as per the directions of VSP engineer. All trouble shooting jobs which need above 4hrs to complete the activity are considered as Type-B Trouble shooting jobs.
8	Type-A Routine Maintenance Jobs like leaks rectification, greasing of brgs, strainers Jobs like leaks rectification, greasing of brgs, strainers cleaning etc.	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work, collecting the permit to work, completion of work on equipment, area cleaning after the completion of work, returning the permit to work. Trial run of the equipment, area cleaning after the completion of work, equipment and attending if any problem comes. Routine maintenance type-A jobs are enclosed at Annexure-2A. Each job description on equipment will be 1No qty.
9	Type-B Routine Maintenance Jobs like oil/refrigerant top ups, filters cleaning, gland packing replacement etc.	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work, collecting the permit to work, completion of work on equipment, area cleaning after the completion of work, returning the permit to work. Trial run of the equipment and attending if any problem comes. Routine maintenance type-B jobs are enclosed at annexure-2B. Each job description on equipment will be 1No qty.
10	Type-C Routine Maintenance Jobs like diaphragms replacement, rubber seals replacement etc.	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work, collecting the permit to work, completion of work on equipment, area cleaning after the completion of work, returning the permit to work. Trial run of the equipment and attending if any problem comes. Routine maintenance type-C jobs are enclosed at annexure-2C. Each job description on equipment will be 1No qty.
11	Type-D Routine Maintenance Jobs like valves gear box servicing, nrv's servicing etc.	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work, collecting the permit to work, completion of work on equipment, area cleaning after the completion of work, returning the permit to work. Trial run of the equipment and attending if any problem comes. Routine maintenance type-D jobs are enclosed at annexure-2D. Each job description on equipment will be 1No qty.

12	Type-E Routine Maintenance Jobs like alignment, belts replacement, manhole covers removal etc.	No.	The scope of work includes the full/part activities not limited to the following: Applying the permit to work, collecting the permit to work, completion of work on equipment, area cleaning after the completion of work, returning the permit to work. Trial run of the equipment and attending if any problem comes. Routine maintenance type-E jobs are enclosed at annexure-2E. Each job description on equipment will be 1No qty.
13	3" and below sized Safety Valves Maintenance jobs	No.	The scope of work includes the full/part activities not limited to the following: 1. Applying the permit to work, collecting the permit to work 2. Removal of the safety valve and shifting to work shed 3. Testing of safety valve in presence of VSP engineer 4. Repair of safety valve if required, replacement of parts of safety valve if required 5. Safety valve fixing back with new gasket and returning the work permit. 6. After normalization leak checking and rectification of leaks to be done by the contractor. VSP engineer shall decide replacement of spares.
14	3" above sized Safety Valves Maintenance jobs	No.	The scope of work includes the full/part activities not limited to the following: 1. Applying the permit to work, collecting the permit to work. 2. Removal of the safety valve 3. Shifting to work shed or in-situ testing of safety valve using a jig in presence of VSP engineer, 4. Repair of safety valve if required, replacement of parts of safety valve if required 5. Fixing back with new gasket and returning the work permit. 6. After normalization leak checking and rectification of leaks to be done by the contractor. VSP engineer shall decide replacement of spares.
15	3" and below sized Piston operated actuators Maintenance jobs	No	The scope of work includes the full/part activities not limited to the following: 1. Applying the permit to work, collecting the permit to work 2. Removal of the actuator 3. Dismantling, cleaning of all parts 4. Replacement of spares and assembling of actuator 5. Fixing back the actuator in position 6. Returning the work permit. 7. After normalization leak checking and rectification of leaks to be done. VSP engineer shall decide replacement of spares.

16	3" above sized Piston operated actuators Maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work, collecting the permit to work 2. Removal of the actuator 3. Dismantling of actuator, cleaning of all parts 4. Replacement of spares and assembling of actuator 5. Fixing back the actuator in position 6. Returning the work permit. 7. After normalization leak checking and rectification of leaks to be done. VSP engineer shall decide replacement of spares.
17	3" and below sized diaphragm operated actuators Maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work, collecting the permit to work 2. Removal of the actuator 3. Dismantling, cleaning of all parts 4. Replacement of spares and assembling of actuator 5. Fixing back the actuator in position 6. Returning the work permit. 7. After normalization leak checking and rectification of leaks to be done. VSP engineer shall decide replacement of spares.
18	3" above sized diaphragm operated actuators Maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work, collecting the permit to work 2. Removal of the actuator 3. Dismantling, cleaning of all parts 4. Replacement of spares and assembling of actuator 5. Fixing back the actuator in position 6. Returning the work permit. 7. After normalization leak checking and rectification of leaks to be done. VSP engineer shall decide replacement of spares.
19	Liquid Argon process/ Liquid Argon Backup pumps maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Removal of all pump connected tubing seal gas lines etc. 4. Removal of all bolts/ screws connected to pump and removal of 'v' belts 5. Removal of cold end as per the SMP provided by VSP 6. Shifting of cold end to clean room and dismantling of cold end 7. Cleaning of all parts 8. Replacement of spares and assembling of cold end maintaining all the clearances as per the data sheet provided by VSP. 9. Shifting back the cold end to location/ site

			<p>10. Fixing back the cold end, connecting back the all tubing/ piping removed, 'v' belts fixing</p> <p>11. Returning the permit to work.</p> <p>12. After normalization, trial to be taken, rectification of problems if any along with operation.</p> <p>13. Area to be cleaned after completion of job.</p> <p>14. Making a report of all clearances data and submission of report to VSP engineer.</p> <p>VSP engineer shall decide replacement of spares.</p>
20	Oil pump maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Draining oil and filling back to lube oil tank 4. Disconnection of oil pump connected flanges. 5. Coupling guard removal. 6. Decoupling from motor. 7. Shifting of pump to work shed. 8. Dismantling of pump and cleaning of all parts. 9. Repair of parts if any. 10. Assembling of pump with new spares. 11. Shifting pump to site/ location. 12. Fixing back pump in position. 13. Alignment checking, aligning with motor and coupling with coupling pads. 14. Connected piping/ flanges fixing with new gaskets. 15. Coupling guard fixing. 16. Surrounding area cleaning 17. Returning the work permit. 18. Trial run along with operation and rectification of leaks if any. <p>VSP engineer shall decide replacement of spares.</p>
21	3" and below sized electric/ pneumatic Operated globe/ball /gate/ butterfly/plug valves Maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Valve actuator removal 4. Valve flanges disconnection or valve removal by cutting the lines if valve is welded. 5. Valve dismantling, cleaning of all parts 6. Valve assembling with new spares. 7. Valve assembling and actuator fixing 8. Valve testing for passing and rectification if any by either stroke adjustment or seat lapping 9. Valve with actuator fixing in position if flanged or welding in

			position in case of welded valve 10. Returning the work permit 11. Leak checking after normalization and rectification if leak exist Area cleaning after completion of job
22	3" above sized electric/ pneumatic Operated globe/ball /gate/ butterfly/plug valves Maintenance jobs	No	The scope of work includes the full/part activities not limited to the following: 1. Applying the permit to work 2. Collecting the permit to work 3. Valve actuator removal 4. Valve flanges disconnection or valve removal by cutting the lines if valve is welded. 5. Valve dismantling, cleaning of all parts 6. Valve assembling with new spares. 7. Valve assembling and actuator fixing 8. Valve testing for passing and rectification if any by either stroke adjustment or seat lapping 9. Valve with actuator fixing in position if flanged or welding in position in case of welded valve 10. Returning the work permit 11. Leak checking after normalization and rectification if leak exist Area cleaning after completion of job
23	All globe/ ball/ gate/ butterfly/ plug manual isolation valves maintenance jobs	No	The scope of work includes the full/part activities not limited to the following: 1. Applying the permit to work 2. Collecting the permit to work 3. Valve flanges disconnection 4. Valve dismantling, cleaning of all parts 5. Valve assembling with new spares. 6. Valve assembling 7. Testing of valve for passing and rectification if any by seats lapping 8. Fixing of valve in position with new gaskets. 9. Returning the work permit. 10. Leak checking after normalization and rectification if leak still exists. Area cleaning after completion of job.

24	Heat exchangers maintenance job	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the work permit from operation shift in charge. 3. Checking for depressurized condition of heat exchanger. 4. Heat exchanger connected water bends removal. 5. Tube bundle to shell bolts removal. 6. Tube bundle pulling arrangement to be made 7. Tube bundle pulling out using trolley if available. 8. Both water entry side and free end covers removal, cleaning of gasket area, tube flushing with air and water, gaskets preparation, boxing up with the gaskets made. 9. Testing of tube bundle for leaks checking (test pressure will be decided by VSP), rectification of leaks if any. 10. Gasket preparation and tube bundle pushing inside the shell with gasket made in position. 11. Tube bundle to shell bolts fixing with new gasket made. 12. Gaskets preparation and water bends fixing with the gaskets made. 13. Returning the work permit to operation shift in charge. 14. Normalization of system with water and gas charging and checking for leaks. Rectification leaks if any. 15. Area good housekeeping
25	Oil coolers Maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. Oil draining into empty oil drums and filling back to oil tank. 4. Disconnection of oil/ water lines/ piping of oil coolers. 5. Removal of oil coolers. 6. Shifting of oil coolers to chemical cleaning bay. 7. Shifting of oil coolers from chemical cleaning bay to site/ location. 8. Placement of oil coolers in position. 9. All connected water/ oil piping fixing back with new gaskets. 10. Returning the work permit. 11. Leak checking after normalization and rectification if leak exists. 12. Shifting back oil drums to designated locations. 13. Area cleaning after completion of job.

26	Liquid Disposal Vaporizer Fan Maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. Decoupling of blower to motor 4. Blower removal if required. 5. Blower bearings replacement. 6. Blower fixing back in position. 7. Alignment of blower to motor. 8. Coupling greasing and fixing. 9. Returning the work permit. 10. Trial run and rectification of problems if any. 11. VSP engineer shall decide spares replacement. <p>Area cleaning after completion of job.</p>
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27	Type-A Refrigeration unit maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge.. 3. Draining of refrigerant to Refrigerant recovery system. 4. Compressor dismantling. 5. Cleaning of all parts. 6. Assembling of compressor with new spares/ parts maintaining all clearances as per the data sheet provided by VSP. 7. Refrigerant charging through refrigerant recovery system. 8. Returning the work permit. 9. Trial run and rectification of problems if any. 10. Making a report of overhaul with all clearances, data and submission of report to VSP engineer. 11. VSP engineer shall decide spares replacement. <p>Area cleaning after completion of job.</p>
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28	Type-B Refrigeration unit maintenance jobs	No	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. Draining of refrigerant to Refrigerant recovery system. 4. Oil Filter/ Filter drier removal. 5. New oil filter/ filter drier fixing. 6. Refrigerant charging through refrigerant recovery system. 7. Returning the work permit. 8. Trial run and rectification of problems if any. <p>VSP engineer shall decide spares replacement. Area cleaning after completion of job.</p>
29	Qualified Technical Assistant	Man days	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying work permits, collecting work permits from operation shift in charge 2. Obtaining clearances, returning clearances to Operation shift in charge. 3. Job allotment, man management of contract manpower. 4. Making reports of each individual equipment during overhauls as per the format supplied by VSP engineer. 5. Assisting contract manpower in technical aspects and interpretation of engg drawings. 6. Providing all facilities to contract manpower for smooth job handling. 7. Preparing daily reports.
30	Misc Repair/ Maintenance jobs on Equipment by providing skilled manpower supply	Man days	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Supply of Skilled manpower supply for Misc Repair/ Maintenance jobs on Equipment
31	Misc Repair/ Maintenance jobs on Equipment by providing semi skilled manpower supply	Man days	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Supply of semi skilled manpower for Misc Repair/ Maintenance jobs on Equipment.
32	Misc Repair/ Maintenance jobs on Equipment by providing unskilled manpower supply	Man days	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Supply of unskilled manpower for Misc Repair/ Maintenance jobs on Equipment.

