

FORM 'C'
RASHTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
WORKS CONTRACTS DEPARTMENT
VISAKHAPATNAM-530031
PHONE NO: (MAX)3691, TELEFAX NO:0891-2518763

Name of the work : Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant

TENDER NO: 76322-0

PERIOD OF CONTRACT : 24 (Twenty Four) months
DEFECT LIABILITY PERIOD : 03 (Three) months
ENGINEER : AGM (M) / TPP

ISSUED TO SRI/ M/s. _____

TECHNO-COMMERCIAL BID (Part-1)

Note: Tenderer has to fill the data wherever and whatever required in the tender schedule without fail and sign all the pages

No of pages of BOQ alone : NIL
Total No. of pages : 61 (SIXTY ONE) pages only

(FOR OFFICE USE ONLY)

1. E.M.D. PARTICULARS	:	
2. Sl.No.	:	OUT OF TENDERS
3. COVERING LETTER	:	NO. OF PAGES:
4. REBATE OFFERED	:	
5. RATE WRITTEN IN WORDS	:	
6. VALIDITY OF TENDER	:	4 MONTHS FROM THE DATE OF OPENING
SIGNATURE OF CONTRACT DEPT. REPRESENTATIVE		SIGNATURE OF FINANCE DEPARTMENT REPRESENTATIVE

RINL VIGILANCE TOLL FREE NO. **1800 425 8878**

VISAKHAPATNAM STEEL PLANT
WORKS CONTRACTS DEPT., VISAKHAPATNAM -530031 (A.P.)
TELEFAX: 0891-2518763 TEL NO: 0891-2758705, 2518763
OPEN TENDER NOTICE NO:VSP/WC/TPP/76322-0/OT/2016 Dt: 25.10.2016

1. Sealed tenders on **TWO-BID System (Techno-Commercial bid and Price bid)** along with Earnest Money Deposit (EMD) are invited from experienced contractors for the following work:

Tender No:	Name of the work
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76322-0 Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant

- Note :**
1. Similar Experience requirement : "Tenderer to be IBR Licenced repairer with experience in repair or erection of HP boiler"
 2. Statutory requirement : "Contractor should possess a valid Licence for carrying out Category-1 Boiler repairs, issued / endorsed by Boiler Inspectorate, AP"
 3. a) Tenderers are required to unconditionally accept the "Integrity Pact" enclosed to the tender document and shall submit the same duly signed along with their offer. Offer of the tenderers received without Integrity Pact duly signed, shall not be considered.
 b) The External Independent Monitors (EIM) is Sri Venugopal K. Nair, IPS (Retd)., Sri Siva Prasada Rao. The bio-data of Sri Venugopal K. Nair & Sri Siva Prasada Rao are available in VSP website.
 c) The Nodal Officer is Sri P. K. Mishra, GM (MM), VSP. He can be contacted at Phone No. 09989926882 and at e-mail: prasannamishra@vizagsteel.com

4. Welfare allowance is applicable for this work

Tender Number	Cost of Tender Document (Non-refundable)		Eligibility/ experience requirements		Earnest Money Deposit (₹)
	By hand (₹)	By download (₹)	Value of single similar work executed (₹ in Lakhs)	Annual Turn over (₹ In Lakhs)	
76322-0	1800/-	1800/-	79.79	47.87	3,75,000/-

2. Cost of Tender document(s) shall be paid in the form of Demand Draft / Pay Order / Banker's Cheque, obtained from any Nationalized or Scheduled Bank in India, drawn in favour of RIN Ltd., payable at Visakhapatnam and shall be valid for a minimum period of one month from the date of opening of tender i.e., Envelope-1 (Pre-qualification documents). **THE COST OF TENDER DOCUMENT(S) RECEIVED ALONGWITH TENDER DOCUMENT WILL NOT BE REFUNDED UNDER ANY CIRCUMSTANCES UPON RECEIPT OF TENDER.**
3. The value of **single similar work** executed shall be during the **last 07(Seven) years** ending last day of month previous to Tender Notice date i.e: **30-09-2016** and Turnover shall be the average Annual Financial Turnover during the last 03 (Three) years ending 31st March of the previous financial year i.e., **31-03-2016**. The tender document shall be accompanied with copies of (a) 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 Service Tax*. In case of work executed outside VSP, and where the total amount includes Service Tax, tenderers shall make efforts to get the value of Service Tax 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 Service Tax with certification of satisfactory performance of the Contractor to that extent and continuance of the said work by the respective employer (b) for Turn Over Audited balance sheets certified by Practicing Chartered Accountant in case the annual Turn-over is more than ₹40.00 Lakhs (or) in case of Turn-Over being less than ₹40.00 lakhs either Turn-over certificate in the prescribed format of VSP duly signed by a practicing Chartered Accountant/Cost Accountant or T.D.S. certificate(s) comprising of the Gross bill values issued by the Deductor(s) for the work done. (c) Copy of registration letter issued by V.S.P in case of registered**

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agencies and incase of non registered agencies, either a copy of Notarized sole Proprietorship or a copy of Partnership deed or a copy of Memorandum of Association & Articles of association along with certificate of registration- whichever is applicable . **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.

NOTE :

- 1) TENDERERS SHALL SUBMIT PF REGISTRATION CERTIFICATE IF AVAILABLE, IF NOT AVAILABLE SUCCESSFUL TENDERER SHALL SUBMIT PF REGISTRATION CERTIFICATE BEFORE COMMENCEMENT OF THE CONTRACT.
 - 2) THE SUCCESSFUL TENDERER SHALL PRODUCE REGISTRATION CERTIFICATE UNDER APVAT ACT, WHEREVER APPLICABLE, BEFORE SIGNING THE WORK ORDER / LOA AND SUBMIT A COPY OF THE SAME.
- 4.0 The tenderers are requested to note that :
- 4.1 The offer shall be made in **02(two) envelopes. First envelope** (to be super scribed as Envelope-1 with name of the work, tender no.) should contain the cost of the tender document in case the tender is downloaded from the web site (Tender can be purchased from the office of DGM(WC) I/c by paying tender cost in the form of DD/PO/BC as cited at para-2 above in which case tender cost need not be enclosed while submitting the tender), Earnest Money Deposit(EMD) separately in the form of DD/PO/BC etc (refer to instruction to tenderer) and pre-qualification documents(Criteria eligibility/experience and other documents etc.) as per para-1 read with para-3 above along with TECHNO-COMMERCIAL BID WITH FILLED IN QUESTIONNAIRE, ALONGWITH DETAILS OF EXPERIENCE AND SUPPORTING DOCUMENTS, duly signed / attested by the authorized representative of the company. **Second envelope** (to be super scribed as Envelope-2 with name of the work, tender no.) should contain price bid in its prescribed format along with the tender document.
- 4.2 The first cover shall be opened initially and only on satisfying the eligibility criteria **INCLUDING TECHNICAL ACCEPTABILITY**, adequacy of cost of tender document (incase of downloaded tender) and EMD etc., placed in it, the second envelope containing the price bid shall be opened. The date and time of opening of the price bid along with names of successful tenderers in pre-qualification & techno-commercial bid will be subsequently displayed in the notice board of Works Contracts only and no individual communication to tenderers will be made.
- 4.3 Scope of work, Bill of Quantities (BOQ), Terms & Conditions given in the tender documents (placed in the website) 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 / issued are found tampered/alterd/ incomplete, they are liable for actions like rejection of the tender, cancellation & termination of the contract, debarring etc., as per the rules of the company.
- 4.4 It will be presumed that the tenderers have gone through the General Conditions, Special Conditions & Instructions to tenderer etc., of the contract available in the website which shall be binding on him/ them.
- 4.5 The tenderer shall download the "TENDER SCHEDULE" available on the website in totality and submit the same duly signed on each page. **Any time prior to the deadline for submission of bids, Works Contracts department may, for any reason, modify the tender terms and conditions by way of an amendment, such amendment will be notified on RINL's website at regular intervals.**
- 4.6 **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, by clearly stating the extent of updation done to their original offer and the order of prevalence of revised offer vis-à-vis original offer. The employer reserves the right to open the original offer along with revised offer(s).**
- 5.0. The tender documents and other details can be downloaded from our web site: **www.vizagsteel.com** and the same are to be submitted to the Dy. General Manager (Works Contracts) I/c, Visakhapatnam Steel Plant duly signed on each page by the tenderer **on or before 03.00 PM on 26-11-2016**
- 6.0. Non-transferable tender document can also be obtained from the office of Dy General Manager (Works Contracts) I/c, VSP on written request on bidder's letter head on payment of tender cost in the form of DD/BC during working hours **10 AM to 4.30 PM on or before 04.30 PM on 25-11-2016**
- 7.0. Tenders will be received in the office of Dy General Manager (Works Contracts) I/c, **up to 03.00 PM on 26-11-2016 and Envelope-1 will be opened immediately there after.**
- 8.0 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.
- 9.0 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**

- 10.0 The date of opening of the pre-qualification cover (envelope-1) shall be the date of tender opening in respect of both the single bid and two-bid (techno-commercial and price-bid).
- 11.0 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 P.F. Regn./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.**
- 12.0 Tender documents will be issued to tenderers based on their request and on payment of tender cost or same can be downloaded from our web site by submitting the cost of tender along with their offer. However, 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) Issue or Refuse tender documents without assigning any reason. (b) Split and award the work to more than one agency, (c) 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 cost of tender documents thereupon.