33	Type-A High Pressure Liquid Oxygen Pumps maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Removal of all pump connected tubing seal gas lines etc. 4. Removal of all bolts/ screws connected to pump 5. Removal of cold end as per the SMP provided by VSP 6. Cover all openings and shifting of removed cold end to clean room 7. Cleaning of all parts 8. Spare cold end shifting to site/ location and fixing back the spare cold end, connecting back the all tubing/ piping removed 9. Returning the permit to work. 10. After normalization, trial to be taken, rectification of problems if any along with operation. 11. Area to be cleaned after completion of job. <p>VSP engineer shall decide replacement of spares.</p>
34	Type-B High Pressure Liquid Oxygen Pumps maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Dismantling of cold end 2. Cleaning of all parts 3. Replacement of spares and assembling of cold end maintaining all the clearances as per the data sheet provided by VSP 4. Area to be cleaned after completion of job. 5. Making a report of all clearances data and submission of report to VSP engineer. 6. Equipment shall be kept under preservation. <p>VSP engineer shall decide replacement of spares.</p>

35	Liquid Argon/ nitrogen/ oxygen truck loading pumps/ Crude Argon column Pumps maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Removal of all pump connected tubing seal gas lines etc. 4. Removal of all bolts/ screws connected to pump 5. Removal of cold end as per the SMP provided by VSP 6. Shifting of cold end to clean room and dismantling of cold end 7. Cleaning of all parts 8. Replacement of spares and assembling of cold end maintaining all the clearances as per the data sheet provided by VSP 9. Shifting back the cold end to location/ site 10. Fixing back the cold end, connecting back the all tubing/ piping removed 11. Returning the permit to work. 12. After normalization, trial to be taken, rectification of problems if any along with operation. 13. Area to be cleaned after completion of job. 14. Making a report of all clearances data and submission of report to VSP engineer. <p>VSP engineer shall decide replacement of spares.</p>
36	Type-A Expansion Turbines Maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Removal of all connected piping, actuators, any parts which are needed for cold end removal 4. Removal of all bolts/ screws connected to cold end 6. Removal of cold end as per the SMP provided by VSP 7. Shifting of cold end to clean room 8. Cleaning of all parts 9. Shifting the spare cold end to location/ site 10. Fixing back the spare cold end, connecting back the all piping, all parts which are removed 11. Returning the permit to work. 12. After normalization, trial to be taken, rectification of problems if any along with operation. 13. Area to be cleaned after completion of job. <p>VSP engineer shall decide replacement of spares.</p>

37	Type-B Expansion Turbines Maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Dismantling of cold end 2. Cleaning of all parts 3. Replacement of spares and assembling of cold end maintaining all the clearances as per the data sheet provided by VSP 4. Area to be cleaned after completion of job. 5. Making a report of all clearances data and submission of report to VSP engineer. 6. Equipment shall be kept under preservation. <p>VSP engineer shall decide replacement of spares.</p>
38	Type-A maintenance jobs on water pumps	Nos.	<p>Water pumps of 20-100m³/hr discharge flow are considered as Type-A.</p> <p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. Water pump coupling guard removal. 4. Decoupling from motor. 5. Removal of bolts/ screws of casing. 6. Removal of rotor. 7. Shifting of rotor to work shed. 8. Rotor dismantling and cleaning of all parts. 9. Rotor assembling with new spares. 10. Rotor shifting back to pump and fixing with new gasket. 11. All screws/ fasteners tightening. 12. Alignment checking, aligning with motor and coupling with new pads. 13. Coupling guard fixing. 14. Returning the work permit. 15. Leak checking after normalization and rectification if leak still exists. 16. VSP engineer shall decide spares replacement. <p>Area cleaning after completion of job.</p>

39	Type-B maintenance jobs on water pumps	Nos.	<p>Water pumps above 100m³/hr up to 500m³/hr discharge flow are considered as Type-B.</p> <p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. Water pump coupling guard removal. 4. Decoupling from motor. 5. Removal of bolts/ screws of casing. 6. Removal of rotor. 7. Shifting of rotor to work shed. 8. Rotor dismantling and cleaning of all parts. 9. Rotor assembling with new spares. 10. Rotor shifting back to pump and fixing with new gasket. 11. All screws/ fasteners tightening. 12. Alignment checking, aligning with motor and coupling with new pads. 13. Coupling guard fixing. 14. Returning the work permit. 15. Leak checking after normalization and rectification if leak still exists. 16. VSP engineer shall decide spares replacement. <p>Area cleaning after completion of job.</p>
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40	Type-C maintenance jobs on water pumps	Nos.	<p>Water pumps above 500m³/hr discharge flow are considered as Type-C.</p> <p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. Water pump coupling guard removal. 4. Decoupling from motor. 5. Removal of bolts/ screws of casing. 6. Removal of rotor. 7. Shifting of rotor to work shed. 8. Rotor dismantling and cleaning of all parts. 9. Rotor assembling with new spares. 10. Rotor shifting back to pump and fixing with new gasket. 11. All screws/ fasteners tightening. 12. Alignment checking, aligning with motor and coupling with new pads.
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			13. Coupling guard fixing. 14. Returning the work permit. 15. Leak checking after normalization and rectification if leak still exists. 16. VSP engineer shall decide spares replacement. Area cleaning after completion of job.
41	Type-A deriming jobs	Nos.	The scope of work includes the full/part activities not limited to the following: 1. Loosening/ Removal of flange bolts 2. Reversal of spectacle blind 3. After completion of deriming normalization of spectacle blind/ blind flange with new gasket if required. Above activities for all deriming1 circuits for 01no ASU is treated as one quantity.
42	Type-B deriming jobs	Nos.	The scope of work includes the full/part activities not limited to the following: 1. Loosening/ Removal of flange bolts 2. Reversal of spectacle blind 3. After completion of deriming normalization of spectacle blind/ blind flange with new gasket if required. Above activities for 01 no circuit for 01 no ASU is treated as one quantity.
43	Maintenance jobs of Inst air compressor	Nos.	The scope of work includes the full/part activities not limited to the following: 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. De-dusting of equipment. 4. Dismantling of compressor 5. Removed parts cleaning and assembling with new / removed spares maintaining all clearances as per the OEM manual. 6. Returning the work permit after housekeeping 7. Trial run of the equipment and rectification of problems if any. VSP engineer shall decide spares replacement.

44	Blower Maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the work permit. 2. Collecting the work permit from operation shift in charge. 3. De-dusting of equipment. 4. Dismantling of blower 5. Removed parts cleaning and assembling with new / removed spares maintaining all clearances as per the OEM manual. 6. Returning the work permit after housekeeping 7. Trial run of the equipment and rectification of problems if any. <p>VSP engineer shall decide spares replacement</p>
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45	Type-A Liquid nitrogen pumps maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Removal of all pump connected tubing seal gas lines etc. 4. Removal of all bolts/ screws connected to pump 5. Removal of cold end as per the SMP provided by VSP 6. Cover all openings and shift the removed cold end to clean room 7. Shifting of spare cold end to site/ location. 8. Fixing back the spare cold end, connecting back the all tubing/ piping removed 9. Returning the permit to work. 10. After normalization, trial to be taken, rectification of problems if any along with operation. 11. Area to be cleaned after completion of job. <p>VSP engineer shall decide replacement of spares.</p>
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46	Type-B Liquid nitrogen pumps maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Dismantling of cold end 2. Cleaning of all parts 3. Replacement of spares and assembling of cold end maintaining all the clearances as per the data sheet provided by VSP 4. Area to be cleaned after completion of job. 5. Making a report of all clearances data and submission of report to VSP engineer. 6. Equipment shall be kept under preservation.VSP engineer shall decide replacement of spares.
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47	Type-A crane maintenance jobs	Nos.	<p>Double girder cranes above 5 tons capacity are considered under Type-A maintenance jobs.</p> <p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. All Coupling guards opening. 4. Greasing of all couplings. 5. Cleaning of excess grease. 6. Coupling guards fixing back 7. Oil levels checking and top up as per the requirement 8. Work permit shall be returned after completion of all the above activities. 9. Trial operation and checking for any abnormalities and rectification of the same..
48	Type-B crane maintenance jobs	Nos.	<p>Single girder cranes and electrical hoists are considered under Type-B maintenance jobs.</p> <p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. All Coupling guards opening. 4. Greasing of all couplings. 5. Cleaning of excess grease. 6. Coupling guards fixing back 7. Oil levels checking and top up as per the requirement 8. Brakes shoes adjustment/ replacement 9. Work permit shall be returned after completion of all the above activities. 10. Trial operation and checking for any abnormalities and rectification of the same.
49	Oxygen filter/strainer (Monel) maintenance jobs	Nos.	<p>The scope of work includes the full/part activities not limited to the following:</p> <ol style="list-style-type: none"> 1. Applying the permit to work 2. Collecting the permit to work 3. Checking the oxygen system for depressurization and purging with nitrogen. 4. Fasteners loosening and removal of Spool. 5. Removal of strainer. 6. Cleaning with nitrogen and degreasing agent. Or else replacement of strainer with new one. 7. Fixing of strainer in position with new gaskets

			8. Spool fixing with new gaskets 9. Fasteners tightening. 10. Work permit shall be returned. 11. Leak checking with nitrogen and rectification of leaks if any. Spares replacement shall be decided by VSP in- charge.
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50	Oxygen sintered bronze filters maintenance jobs	Nos.	The scope of work includes the full/part activities not limited to the following: 1. Applying the permit to work 2. Collecting the permit to work 3. Checking the oxygen system for depressurization and purging with nitrogen. 4. Fasteners loosening and removal of top casing. 5. Removal of each candle. 6. Replacement of candles with new candles. 7. Fixing of top casing in position with new gaskets 8. Fasteners tightening. 10. Work permit shall be returned. 11. Leak checking with nitrogen and rectification of leaks if any. Spares replacement shall be decided by VSP in- charge.
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51	Type-A Cooling tower fan maintenance jobs	Nos.	The scope of work includes the full/part activities not limited to the following: 1. Applying the permit to work 2. Collecting the permit to work 3. Removal of coupling bolts 4. Removal of coupling spacer from position 5. Removal of fan from position 6. Removal of gear box from position 7. Replacement of gear box with spare gear box. 8. Fixing of fan in position 9. Fixing of coupling spacer and alignment with motor. 10. Guard fixing and trial run 11. Rectification problem if any.
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52	Type-B Cooling tower fan maintenance jobs	Nos.	The scope of work includes the full/part activities not limited to the following: 1. Gear box dismantling 2. Cleaning of all parts 3. Replacement of spares if required. 4. Assembling of gear box maintaining all the clearances as per the OEM drawings 5. Keeping the assembly under preservation.
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Annexure-1A

S No	Eqpt	Type of Maintenance	Scope of work
1	Refrigeration units /Driers	Monthly	Leak checking 01 no chiller is treated as 01 BOQ qty.
2	Liquid disposal and vaporizer fan	Fortnightly	Greasing of bearings.
3	EOT cranes and Telfers	Monthly	Inspection as per the checklist provided by VSP. Each crane or telfer is treated as 01 Qty.
4	DG set	Monthly	Assistance in the Maintenance of DG set as per the directions of OEM
5	Water pumps	Fortnightly/ Monthly	Greasing of water pump bearings .01 nos pumps is treated as 01 qty.
6	Cryogenic pumps	Monthly	Fittings tightness checking. 1 no cryo pump is treated as 01 quantity.
7	PRS	Monthly	Leak checking of 02 nos of branches is treated as 01 quantity.

Annexure-1B

S No	Eqpt	Type of Maintenance	Scope of work
1	Water pump	Quarterly Maintenance	Gland packing replacement with correct size gland rope. Checking of foundation bolts tightness.
2	Expansion turbine ET01/ ET02	Quarterly Maintenance	Oil accumulator pressure checking and Nitrogen filling if required
3	Cryogenic pump	Quarterly Maintenance	Oil injection for cross head, Greasing of bearings, V-Belts tension checking
4	SSF Blower	Quarterly Maintenance	V-Belt tension checking, Alignment checking
5	Reciprocating Compressor	Quarterly Maintenance	V-Belt tension checking, Alignment checking
6	Cooling Tower fan	Quarterly Maintenance	Coupling inspection, Coupling flexible element inspection , Checking of foundation bolts tightness

Annexure 1C:

S No	Eqpt	Type of Maintenance	Scope of work
1	Air compressor	Annual Maintenance	Inspection of Flexible elements of Main coupling and gap measurement. AOP coupling pad replacement
2	MP Nitrogen Compressor	Annual Maintenance	Inspection of Flexible elements of Main coupling and gap measurement. AOP coupling pad replacement
3	Water Pump	Half yearly Maintenance	Quarterly maintenance jobs + Coupling pad inspection
4	Water Pump	Annual Maintenance	Quarterly Maintenance jobs + Coupling pad replacement, Alignment checking and correction if required
5	Expansion Turbine ET01/ ET02	Annual Maintenance	Quarterly Maintenance jobs + AOP coupling pads replacement
6	Liquid Disposal Vaporizer Fan	Half yearly Maintenance	Suction air filter cleaning Coupling bolts tightness checking
7	Liquid Disposal Vaporizer Fan	Annual Maintenance	Half yearly maintenance jobs + Coupling inspection, Alignment checking and correction if required, checking condition of bearings
8	Cryogenic Pump	Annual Maintenance	Quarterly Maintenance jobs + V Belts replacement, Alignment checking and correction if required, Grease cartridge replacement.
9	SSF Blower	Half yearly Maintenance	Quarterly maintenance jobs + suction air filter cleaning
10	SSF Blower	Annual Maintenance	Quarterly maintenance jobs + V belts replacement based on condition, suction air filter cleaning/ replacement, oil replacement.
11	Cooling Tower Fan	Half yearly Maintenance	Quarterly maintenance jobs + alignment checking
12	Cooling Tower Fan	Annual Maintenance	Half yearly + Oil replacement
13	EOT Crane	Annual Maintenance	All couplings greasing, Gear box internals inspection, Wheel bearings greasing. Oil top up in gearbox if required
14	PRS	Half yearly Maintenance	Inspection of PRS as per the checklist
15	Reciprocating Air Compressor	Half yearly Maintenance	Quarterly maintenance jobs + suction air filter cleaning

16	Reciprocating Air Compressor	Annual Maintenance	Quarterly maintenance jobs + V belts replacement based on condition, suction air filter cleaning/ replacement, oil replacement. Cylinder head cleaning.
17	DG Set	Annual Maintenance	Assistance in the Maintenance of DG set as per the directions of OEM

Annexure-2A

S No	Type of Maintenance	Activity	Scope of work
1	Type-A routine maintenance jobs	Oil/water/air/other small leaks and gland leaks rectification by tightening	Tightening of flange bolts, threaded joints for rectification/ minimization of leaks
2	Type-A routine maintenance jobs	Greasing of brgs/ Coupling/ gearbox/ actuators.	Grease filling in grease gun in stores, Grease nipples removal of respective eqpt, greasing of brgs, leakage grease, cleaning, grease nipples fixing back, grease gun handing over back to the stores
3	Type-A routine maintenance jobs	water lines strainers cleaning	Loosening of bolts, removal of filter/ strainer, cleaning of filter/ strainer and fixing back in position after the clearance from VSP engineer. Gasket replacement and flange tightening

Annexure-2B

S No	Type of Maintenance	Activity	Scope of work
1	Type-B routine maintenance jobs	Oil/refrigerant topup,	Drawl of oil/ refrigerant from stores, shifting to site/location, oil/ refrigerant top up using centrifuges/ pumps if available otherwise manual top up to be done. Empty drums/ cylinders shifting back to designated location.
2	Type-B routine maintenance jobs	Oil/ air/ gas filters removal and cleaning/ replacement	Loosening of bolts, removal of filter cleaning of filter as mentioned in SMP and fixing back in position after the clearance from VSP engineer. Gasket replacement and flange tightening

3	Type-B routine maintenance jobs	gland packing replacement	Gland packing replacement as mentioned in SMP
4	Type-B routine maintenance jobs	Cold box valves rubber bellow replacement	Removal of bellow clamps, removal of bellow and new bellow fixing and clamping
5	Type-B routine maintenance jobs	Back flushing of heat exchanger	Water inlet bend removal, flushing of heat exchanger and water bend fixing back with new gasket/ seals.
6	Type-B routine maintenance jobs	Leak rectification by replacement of Valve bonnet/ flange gaskets.	Removal of flange/ valve bonnet bolts, old gasket removal, cleaning gasket surface, new gasket preparation, valve bonnet/ flange tightening with new gasket, leak checking and rectification if any.

Annexure-2C

S No	Type of Maintenance	Activity	Scope of work
1	Type-C routine maintenance jobs	Spectacle blinds/ dummy Flanges removal/fixing	loosening of bolts, making the line through by reversing the spectacle blind, flange bolts tightening and normalization of blind after getting clearance from VSP engineer
2	Type-C routine maintenance jobs	Diaphragm replacement of pneumatic valve actuators	Valve diaphragm cover bolts removal, diaphragm removal, cleaning internals, new diaphragm fixing and cover fixing back.

Annexure-2D

S No	Type of Maintenance	Activity	Scope of work
1	Type-D routine maintenance jobs	manual valves both threaded and flanged servicing up to 100NB	Manual valves both threaded, flanged dismantling, cleaning of all parts, replacement of spares if needed, assembling back, testing of valve for passing, tagging and shifting to stores.
2	Type-D routine maintenance jobs	Gear operated valves gear box servicing	Gear box cover removal, internals cleaning, new grease application, gasket preparation, cover fixing back with new gasket.
3	Type-D routine maintenance jobs	Water lines Victaulic joints rubber seal Replacement	Victaulic joint clamps removal, rubber seal replacement after thorough cleaning, Victaulic joint clamps fixing back.
4	Type-D routine maintenance jobs	NRV removal, checking and boxing up	NRV bolts removal, internals checking, cleaning/ blowing with air, gaskets preparation, NRV fixing back in position

			with new gaskets, bolts tightening.
5	Type-D routine maintenance jobs	Spacer removal and fixing up to 8inch	Spacer bolts removal, gasket surface cleaning, gaskets preparation and spacer fixing back with new gaskets.

Annexure-2E

S No	Type of Maintenance	Activity	Scope of work
1	Type-E routine maintenance jobs	Checking of alignment, replacement of coupling bushes/ v belts replacement, /pulley replacement.	Coupling removal, Checking of pump/ blower to motor alignment, coupling bushes/ V belts replacement if required, pulley replacement if required and boxing up.
2	Type-E routine maintenance jobs	cold box duct manhole covers removal and fixing	Cold box duct manhole cover removal for slag wool removal, gasket preparation, cover fixing back with new gasket after getting clearance.
3	Type-E routine maintenance jobs	Gas lines victaulic joints rubber seal replacement	Victaulic joint clamps removal, rubber seal replacement after thorough cleaning, Victaulic joint clamps fixing back.

GST clause: The scope of material supply and consumables supply in the present proposal are as follows:

Following material will be supplied by VSP at free of cost:

1	All spares
2	Required valves.
3	All sizes of fasteners and pipes.
4	Structural steels.
5	Mobile cranes for major field jobs & existing overhead cranes shall be made available whenever and wherever possible
6	Required drawing /documents/ special tools as provided by the turnkey supplier/ equipment manufacturer, measuring instruments

Following consumables will be supplied by VSP Free of cost

1	All consumables like cotton waste, gland ropes, lube oil, grease, Diesel/ Kerosene for cleaning purpose, TCE etc
2	Suitable gaskets of different thickness
3	The filled-in LPG and oxygen cylinders
4	Different types and sizes of Electrodes for welding and other jobs
5	Compressed Air, water, Nitrogen and Argon for maintenance purposes

Materials to be supplied by the contractor: NIL

Consumables to be supplied by contractor: NIL

The deduction of GST shall be done as per the rules prevailing from time to time.

Following tools and tackles are to be arranged by the contractor for the purpose of executing the contractual jobs and will be taken out by the contractor after completion of the contract period

- i. LPG and oxygen regulators with torch and hoses in proper working conditions complying with all prevailing norms.
- ii. Welding machines to carry out the job with required welding cable and other welding accessories.
- iii. All required tools and tackles for maintenance and cleaning & housekeeping.
- iv. Sufficient no. of hand and flexible grinding machines, grinding wheels and hand drilling machines for various jobs.
- v. Wire rope slings, cutting torch, hoses, jacks, welding machines, chain pulley block, slings, manila rope, lifting tackles, welding cable, holder, screen, scrapping and cleaning hand tools, gas regulators, portable pipe cutting machines, grinding machines are to be arranged by the agency without any extra cost.
- vi. All Personal protective equipments (PPEs) to the workmen like safety shoes, helmets, goggles, safety belts, safety nets, gloves, welding shields, nose masks, ear plugs etc.

TERMS AND CONDITIONS

Work Description: Maintenance works in expansion units of Air Separation Plant-2 complex, Compressor house-3 covering high speed rotating machinery, pumps, turbines, fans, valves etc

1. 1a) This contract is for annual maintenance contract for equipments in Air Separation Plant, Compressor house-3 which covers high speed rotating machinery, cryogenic equipment, valves etc.
 1b) The agency should visit the site and understand the scope of work and get satisfied himself about the equipments, nature of jobs and site conditions fully before quoting.
 1c) The agency shall have experience in Maintenance of Rotating Machinery equipments (like turbines/centrifugal compressors/), pumps/valves/actuators etc.
2. The defect liability period is 3 month.
3. BOQ item no. 1 to 52 shall be executed as per site requirement. Manpower required for executing BOQ item no. 1 to 52 shall depend upon the job requirement at site and may vary on day-to-day basis. The agency to ensure that each job shall be carried out under the supervision of supervisor only. If necessary, agency has to deploy more numbers of supervisors. Expected minimum number of manpower to be deployed daily for carrying out various BOQ jobs is as follows:

Qualified Technical Assistant (Supervisor)	-04
Skilled workers	-08
Semi skilled	-02
Unskilled	-05
4. Agency has to get acquainted with all the jobs before hand and has to start work accordingly. The agency's scope covers deployment of different maintenance teams comprising of supervisors, well-trained skilled workers & helpers for routine, periodical and breakdown maintenance of various equipments for the entire contract period from the commencement of work. In

case of major shutdowns, additional requirement of manpower to carry out a BOQ work, agency should mobilize manpower at his own cost. The maintenance team must be experienced and well conversant with the assembly and sub-assembly of the equipments, having adequate knowledge of mechanical jobs, and shall include well-trained skilled workers. The minimum required qualification & experience of personnel deployed by the agency is mentioned below:

- Qualified Technical Assistant: Shall be Diploma Holder (Minimum) in Mechanical discipline with 2 to 5 years experience in mechanical jobs.
- Skilled workers: Shall be minimum ITI (Fitters preferably with millwright grade/ turner).
- Semiskilled worker: Shall be minimum ITI passed.
- Unskilled worker: Literate.