For Dy General Manager (Works Contracts) I/c

RINL VIGILANCE TOLL FREE NO. **1800 425 8878**

FORM – A

Ref. Tender No. **76322-0**

Name of the Work : Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant

To
Dy General Manager I/c
Works Contracts Department
Visakhapatnam Steel Plant
Visakhapatnam-530 031.

Sirs,

With reference to the Notice Inviting Tender, I/We have gone through the tender documents issued to us. 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 Terms and Conditions of 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 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.

- Status of the firm (mark)
- Proprietary /Partnership/others (Specify)

* Authority to Sign:

- a) Proprietor
 - b) Managing Partner
 - c) Power of attorney holder
- Name of Partners:
- 1)
 - 2)
 - 3)

Following Details are to be furnished by the tenderer compulsorily (neat&legible) while submitting the tender schedule	
Income Tax PAN No.	
Status/Reason for not having PAN No.	
OFFICIAL ADDRESS	
<p>Phone No:</p> <p>Cell No :</p> <p>Fax No.:</p> <p>e-mail address:</p>	

Yours faithfully,

(Signature of Contractor)

Name:.....

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INSTRUCTIONS TO TENDERERS

- 1.a) Tenders shall be submitted in the office of the Dy General Manager (Works Contracts) I/c, Visakhapatnam Steel Plant, Visakhapatnam – 530 031.
- b) Tenders shall be submitted in the prescribed form issued by VSP. The Tender documents issued are not transferable. Tender documents issued/downloaded shall be submitted wholly without detaching any part.
- c) The Tenderer shall agree to VSP's terms and conditions, specifications/scope of work, etc., and quote their **"Total Amount only"** accordingly.
- d) Tender shall be for the entire scope of work mentioned in the tender documents.
- e) Tenderer **"Shall quote only the Total Amount in figures and in words"**. Over writing is not permitted and corrections are to be essentially initialed. Amount quoted in words shall govern in case of variance between figures and words.
- f) The **"Total Amount quoted in figures and words shall be tallied"** before submission of the tender and all mistakes corrected and initialed. Quotation shall preferably be type written or written in neat and legible handwriting. All the pages of tender documents shall be signed by the tenderer.
- g) **Respective tenderers participating in the tenders due for opening on the scheduled day, can witness the opening of tenders/price bid on production of valid identity card/gate pass, or alternately, shall give a duly signed authorization to their designated representatives who are nominated if they wish to witness the tender/price bid opening. However, if any person is found to obstructing the passage/entry to the tender box, or if any unauthorized person is found in the tender opening room, the designated officer of WCD, incharge for tender submission/opening of bids or the HOD of WCD shall inform the CISF constable present on duty to evict the person. Also, to intimate to CISF in writing, to cancel the Gate Pass for a period of 01 (ONE) year.**
- h) If by any reason the tender opening is postponed to any other date, the details will be displayed in the notice board of Works Contract Department. Tenderers shall see the notice board regularly and keep themselves informed in this matter.
- i) 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.
- j) General Conditions of Contract of VSP for Works Contracts are available in the Office of DGM (Works Contracts) I/c and also in VSP's web site for reference. The tenderers shall study and understand all the relevant provisions before quoting.
- k) Tenders shall be kept open for acceptance for a period 4 (Four) MONTHS from the date of opening of tender i.e., Envelope-1.
- l) After opening of tender, the tenderers may be called for negotiations and the details like date, time etc. will be displayed on the notice board of Works Contract Department. The tenderers shall see the notice board regularly and keep themselves informed in this matter and promptly attend negotiations without fail.
- m) Purchase Preference will be given to PSU's where applicable as per DPE guidelines.
- n) The local Small Scale Industries as approved by VSP and registered with Works Contracts Department of Visakhapatnam Steel Plant in the category of Industrial Paint Manufactures for supply and application of industrial Paints to various structurals, equipment pipelines etc., are eligible for purchase preference as per the policy of VSP in force from time to time. The local small-scale industries, those who are technically and commercially acceptable shall be considered for extension of Purchase Preference, if the offer is within 15% above L-1 price and upon their matching with L-1 price.
- o) The date of opening of pre-qualification envelope-1 shall be the date of tender opening in respect of both the SINGLE BID AND TWO- BID(Techno-commercial and Price bid) tenders.
- p) **Corrections / amendments / replacement to / of the deficient documents / financial instruments for Earnest Money Deposit (EMD) & Cost of Tender Document (CTD) shall not be sought in the following cases where**
 - (a) There is evidence of tampering / unauthorized correction
 - (b) The value of financial instrument (s) / document (s) is falling short of the value stipulated in the NIT
 - (c) The validity of BG (s) as on initial tender opening date (TOD) is falling short of minimum validity period stipulated in the tenderer
 - (d) Discrepancy exists in the name of Payee / Beneficiary
 - (e) The bidder fails to submit CTD and / or EMD in case of submission of a single instrument / document towards both CTD and EMD.

2) EARNEST MONEY DEPOSIT (EMD)

- a) In case of Earnest Money Deposit being less than or equal to Rs.5 Lakhs, Earnest Money Deposit shall be in the form of Demand Draft / Pay Order / Banker's Cheque obtained from any Nationalized or scheduled commercial bank in India, drawn in favour of Rashtriya Ispat Nigam Ltd., Visakhapatnam Steel Plant, payable at Visakhapatnam and shall be valid for a minimum period of one month from the Envelope-1 (Pre-qualification documents) opening date. **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 date of opening of Envelope-1 (Pre-qualification documents). The above shall supercede the instructions regarding "form of EMD" elsewhere in the tender document. The above shall supercede the instructions regarding "Form of EMD" elsewhere in the tender document.**
- b) **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.**
- c) **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 (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.
- d) **EMDs of unsuccessful tenderers will be refunded after reasonable time without interest.**

3) MODE OF SUBMISSION OF TENDER

- a) Tender shall be submitted in two separate sealed covers. In case of single bid tender, the first cover shall contain the D.D. / Pay Order / Banker's Cheque for Earnest Money Deposit / Cost of Tender Document / EMD exemption documents for PSUs & MSE units registered with NSIC, other pre-qualification documents etc. and the second cover shall contain the tender.
- b) In case of two bid system, the first cover shall contain the techno-commercial bid part of tender, along with the other bank instruments / documents indicated in para 3(a) above, and the second cover shall contain only the price bid part of tender.
- c) The two sealed covers as mentioned above shall be stapled / tied together and submitted. The first cover will be opened first and only if the submitted documents / instruments are found to be as per NIT requirement, will the second cover containing the price bid be opened.
- d) Tenders not satisfying the requirements as per NIT will not be opened.

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 Registration Certificate under APVAT Act, wherever applicable, before signing the Work Order / Letter of Acceptance and submit a copy of the same.
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

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- 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 service tax 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) The benefit offered by the agency (other than Service Tax) will be deducted from each bill on the offered percentage basis. Amount so recovered shall be released, limiting to the percentage of benefit offered on the quoted price, only on receipt of credit by VSP.
 - d) The prices are exclusive of Service Tax. RINL-VSP will pay Service Tax as applicable on submission of Invoices in accordance with Rule 4A (1) of Service Tax Rules 1994.
The contractor will be paid Service Tax by RINL-VSP along with monthly service charge bills for further deposit with Central Excise Authorities. The contract will, in turn, submit the documentary evidence in support of payment of Service Tax of each month along with subsequent month RA Bills.
 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".

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- 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 category wise are as follows:

I. Category-I of Safety Violations:

Penalty amount: First offence Rs.100/-, 2nd or subsequent offences Rs.300/-

- (1) Occasional violation of not wearing crash helmet;
- (2) Driver of two wheeler carrying more than one pillion rider;
- (3) Wrong parking of vehicle.

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

Penalty amount: 1st violation Rs.2500/-, 2nd violation Rs.10,000/-, 3rd & subsequent violations Rs.20,000/-

- (1) Working at Height without Height-pass;
- (2) Unauthorized entry at hazardous location;
- (3) Engaging workers without safety training;
- (4) Proper ladder/steps not provided for working;
- (5) Failure to provide proper Shuttering at excavation works;
- (6) Power connection taken from board without proper board plug;
- (7) Fitness certification of cranes/hydra/heavy vehicles not available;
- (8) Crane rope conditions not ok;
- (9) Not wearing safety helmet/safety shoe at site;
- (10) Safety goggles/Hand gloves not used;
- (11) Gas cutting without goggle;
- (12) Rolling/lifting of cylinder/dragging on the ground (without cage);
- (13) Welding with non-standard holder;
- (14) Welding machine earthing (double body earthing) not done;
- (15) Gas hose pipe clamping done by wires;
- (16) LPG cylinder date expiry/over;
- (17) Loading/unloading of cylinder – cushion not given;
- (18) Condition of hose pipe not good;
- (19) Working with leaking cylinder;
- (20) Using non-power cable instead of welding cable;
- (21) Working without work permit/shut down;
- (22) Not putting red flags/stoppers;
- (23) Dismantling of structure without authorized plan;
- (24) Unauthorized Oxygen/Nitrogen tapping;
- (25) Not having proper gate passes/other area passes;
- (26) Use of damaged slings/tools/ropes;
- (27) Use of hand grinders/mixer machines without guard;
- (28) Not reporting of accident;
- (29) Taking shelter behind Electrical panel;
- (30) Driving of heavy vehicles on the road during restricted hour;
- (31) Truck side panel Broken/Not Ok;
- (32) Dropping/Spillage of material on the road;
- (33) No number plate on vehicle;
- (34) No indicator light/brake light on vehicles;
- (35) Driving Dangerously;
- (36) Overloading of vehicles beyond CC weight;
- (37) Racing and trials of speed, overtaking heavy vehicles;
- (38) Moving vehicles in unauthorized restricted routes;
- (39) Talking with cell-phone while driving;
- (40) Truck carrying powdery material without Tarpaulin;
- (41) Vehicles without Red flags/Red lights, side-guards & Donnage;
- (42) Stock protruding out of the truck body;

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III. Category-III of Safety Violations (Major Violations):

Penalty amount: 1st violation Rs.7,500/-, 2nd & subsequent violations Rs. 15,000/-

- (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 properly;
- (4) Throwing/dropping of material from height;
- (5) Proper ladder/approach not given for working at height;
- (6) Walkway/Cross over not provided;
- (7) No barricading of excavated pits;
- (8) No top cover on power distribution board;
- (9) Sleeping under truck;
- (10) Absence of Supervisor at height-works, confined space jobs and other hazardous jobs;
- (11) Welding screen/Face shield, welder gloves not used;
- (12) Driving vehicles without valid driving licence;
- (13) Driving by an Drunken person.

IV. Category-IV of Safety Violations (High-Risk Violations): Penalty amount: Rs. 15,000/-

- (1) Failure to use Full body harness with double lanyard;
- (2) Life line of Full body harness not anchored;
- (3) Floor opening left unguarded in the area of work;
- (4) Working at roof without daily permit;
- (5) Working in confined space without Confined-space work-permit;
- (6) Violation of electrical shutdown/PTW;
- (7) Violation of HOT work permit system

V. Category-V of Safety Violations: (The penalties will be imposed on agency in case the reasons to the accidents are attributable to the agency).

- (1) **Serious injuries and permanent disabilities** - Penalty amount: Rs. 1,00,000/- or 2.5% of contract value whichever is less;
- (2) **Fatal accident cases** - Penalty amount: Rs.2,00,000/- or 10% of contract value whichever is less.

- (1) 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.
- (2) Independent of the above, the contractor shall be debarred or deregistered from taking up further contractual work in VSP in case any repeated fatal accident after 3rd incident for the reasons attributable to contractor.

Note: 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).

- (3) Without prejudice to the right conferred for stoppage of work for violation of safety rules, the contractor shall be liable for penalty at the rates indicated above depending upon the category of violation.
- (4) Operating authority will assess the penalty amount having regard to all the circumstances in particular in nature and gravity of the violation on the advice of Head of the Safety Engineering Department and will issue a show cause notice specifying therein the proposed penalty. Considering the cause shown by the contractor, if any, the operating authority shall pass final orders which shall then be binding on the contractor. The penalty amount shall be recoverable from any bill and / or EMD / Security Deposit of the contractor without any further reference to him.

- 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".

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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:
- Time for mobilization after issue of FAX Letter of Intent/detailed Letter of Intent / Work Order shall be:
 - 03 (Three) days for Capital Repairs
 - 15 days for Civil Works
 - 60 days for painting works of Structural Engineering Department
 - 07 (Seven) days for Annual Mechanical, Electrical and works of technological assistance/cleaning.
 - 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.
 - 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 of 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.
- Xo = 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 Xo & L:

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

$$X_o = \frac{(a \cdot USR_o + b \cdot SSR_o + c \cdot SKR_o)}{(a+b+c)}$$

$$L = \frac{(a \cdot USR_o + b \cdot SSR_o + c \cdot SKR_o)}{W}$$

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

- USRo= VSP approved Rate for USW indicated based on which the Estimate of work was prepared,
- SSRo= VSP approved Rate for SSW indicated based on which the Estimate of work was prepared,
- SKRo= 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)

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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 ₹.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 @ ₹80.76ps per day of actual attendance of each worker deployed in the contract not exceeding ₹.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.
- 37.2.3. 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.
- 37.2.4. 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.25.23 ps, SSK —Rs.28.57ps, SK —Rs.33.47 ps
- 2) Component ——— Retrenchment compensation
Recovery amount per labour per every working day —
USK —Rs.12.61 ps, SSK —Rs.14.29 ps, SK —Rs.16.73 ps
- 3) Component ——— Leave with wages
Recovery amount per labour per every working day
USK —Rs.15.52 ps, SSK —Rs.17.58 ps, SK —Rs.20.59 ps

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.53.36 ps, SSK —Rs.60.44 ps, SK —Rs.70.79 ps

- 4) Component ——— Bonus
Recovery amount per labour per every working day
USK —Rs.11.55 ps, SSK —Rs.11.55 ps, SK —Rs.11.55 ps

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.64.91 ps, SSK —Rs.71.99 ps, SK —Rs.82.34 ps

10% towards profit and over heads of contractor

USK —Rs.06.49 ps, SSK —Rs.07.20 ps, SK —Rs.08.23 ps

Total recovery amount

USK —Rs.71.40 ps, SSK —Rs.79.19 ps, SK —Rs.90.57 ps

Note:

- i) The above recovery rates are effective from 01/10/2015. 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:
Desgn:

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 CENVAT AGAINST EXCISE DUTY:
- a) *The tenderer shall specify the percentage of CENVAT benefit on quoted price for which they shall furnish the duty paying documents.*
- b) The successful tenderer shall take necessary steps to comply with the rules and provisions of central excise and service tax law facilitating VSP to avail CENVAT credit.
- c) The amount of CENVAT benefit declared shall be deducted from the tendered price for the purpose of tender evaluation i.e. the evaluation shall be on the net of CENVAT benefit.
- d) The invoice raised by the Contractor should clearly mention VSP as the consignee (Consignee: RINL, VSP, A/c: Name of the contractor). It should be ensured that material has been delivered along with the duplicate for transporter copy of the invoice, based on which CENVAT credit is to be claimed.
- e) The duty paying documents shall be submitted as soon as the material is procured by the agency for incorporation in the work. The CENVAT benefit offered by the agency will be deducted from each bill on the offered percentage basis and will be released to the extent CENVAT benefit could be availed by VSP. The contractor shall extend all possible help to facilitate VSP to avail CENVAT benefit. If CENVAT benefit could not be availed by VSP due to reasons attributable to the contractor, such amount will not be released by VSP.
- f) In the event the CENVAT benefit realized by VSP (based on documents) is in excess of the CENVAT benefit offered by the agency/contractor, the refund will be restricted to the benefit offered by the agency. The excess amount realized from Excise Authorities will be to the credit of VSP only.
- g) 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 CE Act.
44. RINL reserves the right to reject the offers of tenderers whose performance is poor in awarded / ongoing works if any.