Bio data along with proof of experience and qualification of qualified technical assistant (supervisor) and all workmen has to be submitted to engineer in charge for acceptance. Only after the acceptance by engineer in charge, the agency shall deploy the personnel at site.

5. Generally, all the maintenance jobs are to be carried out in General shift. However if there is a requirement at site due to breakdown, site conditions etc the contractor shall have to deploy the personnel in all three shifts, on Sundays and Holidays. Also if there is a breakdown beyond the General shift, the contractor shall ensure personnel are deployed immediately on information. The shift timings as prescribed by VSP shall be followed. Presently, the working hours are from 6.00 AM to 2.30 PM, 2.00 PM to 10.30 PM, 10.00 PM to 6.30 AM for `A, `B and `C shifts respectively. For General shift, the working hour is 9.00 AM to 5.30 PM
6. In the event of any breakdown/ emergency, the agency shall ensure continuation of work without any break till the equipment is brought in to operation.
7. The agency has to follow all safety procedures of VSP and ensure use of necessary safety appliances by his workmen

8. Housekeeping and cleaning of the area in the plant is an important factor. The agency has to clean the work area premises, maintain the area neat and clean on daily basis. After the maintenance, the agency is required to clean the area, remove all the waste material from the work place and dump it in respective waste bins located at designated place.
9. While working on Oxygen service equipments, workers shall wear clothes without any grease/oil. While working on Oxygen service equipments, all safety and special instructions as instructed by Engineer shall be strictly adhered to. No work should be started without shutdown protocols.
10. Deployment of manpower for handling of spares/consumables to and from department stores to site shall be in the scope of the agency. However, truck/Van/field equipment like hydra crane and forklift for shifting heavy spares/equipment to site shall be provided by VSP free of cost.
11. The agency is required to carry out the maintenance of equipments as mentioned under BOQ and scope of work.
12. During common shutdown, the agency may require to take up those jobs that could not be done in normal days. Agency is required to make necessary arrangement of required resources like extra manpower, tools etc. to accomplish all such jobs during the shutdown.
13. In some of the spares, the actual tolerances may be slightly more than specified in the drawing. The agency has to bring the correct finished dimension by grinding/filing at site.
14. Necessary facility for machining available at department workshop or UERS/ENGINEERING SHOP will be provided by VSP.
15. The agency shall follow the maintenance plan of equipments approved by VSP.
16. The activities of mechanical maintenance shall be of regular and continuous nature. More than one job shall be required to be carried out simultaneously on daily basis.

17. The agency shall have to perform the subject work in accordance with the guidelines contained in the work order and the instructions of the Engineer -in-charge.
18. The agency to please note that the quantity of BOQ items are tentative and may vary to a large extent. No claim of the agency shall be entertained on this account.
19. For job planning and scheduling, the Qualified Technical assistant (Supervisor) of the agency shall meet Engineer in charge daily in the morning. The Qualified technical Assistant shall be responsible for deployment of his persons on various jobs, their safety and punctuality.
20. The agency shall have to make their own arrangements for making site office and site stores, for which necessary open space will be shown.
21. The agency shall provide all the safety appliances and personal protective equipments to his workmen at their own cost. The deployed workers shall use the safety equipments as per the requirement without fail.
It shall be the responsibility of the bidder to comply with all the safety rules, standards, and statutory provisions in force in the plant. Ignorance to these rules and statutes shall not be a valid excuse.
22. The agency has to comply with the provisions of QMS, EMS, OHSAS and 5S being followed in VSP.
23. Qualified technical assistant shall be provided with mobile phones and they must respond to the call of engineer in charge or his representative any time.
24. For maintaining good housekeeping, scope of the agency shall cover but not be limited to the following:
 - 5S to be practiced in the maintenance area, store room, staff room and all the related units.
 - Immediate removal/cleaning of mucks, used cotton wastes, spills over. Scraps etc have to be disposed off to respective bins/ disposal yard just before the end of days work.
 - Collection of all used oil in a container, label it for sending to reclamation cell.
25. The agency shall maintain the following records /data book at their own cost in the proper format as suggested by engineer in charge throughout the period of contract.

LOGBOOK: The agency shall maintain daily logbook (job detail register) for the work done, spares/consumables used, any breakdown etc. and get it signed by engineer or his representative at the end of the day.

ATTENDANCE REGISTER: Attendance register for all the personnel engaged is to be maintained.

26. Agency shall fabricate necessary jigs and fixtures for assembling or dismantling of parts at site. Hammering on parts for removal/fitting, which spoils the part, is not allowed.
27. The agency shall comply with all statutory requirements in vogue as per the GCC of VSP and/or by state Govt., central Govt. and other statutory authorities.
28. The agency shall ensure usage of ISI marked regulators, hoses, nozzles, and cutting torches, welding holders and cables for the cutting and welding works. This must be adhered to strictly.
29. The agency shall deploy the manpower to all expansion units of Air separation plant in case of exigencies as and when decided by engineer in charge.
30. Maintenance of Refrigerated Air Driers may require brazing jobs during maintenance. In such events the agency shall arrange welder for brazing work.
31. Welfare allowance is applicable to the subject work.

PRE-QUALIFICATION REQUIREMENT

The following are the pre-qualification requirements to be uploaded in Techbid c folder by the tenderer.

- (a) Copy of registration letter issued by V.S.P. in case of registered agencies and in case of non-registered agencies, either a copy of Notarized sole proprietorship OR a copy of Notarized partnership deed OR a copy of Memorandum of Association & Articles of Association, along with certificate of registration – whichever is applicable.
- (b) For Turn Over Audited balance sheets certified by Practicing Chartered Accountant with Stamp & Membership No. in case the annual Turn-over is more than Rs.100.00 Lakhs (OR) in case of Turn-Over being less than Rs.100.00 lakhs either Turn-over certificate in the prescribed format of VSP duly signed by a practicing Chartered Accountant/Cost Accountant with Stamp and Membership No. (OR) T.D.S. certificate(s) comprising of the Gross bill values issued by the Deductor(s) for the work done.
- (c) Copy of Provident Fund Registration Certificate if available. If not available, successful tenderer shall submit PF Registration Certificate before commencement of the contract to Engineer Incharge.
- (d) **Copy of GST Registration Certificate if available. If not available, the same shall be submitted before signing the order.**

SINGLE **SIMILAR WORK EXPERIENCE REQUIREMENT:**

AGENCY SHOULD HAVE EXPERIENCE IN MAINTENANCE OF AIR SEPERATION UNIT / ROTATING MACHINERY EQUIPMENTS LIKE TURBINES / CENTRIFUGAL COMPRESSORS /CRYOGENIC PUMPS.

The value of **single similarwork executed** shall be during the last **07 (Seven)** years ending last day of month previous to Tender Notice date i.e:**31.12.2018** and Turnover shall be the average Annual Financial Turnover during the last three years ending 31st March of the previous financial year i.e.**31.03.2018**.The tender document shall be accompanied with copies of

Work Order, Bill of Quantities, Work Completion Certificate indicating the total value of the work done inclusive of all deviations and escalations against the subject work and including all taxes & duties, but excluding Goods & Service Tax (GST). In case of work executed outside VSP, and where the total amount includes GST, tenderers shall make efforts to get the value of GST indicated separately in the Work Completion Certificate.

In case of work-in-progress, Work-in-progress Certificate indicating start date as per Order and actual start date & value of work executed with date up to which it is considered against the subject work and including all taxes and duties, but excluding Goods &Service Tax (GST) with certification of satisfactory performance of the Contractor to that extent and continuance of the said work by the respective employer.

VSP reserves the right to reject the offer in case the above documents are not enclosed along with the offer.
The authorized representative of the tenderer shall sign on all the copies of the documents submitted along with the tender document.

SPECIAL CONDITIONS OF CONTRACT

1. **GENERAL :** The special conditions of the contract (SCC) are complementary to and shall be read in conjunction with General Conditions of Contract (GCC) of VSP for works contracts. Scope of work, Bill of Quantities and other documents form part of the Tender Documents. In case of any conflict of meaning between SCC & GCC, provisions of SCC shall over ride the Provisions of GCC.
2. Visakhapatnam Steel Plant reserves the right to accept or reject the lowest or any other tender without assigning any reason and the work may be awarded to one of the Tenderers or to more than one tenderer.
3. The contract shall be treated as having been entered into from the date of issue of the letter of intent/work order to the successful tenderer, unless otherwise specified.
4. **WATER, POWER AND COMPRESSED AIR:** Unless otherwise specified to the contrary in the tender schedule, the contractor is entitled to use in the work such supplies of water, power and compressed air (Basing on availability) from VSP's sources from approved tapping points, free of cost. The contractor shall make his own arrangement for drawing the same to the work spot.
5. **The successful tenderer shall produce GST Registration Certificate under GST Act, before signing the Work Order / Letter of Acceptance and submit a copy of the same. If the agency is unregistered / composition scheme declaration shall be submitted.**
6. Immediately on receipt of work order, the successful tenderer shall obtain and submit the following documents to the Engineer with a copy to ZPE/Manager (Pers)/CLC before start of work.
 - a(i) **ESI registration certificate** with the contractor's Code no. covering all the workmen under ESI Scheme, which shall be effective from the date of start of contract and cover for the entire period of contract including extended period/defect liability period, if any.
 - a(ii) **Insurance policy for payment of exgratia amount of Rs.5,00,000/-** (Rupees Five lakhs only) per head in case of fatal accidents while on duty, to the contract labour engaged by him in addition to the coverage under ESI Scheme / Workmen Compensation Insurance Policy whichever is applicable. As and when a fatal accident takes place while on duty along with the benefits under the ESI Scheme / Workmen Compensation, whichever is applicable, the contractor is required to pay the ex-gratia amount within 30 (Thirty) days from the date of accident to the legal heir of the deceased. In case of any delay in paying the ex-gratia amount as above, the Employer has the right to pay such amount directly to the legal heir of the deceased and recover the same from the contractor's running / future bills. This insurance policy is to be taken by the contractor over and above the provisions specified under Clause No. 6.13 (Third Party) and 6.14 (ESI Act) of the General Conditions of Contract.
 - a(iii) **Copy of the policy for third party insurance** as stipulated in Clause 6.13 of the GCC.
 - b) **Labour License obtained from Assistant Labour Commissioner (Central), Visakhapatnam.**
 - c) **PF Registration Certificate issued by PF Authorities**
 - d) **Safety clearance from Safety Engineering Department of VSP.**
7. The contractor shall submit wage records, work commencement/completion certificate etc. and obtain necessary clearance from Contract Labour Cell of VSP for bills clearance.
8. The contractor shall ensure strict compliance with provisions of the Employee's Provident Fund Act, 1952 and the scheme framed there under in so far as they are applicable to their establishment and agencies engaged by them. The contractor is also required to indemnify the employer against any loss or claim or penalties or damages whatsoever resulting out of non-compliance on the part of the contractor with the provisions of aforesaid act and the schemes framed there under. A copy of the provident fund membership certificate/PF CODE number shall be submitted by the contractor.
9. The contractor shall follow the provisions of Indian Factories Act and all rules made there under from time to time as applicable and shall indemnify the employer against all claims of compensations under the provisions of the act in respect of workmen employed by the contractor in carrying out the work against all costs, expenses and penalties that may be incurred by the employer in connection therewith.
10. a) **Total amount quoted shall be inclusive of all taxes, levies, duties, royalties, overheads and the like but excluding GST prevailing as on the date of submission of bids.**