SCOPE OF WORK

Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

Cond No	Cond Desc
01.00	INTRODUCTION
01.01	CDCP Boilers: Hot coke at a temperature of 1050 Deg C approx is periodically pushed from the 4 Coke Oven batteries, into Coke Buckets over the Coke Cars and is then taken to one of the 4 CDCP Blocks. Each CDCP Block is having 4 Cooling Chambers, each one of them associated with a Heat recovery Boiler. In the CDCP, the Coke Bucket is charged into the cooling chamber after lifting it to the chamber top. After Charging, as the hot coke flows down the cooling chamber, it is cooled by counter flowing circulating gases. Circulating gases get heated up in the process and reaches the Boiler at a temperature of 800 DegC aprox, after passing through a Dust Catcher. In CDCP Boiler, the circulating gas gets cooled to 150 Deg C and each such Boiler produces 25 TPH of Super Heated steam at a Pressure of 40 Ata and a temperature of 450 DegC. These Boilers have Economisers, Evaporators, Super Heaters, & Circulation water pumps. The Feed water Pumps are installed in CDCP1 and CDCP 4 and are common for all CDCP Blocks. The steam output, Feed Water inlet, PRDS outlets and Service Water lines etc are interconnected among the CDCP Boilers.
01.02	CDCP 1,2&3 Boilers: Boilers of CDCP Blocks 1,2 &3 are of Russian make, double shaft design, and don't have membrane walls. Their shell walls are refractory lined from inside. Numbered 1 to 12, these Boilers do not require scaffolding work to access any pressure part.
01.03	CDCP4 Boilers: Boilers of CDCP Block 4, numbered 13 to 16, are of Indian make, single shaft design, and have Membrane walls for their sides and roof. Scaffolding is required to access many of their pressure parts, for overhauling.
01.04	AUXILLIARY UNITS OF TPP: Auxilliary units of TPP referred in the scope of this specification consist of the following units. (1) Back Pressure Turbine Station (BPTS) housing 2 nos of 7.5 MW Back Pressure Turbines, 4 PRDS stations, and various steam pipelines carrying steam at 2.5 ata, 7 ata, 13 ata and 40 ata Pressure which are all coming under the purview of IBR. (2) Chilled Water Plant-1 (CWP-1) inside BPTS Premises where 5 nos of 1000TR VA Chillers and Various Chilled Water Pumps are installed. Chillers have 2.5 ata steam inlets, which are also covered under IBR. (3) Gas Expansion Turbine Station (GETS) near Blast Furnaces, housing 2 nos of 12MW Gas Expansion Turbines. 13 ata steam is used to operate the Thermal Gate Valves of GETS. (4) The steam Pipe lines, Feed Water Pipelines, etc laid over the Overhead Pipe Gallery by roadside, which interconnect all CDCP Boiler Blocks, BPTS and GETS also fall under the domain of this.
01.05	SCOPE OF WORK: The scope of the subject work is divided into 4 parts, i.e, PART- A, PART-B, PART -C and PART-D as follows.
01.06	PART -A : Scope of work covered in this part (From Clause A-1.00.00 to A-10.00.00 pertains to BOQ serial numbers 1 to 18.
01.07	Clause A-1.00.0 : CAPITAL REPAIR OF CDCP 1,2 & 3 BOILERS: Clause A-1.01.1 : Opening of Boiler man holes. Blank the Feed water line,

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Super Heater steam line , CBD, PBD lines, and all such lines that are connected to common facilities as Phosphate dosing, Preheating line etc, Removing the coke dust from the hopper and transporting the dust to the site shown by the site engineer. After ensuring proper isolation of the Boiler to the satisfaction of Engineer in charge or his representative, Obtain Permit to work , and Entry Permit from concerned agencies. First Entry into the boiler to be made in the presence of Engineer In charge or his representative only.
Cleaning of complete boiler tube surfaces with compressed air/ water jets to remove deposits. Closing of the manholes including gasket replacement after satisfactory completion of hydraulic test by Inspector of boilers.

01.08 Clause A-1.01.02: inspection of pressure parts including economizer, evaporator and super heater for erosion. Tube thickness survey is to be carried out as directed by the Engineer-in-charge. Protective plates and baffle plates should be replaced/repared/repositioned as per need. The required plate will be given by VSP Free of cost. Any defect identified in the structural components also is to be repaired. .
Painting of newly welded structural elements also is under this scope. Paint shall be given free of cost.

Clause A- 1.01.03: Opening of boiler drum, internals cleaning including cyclone separator, setting the cyclone separator clearance and offering for IBR dry inspection. Gasket changing and closing of manhole to clear for hydraulic test.

Clause A-1.01.04: Opening drum and super heater safety valves, overhauling lapping of disc/seat, assembling and fixing back in position. Floating the safety valves (Confirming the Lift and Seat at desired pressures in actual conditions) during boiler steaming.

01.09 Clause A-1.01.05: Slime separator opening, cleaning, changing of gasket and assembling back.

Clause A-1.01.06: Turning of all spectacle blind flanges for blanking and again reversing as per sequential (operational) requirement including gasket replacement.

Clause A-1.01.07: All flow orifices are to be opened, cleaned and reassembled including gasket replacement.

Clause A-1.01.08: All level gauges are to be opened, cleaned overhauled and reassembled.

Clause A-1.01.09: Overhauling/maintenance (By dismantling, cleaning, lapping of seats, changing gland / gasket packing etc) of all boiler limit

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valves including actuators of all boiler limit valves such as manual isolating.

01.10 Clause A-1.01.10: All drain valves, vent valves, which are less than 35 mm dia are to be replaced if need arises. The damaged service water line to sample coolers is to be replaced. The sample heat exchanger is to be overhauled by cutting and re fixing.

Clause A-1.01.11: All feed unit valves (total 10 Nos) circulation pump valves, (2 nos) delivery valves (2 Nos), NRVs(2 Nos) are to be opened and overhauled. Seat lapping, gasket changing are to be done. Cleaning of circulation pump mechanical seal cooler, pump pedestal, bearing housing etc. to be done.

Clause A-1.01.12: Cleaning of the boiler tubes (heating surfaces) and drum internals is to be carried out to the satisfaction of the IBR / statutory authorities. General cleaning of complete boiler, its platforms, loaders/ stair cases, working floor including its auxiliaries is to be carried out. Damaged Shell plates , inside or outside the Boiler shell, including the 5 mm thick plate below Drum are to be made fit for clearance by Statutory authorities during Statutory Hydraulic test.

01.11 Clause A-1.01.13: Associating in hydraulic test, Conducting the Internal hydraulic testing , checking and attending all the leakage points observed during hydraulic test and to make the Boiler fit for Statutory Hydraulic testing. Associate with Engineer In Charge or his representative & Conduct the Statutory hydraulic testing to the satisfaction and acceptance of statutory authorities as well as the Engineer in charge.

Clause A-1.01.14: Removal and fixing of insulation wherever required to carry out all the above works. Necessary modifications of minor nature, not exceeding 10 man days for the upkeep of House keeping in the Boiler Floor/ Pump House , contributing towards OHSAS/ 5S Requirements, as instructed by the Engineer In charge or his representative, also to be done.

Clause A -1.02.01: Replacement of boiler tubes/ IBR Weld joints excluding radiography. The weld joint should be as per IBR. The tube size will be maximum 32 mm dia and 5 mm thickness. The root welding is to be done by TIG welding wherever applicable / possible. The subsequent welding can be TIG or arc welding. Necessary edge preparation / joint preparation are included in the scope of work. Failed weld joints / tubes should be neatly dressed / removed as required.

01.12 Clause A-1.02.02: The defective tubes of CDCP Boilers are to be cut by

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hacksaw and plug the tube by IBR welding. The plugs will be supplied by VSP free of cost.

Clause A-1.03.00: Cutting, removing of boiler shell plate including removal and re-fixing of refractory. Welding back the shell plate, after completion of the work. Necessary Refractory materials will be given free of cost. The repair/refix jobs of refractory associated with the work of cutting, removal and replacement of shell plate shall be done at no extra cost to VSP. If required, painting also is to be done.

Clause A-1.04.00: Repair of structural parts -of Boilers & EOT Cranes of CDCP-1,2,3&4, Structural parts of EOT Cranes in BPTS, GETS, and CWP-1: The damaged structural parts including walkways, Grills, platforms, railings are to be replaced. All required structural materials such as channels, beams, flats, grills will be supplied by VSP free of cost.

Clause A-1.05.00: REPAIR OF CDCP BOILERS TOP PANEL: Repair of CDCP1,2 & 3 Boilers (CDCP 4 Boilers not included) top panel (approx. 2.5 M2) of super heaters by cutting the required plates, beams, rods etc. Placement of stainless steel plates, repair of damaged structures and closing of panel including associated works like platform removing, fixing etc. as per the instructions of Engineer-in-charge.

01.13 Clause A-2.00.00: TUBE LEAKAGE RECTIFICATION WORKS:

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Clause A-2.00.01 : Assist in Isolation / Disconnection of the Tube Leak Boiler Opening of Boiler man holes. Blank the Feed water line, Super Heater steam line, CBD, PBD lines, and all such lines that are connected to common facilities as Phosphate dosing, Preheating line etc. Removing the coke dust from the hopper and transporting the dust to the site shown by the site engineer. After ensuring proper isolation of the Boiler to the satisfaction of Engineer in charge or his representative,

Clause A- 2.00.02 : Obtain Permit to work, and Entry Permit from concerned agencies. First Entry to the Boiler is to be made in the presence of the Engineer in charge or his representative only. Cleaning of complete boiler tube surfaces with Compressed air/ water jets to remove deposits. Closing of the manholes including gasket replacement after satisfactory completion of hydraulic test by Inspector of boilers.

Clause A- 2.00.03: Coke dust removal from boiler bottom by removing runner valves. Collection, shifting and dumping of coke dust to a place shown by Engineer-in-charge.

Clause A-2.00.04: Cleaning of boiler internals as per the instructions of Engineer-in-charge.

SCOPE OF WORK

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01.14	<p>Clause A-2.00.05: Detection of tube leakage and tracing the punctured tube at bottom and top headers.</p> <p>Clause A-2.00.06: Slime separator opening, cleaning and re-assembly as per the need and instructions of engineer-in-charge.</p> <p>Clause A-2.00.07: Tube thickness survey is to be done as directed by Engineer- in-charge for all bundles (economizer, evaporator & Super Heater).</p> <p>Clause A-2.00.08: The boiler is to be inspected thoroughly and any damages to the protective plates, baffle plates, should be replaced / repaired / repositioned as per the need. The required plates will be given by VSP free of cost.</p> <p>Clause A-2.00.09: The gland leakages if found, are to be rectified.</p> <p>Clause A-2.00.10 : Association of Hydraulic Test up to the satisfaction and acceptance of IBR authorities/Engineer-in-charge. Closing of the manholes including gasket replacement after satisfactory completion of hydraulic test .</p>
01.15	<p>Clause A-2.00.11 Cleaning of all boiler platforms, pump house, header floors etc. to be carried out , once the repair work is completed. Necessary modifications if any , of minor nature, not exceeding 10 man days for the upkeep of House keeping in the Boiler Floor/ Pump House , contributing towards OHSAS/ 5S requirements to be done, as instructed by the Engineer incharge or his representative.</p> <p>Clause A-2.00.12: During the course of work, any minor insulation works arises, for which material will be supplied free of cost by VSP, are to be done at no extra cost to VSP.</p>
01.16	<p>Clause A-3.00.00: REPLACEMENT/REPAIR OF VARIOUS PUMP FOUNDATION FRAMES, CRANE PLATFORMS AND WALKWAYS etc AT BPTS , CWP-1 and GETS:</p> <p>The rusted foundation frames of various pumps, channels, Walkways, & MS piping at BPTS and CWP-1 are to be repaired / replaced / newly fabricated & Erected as per requirements and as per the instructions of Engineer-in-charge. The total weight of structural elements /Piping erected will be approximately 5 Tons. After completion of job anti corrosive painting is to be done and paint will be issued by VSP free of cost.</p>
01.17	<p>Clause A-4.00.00: TUBE CLEANING AND ASSOCIATED JOBS IN CHILLERS OF CWP-1: There are total 5 nos. of absorption chillers in Chilled Water Plant-1. Each chiller consists of mainly Generator, condenser, absorber and evaporator. They have to be cleaned twice every year under guidance of</p>

SCOPE OF WORK

Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

Engineer in charge or his representative.

Clause A-4.01.01: DISMANTLING OF CHILLER EXTERNALS :
Dismantling of inlet, outlet cooling water pipe lines..

Clause A-4.01.02: Dismantling of chilled water pipe lines. Cold insulation / cemented portion near the flanges to be removed to facilitate the opening of the flanges.

Clause A-4.01.03: Dismantle the steam pipings, & steam chest cover plate/door.

Clause A- 4.01.04: Make scaffolding for opening the flanges & cover plate / doors on both sides of the chiller.

Clause A-4.01.05: Open the cover plates/doors (cooling water and chilled water chests) on both sides of the chiller for the purpose of tube cleaning.

Clause A-4.01.06: While opening the cover plates if there are any sheared studs they are to be drilled and taken out. New bolts to be fixed after tapping etc.

01.18 Clause A-4.01.07: If the valves are passing they have to be blanked by providing blank plates. Blank plates shall be given by VSP free of cost on returnable basis. If required, the chilled water inlet and outlet gate valves of the chiller are to be replaced with new - reconditioned valves, supplied by VSP at no extra cost

Clause A-4.02.01: CLEANING OF CHILLER TUBES
Tubes are to be cleaned with help of brush mounted on a suitable rod of sufficient length, dia etc. or with suitable rods without damaging the parent metal of the tubes. Service water can be used for the purpose of flushing etc. Suitable brushes are to be arranged by Contractor only.

Clause A-4.02.02: Tubes are to be cleaned to the satisfaction of Engineer-in- charge / his representative.

Clause A- 4.02.03: Tubes are to be checked for leakages with nitrogen and soap solution before and after cleaning of tubes. Leaking tubes are to be plugged. Plugs shall be supplied by VSP Free of cost.

Clause A-4.02.04: Tubes to be cleaned are that of Condenser, Evaporator & Absorber and Generator

01.19 Clause A-4.03.00: CLEANING OF CHILLER TUBES

Clause A- 4.03.01: After cleaning work is completed to the satisfaction of Engineer-in-charge the chiller is to be boxed up.

SCOPE OF WORK

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Clause A-4.03.02: All flange / cover plate/ door mating surfaces are to be properly cleaned.

Clause A-4.03.03: All dismantled pipe lines, cover plates, doors are to be reassembled with new gaskets including the gasket of steam side chamber chest cover plate / door.

Clause A-4.03.04: After completing assembly of cover plates, pipes etc. the chiller is to be tested for any leak. Leaks if any, are to be rectified.

Clause A-4.03.05: The removed cold insulation/ cemented portion of the equipment / piping is to be put back. Material required for the job shall be given free of cost by VSP.

Clause A-4.03.06: Painting of the equipment / piping in the chiller area is to be carried out, if asked by the Engineer-in-charge. . Paint shall be given by VSP free of cost.

Clause A-4.03.07: The total job of chiller dismantling, cleaning & boxing up is to be completed within 30 days from the date of issuing work permit.

01.20 Clause A-5.00.00 : COMPLETE OVER HAUL OF ONE CHILLER IN CHILLED WATER PLANT NO:1

Clause A-5.00.01: The job involves Opening of the Water inlet and outlet manifold covers. Chemical cleaning of Evaporator , Absorber, Condensor tubes is to be carried out as per the need and under the instructions of Engineer in charge or his representative. mounting of suction, delivery and vent piping , pump for circulating acid or any other cleaning solution as selected by Engineer in charge, tank, mixing of solution of required chemical. Inhibitor, etc. All materials, equipments (Pump etc) and solutions will be issued by VSP, free of cost. Requirement of Chemical cleaning will be determined only after inspection of the inner surface of the tubes by Engineer in charge. If Chemical cleaning is not required , Back washing by Service water is to be carried out.

Clause A-5.00.02: Rectification of all leaks as noticed in Nitrogen pressure test. If required servicing of any or all the valves, pumps, flanges, level gauges, view glasses, replacement of packings, "O" rings, glasses, glands etc. are to be carried out as per the directions of Engineer in charge or his representative.

01.21 Clause A-5.00.03: Achieving vacuum holding/pressure bearing capacity of the chiller as per engineer-in-charge instructions. If required servicing of all diaphragm valves, solenoid valves and any other valve is to be carried out. If required servicing of steam control valves, isolation valves also

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are to be done.

Clause A-5.00.04: In certain cases, due to excess contamination of Lithium Bromide, or for any other shell repair reasons, if the Engineer In Charge decides to drain off Lithium Bromide, Assistance is to be provided in draining of all fluids (Lithium Bromide solution, refrigerant solution) into containers without spillage ; Assistance to be provided in filtering of the fluids.

Clause A-5.00.05: Charging back of Li Br, and distilled water after filtering.

01.22 Clause A-5.00.06: If any damaged tubes are found the same are to be plugged. Plugs will be supplied by VSP free of cost.

Clause A-5.00.07: Back Flushing Operation: Isolation of all Service Water and steam lines, Opening up of the water inlet chests of Absorber , Evaporator and Condenser in the sequence told by the Engineer In charge, followed by repeated opening and closing of Service water Outlet valve, to flush out all the impurities . After flush out the corresponding chests are to be tight closed. Any other job of minor scale as per instructions of Engineer-in-charge also is to be done.

01.23 Clause A-6.00.00: SAND BLASTING OF GAS EXPANSION TURBINE ROTOR, GUIDE BLADES AND OTHER MISCELLANEOUS WORKS:

Clause A-6.00.01: All required arrangements are to be made for sand/ash blasting the turbine rotor, guide blades etc. The scope includes making of temporary arrangements for covering the turbine rotor to facilitate sand/ash blasting and initial manual cleaning of rotor.

Clause A-6.00.02: Sand/ash blasting is to be done as directed by Engineer-in-charge. Required sand/ash, etc. are to be brought to the site by the contractor, from the location shown by Engineer in charge. Sand /Ash etc shall be given free of cost by VSP.