- b) During the operation of the contract if any new taxes/duties/levies etc are imposed or rates undergo changes, as notified by the Government and become applicable to the subject works, the same shall be reimbursed by VSP on production of documentary evidence in respect of the payment of the same. Similarly benefits accruing to agency on account of withdrawal/reduction in any existing taxes and duties shall be passed on to VSP.
 - c) Supplier of Services / Goods shall comply with the GST provision as prescribed. In case of failure to comply with the GST provision by the Supplier thereby RINL could not obtain GST-ITC or ITC is reversed with interest at a later date the equivalent amount of ITC lost including interest paid, if any, to GST Authorities shall be recovered from the immediate payment due to the supplier of service.
 - d) The prices are exclusive of GST. RINL-VSP will pay GST as applicable on submission of Tax Invoices in accordance with Rule 46 of GST Rule 2017.
The contractor will be paid GST by RINL-VSP along with monthly RA bills. The contractor will, in turn, submit the documentary evidence in support of payment of GST of each month along with subsequent month RA Bills.
The Supplier/Contractor shall upload the details of Invoices issued by him in the monthly return (GSTR-1) of the month in which Tax Invoices are raised to enable RINL to claim Input Tax Credit under GST. Otherwise, Payment of GST will not be made.
11. ADVANCE: No advance of any sort will be given by VSP.
 12. PAYMENT TERMS: Payment will be made monthly on recommendations of the Engineer basing on the quantities executed, at accepted rates.
 13. MEASUREMENTS: The contractor shall take measurements jointly with the Engineer or his representative and keep joint records for the same. Bills shall be prepared and submitted by the contractor basing on agreed measurements.
 14. INITIAL SECURITY DEPOSIT (ISD): Initial Security Deposit for the work shall be @ 2% of contract price. Earnest Money Deposited by the successful tenderer shall be adjusted against ISD, and the difference between ISD and EMD shall be deposited in the manner mentioned in the work order/letter of intent.
 15. RETENTION MONEY: Retention Money for contracts up to a value of Rs. 100 lakhs, at the rate of 7.5% of the bills for works with defective liability period *not NIL* and at the rate of 5.0% *for works with defective liability period "NIL"* will be deducted from each bill until this amount together with the Initial Security Deposit reach the limit of retention which is 7.5% or 5.0% as the case may be for the value of work. The Retention Money shall be released after the satisfactory completion of defect liability period after liquidating the defects. For contracts of value above Rs.100 Lakhs, the limit of retention money shall be Rs.7.5 lakhs plus 5% of the value exceeding Rs.100 lakhs.
 16. Security Deposit: : The Public Sector Enterprises or State/Central Government Undertakings/ MSEs shall be required to submit a "Performance Guarantee Bond" of requisite value in the prescribed proforma in lieu of Security Deposit covering the period of contract + defect liability period + 6 months (Claim period). It may be noted that waiver of Security Deposit is permitted only up to the monetary limit as specified in the proof of enlistment for which the unit is registered for MSEs.
 17. Recovery of income tax at source will be made from contractor's bill and deposited with Income Tax Department as per rules. Recovery of sales tax applicable shall be made from the contractor's bills.
 18. SAFETY:
 - a) The contractor and his workers must strictly take all safety precautions and shall supply to his workers dependable safety appliances like hand gloves, safety boots, safety belt, safety helmets, duster cloth, dust mask/nostril filter etc. In addition to this, contractor shall also provide additional safety appliances as per requirement and follow safe working practices like using fully insulated electrode holders etc. He shall also ensure that his workmen intelligently use only dependable safety appliances supplied to them.
 - b) The contractor shall take adequate safety precaution to prevent accidents at site. The contractor shall also ensure that his employees observe the statutory safety rules and regulations and also those laid down by the employer from time to time and promptly submit report of accident and state the measures taken by him to prevent their

- recurrence and also keep the employer indemnified of all claims arising out of such accidents.
- c) No Workmen shall be engaged on the work without proper safety induction and without using required PPE. Use of safety helmet and shoe is must excepting in painting works where shoe will not be used.
 - d) All the safety appliances required for safe working as decided by SED/Contract operating department shall be provided by the contractor to his workmen.
 - e) Clearance to start the job will be obtained by the contractor in form 'A&B' before start of work. The forms may be obtained from the dept. concerned.
 - f) Works at height cannot be started without clearance from Zonal Safety Officer. The workers engaged for work at height shall possess height pass from SED. The names of workmen working at height or in hazardous areas will be written on the body of form "B".
 - g) Contravention of any safety regulation of VSP in vogue from time to time will result into work stoppage, levying penalties and ultimately in contract termination.

The list of safety violations by Contractor category wise are as follows:

I. Category-I of Safety Violations:

Penalty amount: First offence Rs.1000/-, 2nd or subsequent offences Rs.2000/- For Works / Non-works.

Penalty amount: First offence Rs.1000/-, 2nd or subsequent offences Rs.2000/- For Projects

- (1) Not wearing crash helmet while riding Two-Wheeler in plant premises.

II. Category-II of Safety Violations (Minor Violations):

Penalty amount: Rs.3000/- - For Works / Non-works.

Penalty amount: Rs.5000/- - For Projects

A. HEIGHT:

- (1) Height Pass not made / not available;
- (2) Unauthorized entry at height / hazardous locations;
- (3) Fall arrester not provided / used;
- (4) Horizontal life line / guide rope not provided for anchoring full body safety harness.

B. EXCAVATION:

- (1) Proper ladder/steps not provided for descending / ascending;
- (2) Shutting not done (below 2 mts. Level) of excavation;
- (3) Overhanging burden in pit not removed in excavation;
- (4) Excavated materials left near the edge of the pit.

C. ELECTRICAL:

- (1) Power cable clamped with G. I. Wires to post / pillar;
- (2) Power cables tied on reinforce rod / structure without proper insulation;
- (3) Loose connection taken from sockets without proper plug;
- (4) Taking shelter behind electrical panel;
- (5) Power cables / electrical wires lying on ground in hap-hazard manner;
- (6) Source of supply / danger board not displayed on the electrical equipment;
- (7) Electrical Control Post not provided with Barricade / Shelter / Canopy;
- (8) Cables used having many joints;
- (9) Earthing not provided on Electrical Equipments;
- (10) ELCB not installed.

D. MATERIAL HANDLING:

- (1) Use of damaged slings / tools / ropes;
- (2) Fitness certificate of cranes / hydras / heavy vehicles not available;
- (3) Crane rope conditions not ok;
- (4) Rope of crane not clamped properly;
- (5) Guy ropes not used during shifting of materials.

E. GAS CUTTING:

- (1) Rolling / lifting of cylinders (without cage);
- (2) Gas cutting without required PPEs;
- (3) Gas hose pipe clamping done by wires;
- (4) Usage of LPG Cylinder beyond date of expiry;
- (5) Wet bags / covers not put on gas cylinder;
- (6) Loading / Unloading of cylinder – cushion not given.
- (7) Condition of hose pipe not good;
- (8) Working with leaking cylinder;
- (9) Flash Back Arrestor not provided at Torch / Cylinder ends;
- (10) Colour coding of gas cutting of hoses not followed.

F. ARC WELDING:

- (1) Welding with non-standard holder
- (2) Welding machine earthing not done (Double body earthing);
- (3) Using improper welding cable;
- (4) Welding cables used with many joints;
- (5) Lugs not provided for connecting cables to welding machines;
- (6) Local isolation switch not provided on welding machines.

G. PPEs:

- (1) Non usage of PPEs at site such as Safety Helmet, Shoes, Goggles, Hand Gloves, Face Shields etc., as per requirement.

H. VEHICLE:

- (1) Driving of heavy vehicles on the main road during restricted hours & restricted routes;
- (2) Parking at unauthorized place;
- (3) Using of truck with damaged body;
- (4) Dropping / Spillage of material on the road;
- (5) No number plate on vehicle;
- (6) No head light / signal lights / brake light / horn / reverse horn on the vehicle;
- (7) Types of vehicle having patching / bolting;
- (8) Violation of approved speed limits during plying on the road;
- (9) No front / rear wheel guards on Hydra;
- (10) Un-authorized dumping of material;
- (11) Driving license not available / in-valid;
- (12) Driving of two wheeler carrying more than one pillion rider;
- (13) Driving dangerously;
- (14) Overloading of vehicles;
- (15) Talking on cell phone while driving;

- (16) Vehicles transporting loads without tying / securing of loads / stock protruding out of the truck body / without red flags / red lights, side guards, donnage;
- (17) Drunk & driving;
- (18) Non availability o reverse horn of moving equipment;
- (19) Using hydra for material transportation on roads;
- (20) Marching of hydra without signal man & red flags;
- (21) Using trucks for transportation of persons.

I. PERMITS:

- (1) Working without work permit / shut down
- (2) Not putting red flags / stopper
- (3) Dismantling of structure without authorized plan
- (4) Unauthorized oxygen tapping
- (5) Working on VSP installations without permission
- (6) Critical / heavy erection of structures without authorized plan.

J. GENERAL:

- (1) Not having proper gate passes / other area passes
- (2) Not reporting of accident
- (3) Hand grinders / mixer machines without guard
- (4) Make-shift arrangement for job execution
- (5) Engaging workers without safety training
- (6) Using of defective tools
- (7) Unauthorized operation of equipment

K. STATUTORY RECORDS:

- (1) Safe Working Load (SWL) Certificates of lifting machines / equipments not valid / not available / details not displayed on the equipment
- (2) Valid Test Certificates of Electrical Hand Gloves / Full Body harness not available
- (3) Eye examination records of vehicle / crane operators not available
- (4) Electrical Authorization not available
- (5) Vehicles plying without valid insurance, valid fitness certificate, valid pollution under control certificate.

III. Minor subsequent – Repetition of safety violations as detailed under Category – li above

Penalty amount: 1st repetition of violation Rs.12,000/-, 2nd repetition of violation onwards Rs.24,000/- - For Works / Non-Works

Penalty amount: 1st repetition of violation Rs.15,000/-, 2nd repetition of violation onwards Rs.25,000/- - For Projects

IV. Category – IV of Safety Violations (Major Violations)

Penalty amount: Rs.20,000/- - For Works / Non-Works

Penalty amount: Rs.40,000/- - For Projects

HEIGHT:

- (1) Using bamboo / or other non-standard material for scaffolding
- (2) Railing not given at platforms or opening of floor
- (3) Scaffolding planks not tied
- (4) Throwing / dropping of material from height

- (5) Proper ladder / approach not given for working at height
- (6) Full body harness (FBH) not wearing
- (7) Lifeline of FBH not anchoring
- (8) Floor opening left unguarded in the area of work
- (9) Working at roof without daily permit
- (10) Walkway / cross over path not provided

EXCAVATION:

- (1) No barricading of excavated pits

ELECTRICAL:

- (1) Unauthorized working on electrical equipment

VEHICLE:

- (1) Sleeping under truck

ARC WELDING:

- (1) Welding screen not used

GENERAL:

- (1) Absence of Supervisor at work site
- (2) Leaving loose sheets on the roof tops

- V. Fatal Accidents / Permanent disability**
Penalty amount: 20% of contract value subjected to Min. Rs.1.00 lakh and Max. Rs.5.00 lakhs or banning of business dealing or both. – For Works / Non-Works
Penalty amount: 10% of contract value subjected to Min. Rs.5.00 lakhs and Max. Rs.10.00 lakhs or banning of business dealing or both. – For Projects

Note:

- 1) Any other violation which is not listed above having potential to endanger human life / Property shall be liable for penalty under any of the categories listed above.
- 2) Independent of the above, the contractor shall be debarred from taking up further contractual work in VSP in case any repeated fatal accident after 3rd incident for the reasonable attributable to Contractor.
- 3) The Safety violations have been classified into five categories (I to V). Without prejudice to the right conferred by the Clause No. 16(g) of Special Conditions of Contract for stoppage of work for violation of safety rules, the contractor shall be liable for penalty at the rates as indicated depending upon the category of violation.
- 4) The penalties mentioned above are in addition to those which are applicable as per the Statutory Acts & Rules. In case of any imposed penalty by any Statutory Authority, the same shall be over and above the contractual clauses.
- 5) The above penalties related to the accidents mentioned at Category-V will be imposed on agency in case the reasons to the accidents are attributable to the agency.