Clause A-6.00.03: The following miscellaneous works are included in the scope of contract:

Gas heater welding work -such as SS sheet replacement by welding, replacement of damaged swirler by new swirler, welding repair of minor nature such as drains, vents and diaphragm drains on BF gas piping. Replacement of Various damaged pipelines etc. Payment shall be made based on the actual deployment of manpower on each occasion , against the BOQ item "Deployment of Man power"

SCOPE OF WORK

Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

01.24	<p>Clause A-7.00.00. REPAIR OF HEADER WELD JOINTS:</p> <p>Clause A-7.00.01. The jobs deal with (1) Rectification of failed weld joints of steam pipelines in CDCP 1,2,3&4, BPTS, CWP-1, GETS and along the Overhead Pipe Gallery inter connecting CDCPs and BPTS or (2) Replacement of the above mentioned lines . All DM water and Feed water pipelines of the said locations are also considered at par with Steam Pipelines of corresponding diameter as far as the subject works are concerned.</p> <p>Clause A-7.00.02: The joints are to be cut by Gas/hacksaw and re-welded as per IBR welding. The required material i.e. grinding wheels, special electrodes, filler rods etc. are to be arranged by the contractor only. As per the need the required pipe bends, spool pipes will be issued by VSE free of cost for replacement purpose. The job involves cutting, edge preparations by grinding, root welding by TIG and sub sequential welding by special electrodes. The joints are to be tested Radiographically if asked by the Engineer In Charge. An amount as per Note-1 below will be deducted for every such joint where Radiography is not done. If any defect is found in the weld joints, the joints are to be repaired free of cost. After rectification, association in Hydraulic test up to the satisfaction of IBR authorities / engineer-in-charge. After the work is over, the insulation to be put back.</p> <p>Clause A-7.00.03: The total headers are classified into six categories as in clause A-8.00.00 to clause A-8.00.05</p>
01.25	<p>Clause A-8.00.00: 20 NB to Less than 80 NB ;thickness varies from 3 mm to 25 mm.</p> <p>Clause A-8.00.01: 80 NB to Less than 100 NB; thickness varies from 4 mm to 25 mm.</p> <p>Clause A-8.00.02: 100 NB to Less than 150 NB; thickness varies from 4 mm to 25 mm.</p> <p>Clause A-8.00.03: 150 NB to Less than 200 NB ;thickness varies from 4 mm to 25 mm.</p> <p>Clause A-8.00.04: 200 NB to Less than 250 NB; thickness varies from 4 mm to 25 mm.</p> <p>Clause A-8.00.05: Above 250 NB ; Thickness varies from 4 mm to 25 mm.</p> <p>Clause A-8.01.00. For Item vide clause A-8.00.00 , and for all socket welds Radiography is not required. For the remaining , whenever radiography is not done (when engineer-in-charge has not specifically asked to do Radiography), the following amount will be deducted .</p> <p>Clause A-8.01.01--Pipe Size as per Clause A-8.00.00: -- Not applicable</p> <p>Clause A-8.01.02--Pipe Size as per Clause A-8.00.01: -- Rs. 207 per joint</p>

SCOPE OF WORK

Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1, 2, 3 & 4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

Clause A-8.01.03--Pipe Size as per Clause A-8.00.02: -- Rs. 322 per joint
 Clause A-8.01.04--Pipe Size as per Clause A-8.00.03: -- Rs. 490 per joint
 Clause A-8.01.05--Pipe Size as per Clause A-8.00.04: -- Rs. 644 per joint
 Clause A-8.01.06--Pipe Size as per Clause A-8.00.05: -- Rs. 811 per joint

1. The application of pipes are for water or steam. The material will be carbon steel or alloy steel.
 2. Wherever required, stress relieving is to be done.
 3. Deduction amounts for not doing Radiography of Header weld joints vide Clauses A-8.01.02 through A-8.01.06 were increased (5 items) proportional to the increase in estimated rates of the respective BOQ Items.

01.26 Clause A-9.00.00. DEPLOYMENT OF MANPOWER DURING EXIGENCIES OF BOILERS ,BPTS,& GETS: On occasions of sudden operation exigencies like failure of rusted service water header piping, drain piping, gas and steam pipings and other exigencies, and also during shutdown periods in GETS units the contractor has to deploy manpower in each 8 hours working shift, immediately on receiving information from the Engineer-in-charge. The contractor has to deploy the man power, if required on round the clock basis also. Payment will be made on actual number of man days worked. One man day will be 8 hours of work done continuously , by one workman , in any of the shifts (No over time payment shall be entertained).

01.27 Clause A-10.00.00:JOB COMPLETION PERIOD: For sl. no: 1 of bill of quantities the job completion period is 06 days from the date of issue of work permit. However, if Engineer In charge demands early completion based on site emergency , all efforts are to be put towards early completion. For sl. no: 3 of bill of quantities the job completion period is 20 days from the date of issue of work permit. For sl. no: 4 of bill of quantities the job completion period is 7 days from the date of issue of work permit. For sl. no: 25 of bill of quantities the job completion period is 7 days from the date of issue of work permit. For sl.no: 26 of bill of quantities the job completion period is 30 days from the date of issue work permit. Balance bill of quantities should be completed along with Bill of quantities 3 or 4 or as per the instructions of Engineer-in-charge.

01.28 PART B
 SCOPE OF WORK COVERED IN THIS PART (From Clause Number B-1.00.00 to B-8.00.00) is FOR ECONOMISER, EVAPORATOR and SUPER HEATER TUBE BUNDLE REPLACEMENT WORKS IN CDCP 1, 2 & 3 BOILERS , PERTAINING TO BOQ SERIAL NUMBERS 19 to 24.

SCOPE OF WORK

Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

- 01.29 Clause B-1.00.00 ECONOMISER TUBE BUNDLE REPLACEMENT IN CDCP 1,2 &3 BOILERS:
This specification involves Changing of 8 Nos. of Economizer bundle with new bundles having approximate weight of 27 tonnes (Total weight of 8 bundles) and all other associated jobs . One CDCP Boiler consists of 8 Economiser Bundles.
- Clause B-1.01.00 ECONOMISER TUBE BUNDLES REMOVAL
Gas cutting and removal of the following:
a) Boiler panels of economizer bundles and associated structurals like baffle plates walk ways, platforms, railings etc. to be cut for facilitating the removal / erection of tube bundles.
b) Complete top panel (Over Economiser) is to be cut.
c) The down comers from the drum to be cut and removed (Proper care is to be taken as they are cold pulled.)
d) All connected refractory and insulation is to be removed.
- 01.30 Clause B-1.01.01 For facilitating the removal of bundles the following are to be cut::
-Economiser inlet header, outlet header.
-Drain and vents of economizer collectors.
-All other associated piping connected with bundles.
- Clause B-1.01.02: The hanging tube bundles are to be supported properly. After that, de-link the bundles by disconnecting the links and cutting the riser tubes between each bundle.
- Clause B-1.01.03 Each bundle to be lifted separately with EOT crane (will be arranged by VSP) one by one, without any damaged and place them in a suitable place as directed by Engineer-in-charge. In between any support beams, structures etc. needed to be cut, for removal of the subsequent bundles also are to be cut and removed.
- 01.31 Clause B-1.02.00 NEW BUNDLES PREPARATION:
New bundles are to be brought from Central Stores / Sub Stores. Hydra and trailer shall be provided by VSP Free of cost. Bundles are to be cleaned off dust, dirt etc. Compressed air cleaning to be done as directed by Engineer-in-charge. Tube thickness survey has to be done and observations should be properly recorded. The tube Bundles brought from VSP Stores may not be identical to existing bundles. Hence these bundles and supporting frames are to be made as per the drawings / existing bundles. Hence these bundles and supporting frames are to be made as per the drawings / existing bundles from the material of old bundles or from the material supplied by VSP free of cost. Assemble coils into tube bundles as per old bundles/ drawings.

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Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

- 01.32 Clause B-1.02.01 PREPARATION OF 4 NOS. OF ECONOMISER HEADERS:
The removed / new headers are to be thoroughly cleaned as instructed by the engineer-in-charge, for properly connecting to the top and bottom headers. The 28 dia pipes from the headers are to be removed by grinding, and the holes are to be properly re-shaped for fixing the new tube ends. The inspection covers of the headers are to be cut and after cleaning the headers, these are to be properly re-fixed as per IBR.
- Clause B-1.02.02 After checking of all support, beams etc. as per the set of drawings given, alignment and erection of the new bundles one by one is to be done. All structurals, beams supports etc. which are cut temporarily while removing bundles are to be restored back as per the drawings.
- Clause B-1.02.03 After alignment, the bundles are to be properly linked and supported. Connect the bundles by welding the riser tubes of each bundle at each elevation. The extra length of the tubes are to be cut and edge preparations are to be made as per IBR. Damaged ends / risers with insufficient length should be rectified by welding spool pieces. The incoming and outgoing headers, drains, vents etc. to be connected as per the set of drawings. The down comers also to be connected and welded. Wherever required, cold pulling is to be done. All joints shall be of IBR quality. All joints shall be root welded with TIG welding and subsequently may be welded as IBR quality. Before welding, edge preparation and proper grinding, is to be done. After welding 10% of tubes (32 dia and less than 32 dia) should be radiographically tested and defective joints should be replaced. All remaining joints i.e. above 32 dia joints should be tested 100% radiographically to the satisfaction of Engineer-in-charge.
- 01.33 Clause B-1.02.04 Flushing and chemical cleaning of Economiser is to be carried out as per the instructions of Engineer-in-charge. Temporary pipe lines are to be laid for carrying out the said chemical cleaning. After the completion of chemical cleaning & flushing, the temporary lines are to be removed. All required chemicals will be issued by VSP free of cost.
- Clause B-1.02.05 Old bundles should be transported to a suitable place as directed by Engineer-in-charge for proper storage. Trailer, hydra shall be provided by VSP free of cost.
- Clause B-1.02.06 All Boilers panels are to be closed as per the instructions of Engineer-in-charge. After complete closing of the boiler panels, all platforms, ladders structures beams etc. are to be restored and welded properly. Painting is to be carried out on all economiser panels, ladders and platforms wherever repair jobs are carried out as per clause B-5.00.00. Paint will be issued by VSP free of cost.
- Clause B-1.02.07 Pneumatic test of boiler to be carried out for zero gas leakages from the boiler panels, up to the satisfaction of the engineer-in-charge.

SCOPE OF WORK

Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

01.34 Clause B-2.00.00 EVAPORATOR TOP RISER TUBES REPLACEMENT IN CDCP 1,2&3 BOILERS:
One set of evaporator riser tubes consists of 100 Nos. of tubes & one CDCP Boiler has 2 such sets installed in it.

Clause B-2.00.01 Evaporator top riser tubes are to be cut at suitable places either at Evaporator top bundle or above the Super heater. After removing side panels, refractory, evaporator top collectors are exposed. Cut the riser tubes near the top collectors and remove them. As per the requirement if complete top risers replacement job is being taken up (i.e. replacement of both sets) then top collectors are to be removed. The top collectors should be thoroughly cleaned by cut opening the inspection plugs and all required preparations should be carried out for fixing the riser tubes.

01.35 Clause B-2.01.00 ERECTION OF EVAPORATOR TOP RISER TUBES:
New bends are to be fabricated from the straight tubes supplied by VSP Free of cost. They should be identical in all respects to that of dismantled tubes. After ensuring the collectors in position weld the riser bends with top collectors as per drawing. The associated piping which was removed during dismantling should be restored. The riser tubes are to be properly placed in SS brackets. SS brackets if required will be supplied by VSP free of cost. Evaporator top and side panels are to be thoroughly inspected and all required repairs including replacement of SS / MS sheeting is to be done. Any other required modification for eliminating erosion is to be carried out. Geometrical mismatch, if any, of the ready made riser tubes are to be corrected at site, to the maximum extent of one weld joint and one bend per riser coil.
Clause B-2.02.00: ERECTION WORKS
Clause B-2.02.01: Connect the evaporator top bundles by welding the riser tubes. Drains, vents etc. to be connected as per the set of drawings. All joints shall be of IBR quality. All joints shall be root welded with TIG welding and subsequently may be welded as per IBR Quality. Before welding, edge preparation and proper grinding, is to be done. After welding 10% of tubes (32 dia and less than 32 dia) should be radiographically tested and defective joints should be replaced. All remaining joints i.e. above 32 dia joints should be tested 100% radiographically to the satisfaction of Engineer-in-charge.

01.36 Clause B-2.02.02: All boiler panels are to be closed as per the instructions of Engineer-in-charge. After complete closing of the boiler panels, removed platforms, ladders structures beams etc. are to be restored and welded properly. Painting is to be carried out on all boiler panels, ladders and platforms wherever repair jobs are carried out.; Paint will be issued by VSP Free of cost.

Clause B-2.02.03: Pneumatic test of boiler to be carried out for zero gas leakages from the boiler panels, up to the satisfaction of the Engineer-in-charge.

SCOPE OF WORK

Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

01.37	<p>Clause B-3.00.00 EVAPORATOR TUBE BUNDLES REPLACEMENT: One CDCP Boiler has 6 numbers of evaporator bundles installed, with a total approx weight of 33 Tons. Each such Bundle has 50 coils , one coil being an assembly of 2 parallel tubes of size 28 mm dia.</p> <p>Clause B-3.00.01 This specification involves Changing of 6 nos. of Evaporator tube bundles of said boiler with new bundles having a total weight of 33 tons and all associated jobs given below: Evaporator side panels of the bottom bundles are to be cut and removed. All layers of refractories including castable material is to be broken and removed.. Side panels of other evaporator bundles are to be cut up to required extent as marked by Engineer In charge for facilitating access to tube to tube weld joints. Make temporary platforms and sliding supports for facilitating drawing of evaporator tube bundles from one side at Boiler Bottom.</p> <p>Clause B-3.01.01 Properly support the evaporator bottom bundle which is hanging on the support beams. De-link the bundles by disconnecting the links and cutting the connecting tubes to bottom collectors. Remove the bottom tube bundles by lowering the bundles, and by drawing them out through bottom side .</p>
01.38	<p>Clause B-3.01.02 Evaporator middle bundle is freely resting on the support beam. After cutting the riser tubes with Top bundles, evaporator middle bundle is to be lifted up so as to offload the beams. The beams are to be drawn out and then remove the middle tube bundles by lowering the bundles, and by drawing them out through bottom side .</p> <p>Clause B-3.01.03 All Riser tubes are to be cut off above Super Heater level one by one and removed . Evaporator top bundles are loaded on the support beams. The beams are to be drawn out and then remove the Top bundles by lowering the bundles, and by drawing them out through bottom side . Supporting beams are to be pulled out if required by cutting. All above said bundles are to be pulled from sides with EOT crane/ chain pulley block /max puller without any damage. Keep them in a suitable place as directed by Engineer-in-charge. Any support beams, structural parts etc. if needed to be cut and removed.</p>
01.39	<p>Clause B-3.02.00 EVAPORATOR NEW BUNDLES ERECTION:</p> <p>Clause B-3.02.01 NEW BUNDLES PREPARATION:</p> <p>New bundles are to be brought from Central Stores/ Sub Stores. Crane and trailer shall be provided by VSP. Manpower should be deputed by the contractor. Bundles are to be cleaned off dust, dirt etc. Compressed air should blown through tubes as directed by the Engineer-in-charge. Tube thickness survey has to be done and observations should be properly recorded and presented to the Engineer-in-charge.</p>

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Work Desc : **Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant**

01.40 Clause B-3.02.02 The tube bundles brought from VSP stores may not be identical to existing bundles, hence these bundles and supporting frames are to be modified to match the drawings / existing bundles from the material of old bundles or from the material supplied by VSP free of cost. Correction of any structural defect or drawback arising out of original assembly identified while dismantling is in the scope of this work. Items like strips etc may have to be taken out from the old bundle for reuse in the new assembly. Assemble coils into bundles. During assembly if any excess length is identified in the coils/headers/ structural elements they are to be corrected as per drawing. If any deficiency in dimensions is identified, then they have to be corrected by suitable means as suggested by Engineer in charge. After checking of all supports, beams etc. as per the set of drawings given, alignment and erection of the new bundles one by one is to be done. All structures, beams, supports etc. cut temporarily while removing bundles are to be restored as per the drawings. For welding tubes between different bundles, structurals, wherever required supports removal, panel cutting and refractory removal has to be done. Throttle washers are to be made and to be fixed on bottom bundles as per the instructions of Engineer-in-charge. The required material will be supplied by VSP free of cost. Similarly during erection, all cut structurals, are to be restored back. The refractory restoration works are not included in the Scope of Work.

01.41 Clause B-3.03.00 EVAPORATOR NEW BUNDLES ERECTION:

Clause B-3.03.01 After alignment, the bundles are to be properly linked and supported. Connect the bundle by welding the riser tubes of each bundle at each elevation and connection of tubes with bottom and top collectors. All incoming and outgoing headers, drains, vents, etc are to be connected back as per drawing. Down comers also to be connected and welded. Wherever required, cold pulling is to be done. All joints should be root welded with TIG welding and subsequently can be welded as per IBR quality arc welding. Before welding edge preparation and proper grinding is to be done. After welding for joints less than 32 mm dia 10% tubes should be tested radio graphically and rectifications should be carried out as per the need. For others joints 100% Radiography should be taken to the satisfaction of Engineer-in-charge. Straight Tubes may be welded with evaporator top bundle before lifting the same.

NOTE: Evaporator tube bundles can be removed either from the top or by pulling from the side panels removal. Depending on site conditions evaporator tube bundles can be dismantled by any of the two methods in consultation of Engineer-in-charge. In case of bundle removal from top, the order of removal of tube bundles shall be from top to bottom and in case of side removal, the order of removal shall be from bottom to top.

Clause B-3.03.02 Drum internals are to be thoroughly cleaned and also associated jobs like Turbo Separator clearance setting etc. and all associated jobs are to be done.