AUTHORITY FOR IMPOSING PENALTIES:

- 1) Penalty for violations falling under the Categories (I), (II) & (III) will be imposed by Engineer Incharge based on the findings by the designated officer of SED / Departmental Safety Officer / Zonal / Project Safety Officer / Operating Authority, a copy of the penalty imposition .
- 2) Penalty to the violations falling under the Categories (IV) & (V) will be imposed by the Engineer Incharge, based on the recommendation of Head of SED in consultation with the Head of Operating Department.
- 3) The penalty amount shall be recoverable from any bill and / or EMD / SD of the contractor without any further reference to him.
- 4) For violations falling under the Category (V), besides penalty action for banning of business dealings with the contractor will be initiated, if recommended by the committee for enquiring into fatal cases.
- h) "The contractor shall ensure that the Welders and Gas Cutters wear cotton dress and leather apron. They shall not wear nylon/synthetic dress. This is required to avoid any fire accident. This must be followed strictly".

19. SHUTDOWNS:

- A) Necessary shutdowns will be arranged by VSP to the contractor for carrying out the work based on requirement. No claims on account of delayed/prolonged shutdown will be entertained.
- B) The works assigned to the contractor by the Engineer from time to time shall be completed within the time schedule fixed by the Engineer in each case, within the approved shut down period.

20. LABOUR DEPLOYMENT:

- A) The contractor shall deploy his labour as per requirement and as instructed by the Engineer. It may be necessary to carryout the work round the clock based on requirement and shutdown provided. The contractor's rate shall cover such eventualities.
- B) Only trained, experienced, safety inducted workers acceptable to the Engineer shall be engaged on this work, work shall be executed as per specifications to the satisfaction of the Engineer.
- C) As and when need arises in the Annual works from time to time either for extra requirement of work or as a replacement in running contracts or a contract commencing for the first time, the contractor shall ensure that Displaced Persons (DPs) are engaged in unskilled category of workers to the extent of 50% (fifty percent). The contractor shall contract the Engineer-in-charge for this purpose.
- D) "As and when need arises in the annual works from time to time either for extra requirement of work or as a replacement in running contracts or a contract commencing for the first time in semi-skilled category, the contractor shall ensure the minimum qualification of ITI in the relevant field for such semi-skilled category of workers. The contractor will also ensure to engage 50% (Fifty percent) of such semi-skilled vacancies from Displaced Persons (DPs) category. The contractor shall contact the Engineer-in-charge (EIC) for this purpose".
- E) The Contractor shall engage contract worker(s) who do not have any adverse record with respect to his character in the past. For this purpose, the character and antecedents of the proposed worker(s) whom the Contractor intended to engage, shall be got verified by the Police and report shall be submitted. Till such time the report is submitted, the proposed contract worker(s) will be given only provisional pass and the pass will be cancelled in case any adverse report is reported.

21. SECURITY REGULATIONS: The contractor shall abide by and also observe all security regulations promulgated from time to time by the employer.

22. STORING/STACKING OF MATERIALS: Storing/Stacking/Placing of materials shall be only at the places designated by the engineer.

23. The contractor, his supervisors and workmen shall observe entry and exit timings strictly.

24. After completion of work activity, the site has to be cleared of all debris, construction material and the like.

25. The successful tenderer shall start the work immediately after obtaining gate passes and safety induction training and clearance from the Employer.

26. **NOTICES:** Any notice to be given to the contractor under terms of the contract shall be considered duly served, if the same has been delivered to, left for or posted by registered post to the contractors principal place of business (or in the event of the contractor being a company, its registered office), at the site or to their last known address.
27. **DEFAULT BY TENDERERS:** The successful tenderer may be debarred at the discretion of the company, from issue of further tender documents, work orders etc., for a specified period to be decided by the employer in case of :
 “Undue delay in starting and execution of work awarded, poor performance, backing out from the tender, non accepting work order/LOI during the validity of tender or non observance of safety rules and regulations, misappropriation of company’s materials/property, non payment of due wages to labour or such similar defaults”.
28. Successful tenderer should be in a position to produce the Original Certificate in support of the attested copies of relevant documents enclosed along with pre-qualification documents or afterwards, after opening of the Price Bids.
29. Failure to produce the original certificates at this stage in support of the attested copies of PF Registration/ITCC/Electrical License/Experience/Qualification any other documents etc., submitted earlier would result in disqualification and forfeiture of EMD and also liable for debarring from participation in VSP tenders.
30. If it comes to the notice of VSP at any stage right from request for registration/tender document that any of the certificates/documents submitted by applicant for registration or by bidders are found to be false/fake/doctored, the party will be debarred from participation in all VSP tenders for a period of 05 (FIVE) YEARS including termination of Contract, if awarded. EMD / Security Deposit etc., if any, will be forfeited. The Contracting Agency in such cases shall make good to VSP any loss or damage resulting from such termination. Contracts in operation any where in VSP will also be terminated with attendant fall outs like forfeiture of E.M.D. / Security Deposit, if any, and recovery of risk and cost charges etc. Decision of V.S.P. Management will be final and binding.
31. Failure to execute the work after LOI/WORK ORDER is given, will make the party liable for debarring for a period of 2 (TWO) YEARS.
32. In case it is found before/after award of work to the person/agency through Limited Tender Enquiry (LTE) that the same person/agency is proprietor/proprietress/partner of two or more separate agencies and quoted for the same work, then punitive action to the extent of debarring up to 02 (Two) years from participating in VSP tenders will be taken.
33. In case the Tenderers revoke/withdraw/cancel their tender or they vary any terms of their tender during the validity period of the tender without the written consent of Visakhapatnam Steel Plant (VSP) or in the event of VSP accepting their tender and fail to deposit the required security money, execute the Agreement and fail to start the work within reasonable time (to be determined by the Engineer) after written acceptance of their tender – EMD submitted by them will be forfeited by VSP.
34. Contractor shall note that:
 - i) Time for mobilization after issue of FAX Letter of Intent/detailed Letter of Intent / Work Order shall be;
 - a. 03 (Three) days for Capital Repairs
 - b. 15 days for Civil Works
 - c. 60 days for painting works of Structural Engineering Department
 - d. 07 (Seven) days for Annual Mechanical, Electrical and works of technological assistance/cleaning.
 - ii) Re-starting the work after disruption shall be within 04 (Four) to 06 (Six) hours after the cause of disruption is removed as decided by the HOD.
 - iii) Notice period for Contract Termination shall be - 03 (Three) hours in the event of breakdowns, 02 (Two) days in Capital Repairs and 10 days in other works.

Failure to adhere to above stipulations may result in Termination of contract at risk & cost and will make the party liable for debarring for a period o 2 (Two) years.
35. Agencies are required to submit Bank Guarantee for the value as decided by the Engineer as a Security while taking out Equipment/Components/materials of VSP to their workshop situated outside the VSP premises for carrying out repairs.
36. In case of revision in RINL / VSP approved wage rate, consequent to the revision in the minimum wages (either in Basic Wage or Living Allowances) as notified by the Regional Labour

Commissioner (Central), Hyderabad, Escalation amount to the contract shall be payable as per the following formula:

$$V = \frac{L \times W \times (X - X_o)}{X_o}$$

WHERE:

- V= Escalation Payable
 L= Labour Content during billing period
 W= Gross value of work done on the basis of Contract Rates for the period for which variation is applicable
 X= Revised Weighted Average of RINL/VSP approved Rates for the period for which variation is applicable (for Unskilled, Semi-skilled and Skilled categories of Workers) based on the minimum wages as notified by the ALC (Central), Hyderabad, for the period under consideration for that contract as per present man days of different categories for the billing period.
 X_o = Existing (on the basis which tender estimate prepared) Weighted average of VSP approved rates (for Unskilled, Semi-skilled and Skilled categories of Workers and which is based on the Minimum Wages notified by Commissioner of Labour, Govt. of Andhra Pradesh, Hyderabad) for that contract as per present man days of different categories for the billing period.

Computation of X and X_o & L :

$$X = \frac{(a \cdot \text{USR} + b \cdot \text{SSR} + c \cdot \text{SKR})}{(a+b+c)}$$

$$X_o = \frac{(a \cdot \text{USR}_o + b \cdot \text{SSR}_o + c \cdot \text{SKR}_o)}{(a+b+c)}$$

$$L = \frac{(a \cdot \text{USR}_o + b \cdot \text{SSR}_o + c \cdot \text{SKR}_o)}{W}$$

Where

- a= man days present by USW during the billing period
 b= man days present by SSW during the billing period
 c= man days present by SKW during the billing period

- USR= Revised VSP approved Rate for USW at the time of billing
 SSR= Revised VSP approved Rate for SSW at the time of billing
 SKR= Revised VSP approved Rate for SKW at the time of billing

- USR_o= VSP approved Rate for USW indicated based on which the Estimate of work was prepared,
 SSR_o= VSP approved Rate for SSW indicated based on which the Estimate of work was prepared,
 SKR_o= VSP approved Rate for SKW indicated based on which the Estimate of work was prepared,

(The above escalation shall be independent of the award percentage whether positive or negative)

37. PAYMENT OF MINIMUM WAGES:

- 37.1.** *Wages paid to the workmen by the contractor should not be less than the rates notified by the Regional Labour Commissioner (Central), Hyderabad, from time to time with regard to the minimum wages applicable to the respective categories of workmen plus the ad-hoc amount at the rate of Rs.11.54ps as per working day per workman per category. Wages with ad-hoc amount to the workmen should be paid on or before the 7th of the subsequent month. If 7th falls on a holiday or weekly off day, the payment should be made one day prior to that. Payment of PF for the month, both the employer's (in this case contractor) and employee's (in this case workmen employed by the contractor) contributions should be deposited in the bank in the permanent PF code number and challan obtained before the 15th of the subsequent month and forwarded to the Engineer". In case of failure of the contractor to comply with any of the above, the following action will be taken by VSP.*

- 1a) Lapse ————Payment of wages at rates less than those notified under the minimum wages.

- Action by VSP** -----An amount equivalent to the differential amount between wages to be paid under minimum wages notification of the Government applicable for the period less actual wages paid shall be recovered from the bills as certified by the engineer.
- b) **Lapse** -----Non payment of adhoc amount
Action by VSP -----An amount equivalent to actual payable towards adhoc amount to the workmen engaged for relevant period shall be recovered from the bills as certified by the Engr.
- 2) **Lapse** -----Non payment of wages
Action by VSP -----An amount equivalent to wages payable by the contractor applicable for the relevant period shall be recovered from the bills as certified by the Engineer.
- 3) **Lapse** -----Non payment of PF
Action by VSP -----Recovery of PF amount and an amount equivalent to maximum penalty leviable by Regional Provident Fund Commissioner for the delayed period under the provisions of ERP & MP Act and Rules for delayed remittance of PF contributions (both the employee's and employer's contribution), shall be recovered from the bills of contractor as certified by Engineer.
- 4) **Lapse** -----Delayed payment of PF
Action by VSP ----- An amount equivalent to maximum penalty leviable by Regional provident Fund Commissioner for the delayed period under the provisions of EPF & MP Act and rules for delayed remittance of PF contributions (both the employee's and employer's contribution), shall be recovered from the bills of the contractor as certified by Engineer.
- 37.2. The contractor shall have to pay WELFARE ALLOWANCE (earlier known as SMA, ASMA) towards fuel charges, food, milk, tiffin, coconut water, washing allowance etc @ Rs.80.76ps per day of actual attendance of each worker deployed in the contract not exceeding Rs.2100/- per month in addition to the wages as indicated in the minimum wages clause of Special Conditions of Contract . The contractor will submit his claim with proof of such payment made in this connection in the RA Bill and the same amount will be reimbursed/paid to him.
- 37.2.1. It may be noted that the payment of WELFARE ALLOWANCE is towards the expenditure incurred by the contract labour towards Fuel Charge, Coconut Water Allowance, Washing Allowance, Food/Milk/Tiffin Allowance.
- 37.2.2. The contractor is required to take the above aspects into consideration while submitting their offers and no profit/overhead charges will be paid by VSP on this account.
- 37.2.3. As regards applicability of payment of WELFARE ALLOWANCE, the contractor may refer NIT/Terms & Conditions of the contract in this regard.
- 37.3. (a) **Penalty for delayed payment / non-payment of wages:**
 If the contractor fails to pay wages within the stipulated time ie., by 7th working day of the subsequent month, a penalty up to 1% of the gross wages (Basic, DA & Over time (if any) except Adhoc, SMA, ASMA and other allowances) of the workers will be levied for every day of lapse subject to a maximum of 10% in any calendar month. This is without prejudice to appropriate action against the contractor including debarring, in case of perpetual / habitual default".
- (b) **Payment of wages through banks:**
 The contractor shall pay wages not less than the minimum wages notified by the appropriate Government from time to time to the workers deployed by him. The payment shall be made on the due dates either by way of crossed cheques or crediting the wages to the bank accounts of the concerned contract workers. Proof of such payment shall be submitted by the contractor to the Engineer Incharge by 10th of the subsequent calendar month.
38. The contract period can be extended at the discretion of V.S.P. up to 04 (Four) months at the existing Rates, Terms and conditions and the Contractor shall be bound to execute the work accordingly and the offer of the Contractor is deemed to include this aspect.
39. The tenderers shall note that in case of quoting above the Estimated Value of V.S.P. the L-1 party shall furnish logical / satisfactory explanation which V.S.P. may seek if felt necessary for quoting

such high rates. If the explanation offered by the L-1 party is not acceptable to V.S.P., the L-1 party may be recommended for disqualification while retendering the work.

40. The contractor should clearly understand and comply with the Factories Act 1948 and relieve the FEMALE WORKERS from their work site within the restricted working hours prescribed therein under section 66(b).
41. The following deductions per workman deployed category-wise shall be made from the bills/amounts due to the contractor as applicable for the work done and such deducted amounts shall be released as mentioned below:

1) Component ——— Notice pay
Recovery amount per labour per every working day —
USK —Rs.38.44ps, SSK —Rs.43.42ps, SK—Rs.50.88ps

2) Component ——— Retrenchment compensation
Recovery amount per labour per every working day —
USK —Rs.19.22ps, SSK —Rs.21.71ps, SK—Rs.25.44ps

3) Component ——— Leave with wages
Recovery amount per labour per every working day
USK —Rs.23.66ps, SSK —Rs.26.72ps, SK—Rs.31.31ps

To be released when ——— After the contractor makes payment to the work men in the presence of Engineer Incharge and CLC representatives, a certificate to this effect is to be enclosed with pre-final bill (to be paid with pre-final bill).

Sub-total -
USK —Rs.81.32ps, SSK —Rs.91.85ps, SK—Rs.107.63ps

4) Component ——— Bonus
Recovery amount per labour per every working day
USK —Rs.38.43ps, SSK —Rs.43.40ps, SK—Rs.50.86ps

To be released when ——— After the contractor makes the payment to the workmen in the presence of Engineer Incharge and CLC representatives, a certificate to this effect is to be enclosed with RA bill / pre-final bill (to be paid with RA bill / pre-final bill as and when paid by the contractor).

GRAND TOTAL
USK —Rs.119.75ps, SSK —Rs.135.25ps, SK—Rs.158.49ps
10% towards profit and over heads of contractor
USK —Rs.11.98ps, SSK —Rs.13.53ps, SK—Rs.15.85ps
Total recovery amount
USK —Rs.131.73ps, SSK —Rs.148.78ps, SK—Rs.174.34ps

Note:

- i) The above recovery rates are **effective from 01/10/2017**. In case of any statutory revision in minimum wages payable to contract workmen as notified by the Regional Labour Commissioner (Central), Hyderabad from time to time, the above recovery amounts for workmen category-wise will be revised by RINL/VSP and will be notified accordingly.
- ii) Payment against the above component is to be made to the workmen based on **effective wages of last drawn pay**.

42. PAYMENT MODE FOR BILL AMOUNTS:

42.1 Following are the options available to the Contractors for availing e-payments.

42.1.1 **EFT System:** Under this system Banks offer their customers money Transfer service from account of any bank branch to any other Bank Branch. The EFT system presently covers all the

branches of about 77 banks located at 15 centers indicated below, where clearing houses are managed by RBI i.e.,

i) New Delhi ii) Chandigarh iii) Kanpur iv) Jaipur v) Ahmedabad vi) Mumbai vii) Nagpur viii) Hyderabad ix) Bangalore x) Chennai xi) Trivendrum xii) Kolkata xiii) Bhubaneswar xiv) Guwahati xv) Patna.

42.1.2 Direct Credit: Suppliers opting for this system may open Bank accounts with any one of the following banks.

- | | | | |
|------|-------------------------|---|-----------------------------|
| i) | State Bank of India | - | Steel Plant Branch |
| ii) | Canara Bank | - | Steel Plant Branch |
| iii) | Bank of Baroda | - | Steel Plant Branch |
| iv) | State Bank of Hyderabad | - | Steel Plant Township Branch |
| v) | Andhra Bank | - | Steel Plant Township Branch |
| vi) | UCO Bank | - | Steel Plant Township Branch |
| vii) | IDBI | - | Visakhapatnam Branch |

42.2 The Successful tenderer shall agree that all the payment due and payable in terms of the contract will be paid direct to his bank account and he shall give the bank account number and the address of the Bank in which the money is to be deposited" as per the format given below:

- (1) Vendor Code :
- (2) Option : RTGS / EFT
- (3) Beneficiary Details
- a) Name of Beneficiary (Max.35 characters) :
- b) Bank Name (Max. 35 characters) :
- c) Branch Name (Max. 35 characters) :
- d) Account Number (Max. 35 characters) :
- e) Account type (Max. 35 characters) :
(Savings / Current / Overdraft) [Mention Code No. also]
- f) Beneficiary Bank's IFSC Code (Max. 11 characters):
(For RTGS Mode only)
- g) Beneficiary Bank's MICR Code (Max.09 characters):
(For EFT Mode only)

(Signature of the Party / Contractor)

Name:

Design:

CERTIFICATE

Certified that the above particulars are found to be correct and matching with our records in respect of the above beneficiary.

Sd/-.....

(Signature of Branch Manager)

Name :

Seal of Bank :

- 42.3 The contractor has to submit their bank account details in VSP format duly certified by Concerned Bank Manager for the purpose of making electronic payment before submission of First Running Account Bill, failing which the bill will not be processed.
- 42.4. The Successful tenderer is required to give an undertaking to the Finance Department of VSP that the payment made by RINL/ VSP of any sum due to him by directly remitting the same in his bank, the address and the number of which is to be furnished, shall be in full discharge of the particular bill raised by him, and that he shall not have any claim in respect of the same”.
- 42.5 *In respect of payment made through Electronic Fund Transfer mechanism or Direct Credit to the supplier's/contractor's bank account, the supplier/contractor/receiver should intimate discrepancies, if any, within 10 days from the date of dispatch of intimation letter of payment to them to Finance Department of VSP failing which it shall be presumed that the funds have reached to their bank account and that no claims will be entertained after the said 10 days.*
43. **CLAUSES CONCERNING INPUT TAX CREDIT (ITC) AGAINST GST:**
- a) The successful tenderer shall take necessary steps to comply with the rules and provisions of GST law facilitating VSP to avail ITC.
 - b) **Price condition:** Tenderers shall quote the price of the goods or services excluding GST. Applicable GST shall be indicated against each item and will be paid extra on submission of tax invoice.
In case tenderer opted for composition scheme, GST will not be charged extra and the price quoted includes the GST applicable to composite scheme. Tenderers have to specify that they have opted for composition scheme and GST is included as applicable for composition.
Evaluation criteria:
 1. In case of supply of goods or services on which RINL / VSP is eligible to avail GST input tax credit, evaluation of tender shall be on the basis of landed cost excluding GST.
 2. In case of supply of goods or services on which the employer (RINL/VSP) is not eligible to avail GST input tax credit, the applicable GST payable by RINL/VSP (in case of unregistered taxable supplies) or GST to be charged by the registered taxable supplier as applicable, shall be added to the landed cost for evaluation purposes.
 - c) The tax invoice raised by the Contractor should clearly mention VSP as the recipient. It should be ensured that material has been delivered along with the duplicate for transporter copy of the tax invoice, based on which Input Tax Credit is to be claimed.
 - d) The duty paying documents shall be submitted as soon as the material is procured by the agency for incorporation in the work. In case the material is supplied from a third party, it should be backed up with a GST Tax Invoice from Contractor.
 - e) Material once received in to the factory would not be allowed to go outside the factory premises for any reason. Excess/Rejected material will be allowed to be taken back after complying with the provisions of GST Act.
- 43.1 **Vendor/Supplier/Contractor shall comply with all the necessary statutory compliances including but not limited to providing GST invoices or other documentation as per GST law relating to the above supply/service to RINL, uploading the details of the invoice, payment of taxes, timely filing of valid statutory returns for the tax period in the Goods and Service Tax Portal.**
In case of Input Tax Credit of GST is denied or demand is recovered from RINL on account of any act of the Vendor, including but not limited to non-payment of GST charged and recovered, non-generation of E-Way Bill, non-filing of Returns, non-uploading/improper uploading of valid invoices raised on RINL in the Returns etc., the Vendor/Supplier/Contractor shall indemnify RINL in respect of all claims of tax, penalty and / or interest, loss, damages, costs, expenses and liability that may arise due to such non-compliance. Such amount shall be recovered from any payments due to the vendor/supplier/contractor of from security deposit or any other amount available in the same contract or in other contracts including future contracts.
If any tax has been paid by the vendor/supplier/contractor in pursuance of any demand on account of suppression, fraud or willful misstatements of facts, then the same shall not be passed on to RINL through debit notes or invoices or supplementary invoices.
44. RINL reserves the right to reject the offers of tenderers whose performance is poor in awarded / ongoing works if any.

(This undertaking has to be printed on the letter head of the agency, sign, scan the same and upload in the Tech RFx folder)

UNDERTAKING LETTER

To
General Manager (WC)
Works Contracts Department
Visakhapatnam Steel Plant
Visakhapatnam-530 031.

Name of work: **MAINTENANCE WORKS IN EXPANSION UNITS OF AIR SEPERATION PLANT-2 COMPLEX COVERING HIGH SPEED ROTATING MACHINERY, PUMPS, TURBINE, FANS VALVES Etc.**

RFx No. **2600003435/UTL**

Sir,

With reference to the Notice Inviting Tender, I/We have gone through the tender documents downloaded from SRM Portal. I/We have also gone through the General Conditions of Contract of VSP available in VSP web site and noted the contents therein. I/We hereby confirm that I/We shall abide by the Terms and Conditions and General Conditions of the Contract including Form of Tender, Invitation to Tender, Articles of Agreement etc. I/We hereby declare that, I/We have visited, inspected and examined the site and its surroundings and satisfied ourselves before submitting this tender, obtained information about the nature of work, facilities that may be required and obtained necessary information about Working Conditions, risk contingencies etc., which may influence this tender. We hereby offer to execute & maintain the work during the defect liability period in conformity with the tender conditions at the respective rates quoted by us.

I/We have deposited the Earnest Money Deposit (EMD), which amount is not to bear any interest and I/We do hereby agree that this sum shall be forfeited by me/us if I/We revoke/withdraw/cancel my/our tender or if I/We vary any terms in our tender during the validity period of the tender without your written consent and/or if in the event of Visakhapatnam Steel Plant accepting my/our tender and I/We fail to deposit the required security money, execute the Agreement and/start the work within reasonable time (to be determined by the Engineer) after written acceptance of my/our Tender.

SIGNATURE OF THE TENDERER



**RAHSTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM - 530031**

BILL OF QUANTITIES

PR No / Date: 73003878 / 07.11.2018	Report Date : 07.11.2018
Pur . Org.: WORKS CONTRACTS	
MSS: 5150615001 : MAINT OF EXP UNITS OF ASP-2 COMPLEX	
MAINT OF EXP UNITS OF ASP-2 COMPLEX	

The BOQ Items are taken as per the following Rates.						
	Central Rates	VSP Rates				
Skilled	593.000	988.650				
Semi Skilled	506.000	848.450				
Unskilled	448.000	753.350				
Sl.No	Service Number	Description of the item	Qty	UOM	Rate	Amount
1	510005842	PREVENTIVE MAINTENANCE INSPECTION OF EQUIPMENT AS MENTIONED IN SCOPE OF WORK	986.000	EA	1,112.59	1,097,013.74
2	510005843	CONDITION MONITORING OF EQUIPMENT AS MENTIONED IN SCOPE OF WORK	484.000	EA	1,112.59	538,493.56
3	510005844	FORTNIGHTLY/ MONTHLY SCHEDULED MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	208.000	EA	1,112.59	231,418.72
4	510005845	QUARTERLY SCHEDULED MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	52.000	EA	1,735.88	90,265.76
5	510005846	HALF YEARLY/ ANNUAL SCHEDULED MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	80.000	EA	2,225.17	178,013.60
6	510005847	TYPE-A TROUBLE SHOOTING JOBS AS MENTIONED IN SCOPE OF WORK	325.000	EA	556.30	180,797.50
7	510005848	TYPE-B TROUBLE SHOOTING JOBS AS MENTIONED IN SCOPE OF WORK	185.000	EA	1,112.59	205,829.15
8	510005849	TYPE-A ROUTINE MAINTENANCE JOBS LIKE LEAKS RECTIFICATION, GREASING OF BRGS, STRAINERS CLEANING ETC. AS MENTIONED IN SCOPE OF WORK	450.000	EA	556.30	250,335.00
9	510005850	TYPE-B ROUTINE MAINTENANCE JOBS LIKE OIL/ REFRIGERANT TOP UPS, FILTERS CLEANING, GLAND PACKING REPLACEMENT ETC. AS MENTIONED IN SCOPE OF WORK	225.000	EA	1,112.59	250,332.75
10	510005851	TYPE-C ROUTINE MAINTENANCE JOBS LIKE DIAPHRAGMS REPLACEMENT, RUBBER SEALS REPLACEMENT ETC. AS MENTIONED IN SCOPE OF WORK	208.000	EA	1,735.88	361,063.04
11	510005852	TYPE-D ROUTINE MAINTENANCE JOBS LIKE VALVES GEAR BOX SERVICING, NRV'S SERVICING ETC. AS MENTIONED IN SCOPE OF WORK	205.000	EA	2,225.17	456,159.85
12	510005853	TYPE-E ROUTINE MAINTENANCE JOBS LIKE ALIGNMENT, BELTS REPLACEMENT, MANHOLE COVERS REMOVAL ETC. AS MENTIONED IN SCOPE OF WORK	105.000	EA	2,777.81	291,670.05
13	510005854	3" AND BELOW SIZED SAFETY VALVES MAINTENANCE JOBS	31.000	EA	2,225.17	68,980.27
14	510005855	3" ABOVE SIZED SAFETY VALVES MAINTENANCE JOBS	10.000	EA	4,450.33	44,503.30
15	510005856	3" AND BELOW SIZED VALVES PISTON OPERATED ACTUATORS MAINTENANCE JOBS	4.000	EA	8,900.65	35,602.60
16	510005857	3" ABOVE SIZED VALVES PISTON OPERATED ACTUATORS MAINTENANCE JOBS	4.000	EA	11,111.27	44,445.08



RAHSTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM - 530031

BILL OF QUANTITIES

Sl.No	Service Number	Description of the item	Qty	UOM	Rate	Amount
17	510005858	3" AND BELOW SIZED VALVES DIAPHRAGM OPERATED ACTUATORS MAINTENANCE JOBS	4.000	EA	3,471.74	13,886.96
18	510005859	3" ABOVE SIZED VALVES DIAPHRAGM OPERATED ACTUATORS MAINTENANCE JOBS	4.000	EA	6,675.49	26,701.96
19	510005861	LIQUID ARGON PROCESS/ LIQUID ARGON BACK UP PUMPS MAINTENANCE JOBS	3.000	EA	5,207.64	15,622.92
20	510005864	OIL PUMP MAINTENANCE JOBS	2.000	EA	6,675.49	13,350.98
21	510005865	3" AND BELOW SIZED ELECTRIC/ PNEUMATIC OPERATED GLOBE/ GATE/ BUTTERFLY/ PLUG VALVES MAINTENANCE JOBS	7.000	EA	4,450.33	31,152.31
22	510005866	3" ABOVE SIZED ELECTRIC/ PNEUMATIC OPERATED GLOBE/ GATE/ BUTTERFLY/ PLUG VALVES MAINTENANCE JOBS	6.000	EA	6,675.49	40,052.94
23	510005867	ALL GLOBE/ GATE/ BUTTERFLY/ PLUG MANUAL VALVES/ NRV'S MAINTENANCE JOBS	8.000	EA	3,471.74	27,773.92
24	510005868	HEAT EXCHANGERS MAINTENANCE JOBS	4.000	EA	19,444.76	77,779.04
25	510005869	OIL COOLERS MAINTENANCE JOBS	2.000	EA	3,471.74	6,943.48
26	510005872	LIQUID DISPOSAL VAPORISER FAN MAINTENANCE JOBS	2.000	EA	3,471.74	6,943.48
27	510005873	TYPE-A REFRIGERATION UNIT MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	2.000	EA	11,125.80	22,251.60
28	510005874	TYPE-B REFRIGERATION UNIT MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	3.000	EA	6,943.49	20,830.47
29	510005875	QUALIFIED TECHNICAL ASSISTANT	1,227.000	MDY	988.65	1,213,073.55
30	510005876	MISC REPAIR/ MAINTENANCE JOBS ON EQUIPMENT BY PROVIDING SKILLED MANPOWER SUPPLY	325.000	MDY	988.65	321,311.25
31	510005877	MISC REPAIR/ MAINTENANCE JOBS ON EQUIPMENT BY PROVIDING SEMI SKILLED MANPOWER SUPPLY	100.000	MDY	848.45	84,845.00
32	510005878	MISC REPAIR/ MAINTENANCE JOBS ON EQUIPMENT BY PROVIDING UNSKILLED MANPOWER SUPPLY	325.000	MDY	753.35	244,838.75
33	510007561	TYPE-A HIGH PRESSURE LIQUID OXYGEN PUMPS MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	3.000	EA	3,093.15	9,279.45
34	510007562	TYPE-B HIGH PRESSURE LIQUID OXYGEN PUMPS MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	3.000	EA	8,914.75	26,744.25
35	510007563	LIQUID ARGON/ NITROGEN/ OXYGEN TRUCK LOADING PUMPS/ CRUDE ARGON COLOUMN PUMPS MAINTENANCE JOBS	3.000	EA	6,367.67	19,103.01
36	510007564	TYPE-A EXPANSION TURBINES MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	1.000	EA	3,093.15	3,093.15
37	510007565	TYPE-B EXPANSION TURBINES MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	1.000	EA	8,914.75	8,914.75
38	510007566	TYPE-A MAINTENANCE JOBS ON WATER PUMPS AS MENTIONED IN SCOPE OF WORK	2.000	EA	4,791.88	9,583.76
39	510007567	TYPE-B MAINTENANCE JOBS ON WATER PUMPS AS MENTIONED IN SCOPE OF WORK	2.000	EA	6,186.31	12,372.62
40	510007568	TYPE-C MAINTENANCE JOBS ON WATER PUMPS AS MENTIONED IN SCOPE OF WORK	3.000	EA	10,917.71	32,753.13



**RAHSTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM - 530031**

BILL OF QUANTITIES

Sl.No	Service Number	Description of the item	Qty	UOM	Rate	Amount
41	510007569	TYPE-A DERIMING JOBS AS MENTIONED IN SCOPE OF WORK	4.000	EA	6,186.31	24,745.24
42	510007570	TYPE-B DERIMING JOBS AS MENTIONED IN SCOPE OF WORK	10.000	EA	924.93	9,249.30
43	510007571	MAINTENANCE JOBS OF INST AIR COMPRESSORS AS MENTIONED IN SCOPE OF WORK	2.000	EA	3,244.28	6,488.56
44	510007572	BLOWERS MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	2.000	EA	1,789.38	3,578.76
45	510007573	TYPE-A LIQUID NITROGEN PUMPS MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	2.000	EA	3,093.15	6,186.30
46	510007574	TYPE-B LIQUID NITROGEN PUMPS MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	2.000	EA	10,188.28	20,376.56
47	510007575	TYPE-A CRANE MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	1.000	EA	5,094.14	5,094.14
48	510007576	TYPE-B CRANE MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	3.000	EA	1,849.86	5,549.58
49	510007577	OXYGEN FILTER/ STRAINER (MONEL) MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	2.000	EA	5,094.14	10,188.28
50	510007578	OXYGEN SINTERED BRONZE FILTERS MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	2.000	EA	10,188.28	20,376.56
51	510007579	TYPE-A COOLING TOWER FAN MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	1.000	EA	10,188.28	10,188.28
52	510007580	TYPE-B COOLING TOWER FAN MAINTENANCE JOBS AS MENTIONED IN SCOPE OF WORK	1.000	EA	5,094.14	5,094.14
Total Value: In words : sixty seven lakh forty one thousand two hundred forty two rupees forty paise						6,741,242.40

Signature of the Tendere