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01.42	<p>Clause B-3.03.03: BOILER CIRCULATION PIPING BENDS REPLACEMENT: 150 DIA and 200dia circulation water piping bends are to be tested radiographically. The approximate number of joints of 150 dia and 200dia will be 8 Nos(Both together) . If any defects are noticed the same are to be cut and to be re-welded or to be replaced with new ones as per the instructions of Engineer-in-charge.</p> <p>Clause B-3.03.04 All boilers panels are to be closed as per the instructions of Engineer-in-charge. After complete closing of the boiler panels, all platforms, ladders structures beams etc. are to be restored and welded properly. Painting is to be carried out on all boiler panels, ladders and platforms wherever repair jobs are carried out. Paint will be issued by VSP free of cost.</p> <p>Clause B-3.03.05 Pneumatic test of boiler to be carried out for zero gas leakages from the boiler panels, up to the satisfaction of the Engineer-in-charge.</p> <p>Clause B-3.03.06 All the drain and vent piping inside and outside of boiler sample cooler piping should be replaced with new piping / or by existing good piping whichever is applicable.</p> <p>Clause B-3.3.7 Any minor insulation replacement should be carried out. The required insulation material shall be issued by VSP Free of cost.</p>
01.43	<p>Clause B-4.00.00 CARRYING OUT OF HYDRAULIC TEST AND ALKALI WASH OUT OF BOILER:</p> <p>Clause B-4.00.01 Hydraulic testing is to be carried out twice, once before closing of the boiler panels and the other after complete closing of the boiler panels up to the satisfaction of IBR authorities and Engineer-in-charge. Any defects noticed during hydraulic test viz. leakages of flanges, glands, pipings, weldings, defective valves and other fittings are to be rectified / replaced.</p>
01.44	<p>Clause B-4.00.02 ALKALI WASHING:</p> <p>Alkali washing to be performed as per the instructions of the Engineer-in-charge. The work includes the following:</p> <ul style="list-style-type: none"> a) Laying of temporary pipe lines as per site requirement and as instructed by Engineer-in-charge for charging of alkali and normalization after alkali washing is over. b) Removal of orifice plate in the circulation water line and welding a spool piece (shall be given by VSP free of cost). c) Required man power for assistance as required by Engineer-in-charge during alkali washout should be kept by the contractor. d) After alkali washout boiler drum to be opened and internals to be

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cleaned and boxed up.
 e) Cleaning of slime separating screen.
 f) Cleaning of all the 8 collectors of evaporating surfaces. New Collectors come with loose welded Stub/End caps. They shall be just Arc welded for Pre alkali wash Hydraulic testings. After Alkali wash, they are to be cut open for cleaning and are to be welded back with TIG root weld followed by E-7018. This procedure is same for headers of evaporator, economiser, and Super Heater.
 g) Inspection of circulation pump and mechanical face seals of the pump as directed by Engineer-in-charge.
 h) Inspection of fittings mounted on feed unit and circulation pumps.
 i) Inspection of fittings mounted on lines of periodic and continuous blow down, emergency drainages, purging through lower points, recirculation lines from pumps to economizer in take i.e. DN 32 line from slime separator to line after feed unit and going to economizer), by pass lines of circulation pumps (i.e. Natural circulation line DN 100).
 j) Packing / gland packings on all the fittings.
 k) Inspection of Phosphate pump used during alkali washing.
 l) Flushing of phosphate unit.
 m) Installation of orifice plate on delivery line from circulation pumps (IBR quality welding to be done).

01.45 Clause B-4.01.00 CLEANING:-

Complete area of the boiler to be cleaned from foreign material, scrap, dirt, dust etc. and to be dumped at a suitable place as shown by the Engineer-in-charge.

Clause B-4.01.01 The old bundles/tubes/materials should be transported to a suitable place as directed by the Engineer-in-charge for proper storage. Trailors, hydra shall be provided by VSP free of cost.

Clause B-4.01.02 If need arises, i.e. drain valves, vent valves, Super Heater safety valve etc. are to be replaced with new valves. Painting as per clause B-5.00.00 also is to be done.

01.46 Clause B-5.00.00 PAINTING :

Panels, piping, and structural components erected by the party , as part of the tube bundle replacement works should be painted. 2 coats of red oxide primer is to be applied before application of the enamel paint. Paint Thinner and Red oxide will be supplied by VSP free of cost.

01.47 Clause B-6.00.00 PREPARATION OF ONE SET OF ECONOMISER TUBE BUNDLE FROM USED / NEW BUNDLES IN READY FOR USE CONDITION:

The specification is to make one full set of Economizer tube bundles for one boiler (for one boiler, a total of 8 bundles shall be there) out of new / used tube bundles of CDCP Boilers. Detailed Scope of Work is as follows:

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Clause B-6.00.01 Coils are to be separated from their frames by cutting the necessary joints and supports. All supporting frames should be cut and coils should be made free.

Clause B-6.00.02 Coils are to be cleaned thoroughly to free them of dust, dirt and corrosion products. Blow compressed air through tubes and ensure cleanliness inside also.

Clause B-6.00.03 Necessary manpower is to be arranged for transportation of coils. Hydra and trailer will be provided by VSP free of cost.

Clause B-6.00.04 Tube thickness survey should be carried out at all probable places like bends etc. to ascertain the condition of the tubes. Readings should be recorded and submitted to the Engineer-in-Charge. D-meter will be issued by VSP on returnable basis.

01.48 Clause B-6.00.05 Close one end of the tubes in suitable way and pressurize the coils up to 60 KSCA and check for leakages if any. Identify and segregate the coils which qualify in hydraulic test or any other procedure instructed by Engineer in charge. The required pump for conducting pressure test is to be arranged by Contractor only (manual or electrical).

Clause B-6.00.06 Fix the coils in corrugated brackets as instructed by the Engineer-in-Charge. If any brackets are found defective, they should be replaced by new brackets. New brackets shall be issued by VSP Free of cost.

Clause B-6.00.07 Fabricate the frames as per the drawings given by the Engineer-in-charge. All requires steel like beams, plates, angles etc. will be issued by VSP free of cost.

Clause B-6.0.8 Align the coils perfectly with due care on diagonal symmetry. Fix the coils along with supporting brackets in frames as per the supplied drawings. Weld all corrugated brackets at required places on frames. Due attention should be paid in maintaining the correct dimension of assembled tube bundles with reference to the supplied drawings.

01.49 Clause B-6.00.09 Plug both ends of the coils with rubber caps/wooden plugs which are to be arranged by contractor only.

Clause B-6.00.10 Paint the tubes, frames and all structurals with anti corrosive paints. Keep the coils in ready for use condition. Paints will be issued by VSP Free of cost. Spray nozzle for painting is to be arranged by contractor only.

Clause B-6.00.11 Keep the assembled bundles at a suitable place as directed by the Engineer-in-charge.

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01.50 Clause B-7.00.00: SUPERHEATER TUBE BUNDLE REPLACEMENT IN CDCP 1,2&3 BOILERS:
Clauses from B-7.00.01 to B-7.00.05 define the work indicated vide BOQ sl No 24

Clause B-7.00.01 : Each CDCP Boiler has 2 Super Heater Bundles, One Input Bundle and the other Output Bundle. Both Bundles are alike in structure and size. Each Bundle consists of 24 coils, a coil being an assembly of 2 parallel tubes of size 32 mm dia.
Spare coils for replacement will be provided by VSP. If required, minor modifications are to be done on the said spare coils to suit the site conditions, by doing necessary welding or bending or both (Maximum of 1 weld joint and 1 bend per tube). The Headers/ collectors are also to be replaced with the spare given or repaired and reused, as decided by Engineer in charge. The Super Heater Bundle assembly to be done along with the collectors as per drawing and is to be placed on the Support Beams, aligned in position and connected with the rest of the Boiler as per relevant drawings, and to the satisfaction of the Engineer in charge.

01.51 Clause B-7.00.02 : All joints shall be of IBR quality. All Butt joints should be root welded with TIG and subsequently with E 8018 or equivalent. All socket joints shall be done directly with E 8018 or equivalent. After welding, 10% of the butt joints (on tubes 32 dia and lesser dia) shall be radiographed and defective joints should be replaced followed by re-radiography. All Butt joints on tubes greater than 32 mm dia should be 100% radio graphically tested to the satisfaction of the Engineer in charge.

Clause B-7.00.05: Pneumatic test of Boiler to be carried out for zero gas leakages from the boiler panels. Super Heater blow out is to be carried out for cleaning of Super Heater tubes. Safety valves are to be set. Painting as per clause B-5.00.00 also is to be done.

Clause B-8.00.00: Job Completion period: For Sl No; 19 of BOQ, the job completion period is 20 days from the date of issue of work permit. For sl No; 20 of BOQ, the job completion period is 20 days from the date of issue of work permit. For sl No; 21 of BOQ, the job completion period is 20 days from the date of issue of work permit. For sl No; 22 of BOQ, the job completion period is 2 days from the date of issue of work permit. For sl No; 23 of BOQ, the job completion period is 7 days from the date of issue of work permit. For sl No; 24 of BOQ, the job completion period is 15 days from the date of issue of work permit. However, if Engineer In charge demands early completion based on site emergency, all efforts are to be put towards early completion.

01.52 PART-C:
SCOPE OF WORK COVERED IN THIS PART IS FOR BOQ SL.NO: 25(Overhauling of Circulation Water Pumps- vide clauses C - 1.00.00 to C - 1.01.14) & BOQ SL.NO: 26: (Replacement of Inlet / outlet compensators of GETS- vide

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clauses C - 2.00.00 to C - 2.01.02).

Clause: C - 1.00.00 : Overhauling of Circulation Water Pumps of CDCP 1,2&3 Boilers:

Clause : C - 1.00.01: Circulation Water Pumps of CDCP are of BPCL make , model KSMK 8x10x15, flooded suction 160 CuM/Hr 44MWC 1450 RPM . Being part of the Pressurized circuit of the HP Boiler, it falls under IBR purview.

Clause: C -1.01.00 : Removing the Pump:

The Manual valves at The Suction and Discharge Pipes should be closed tight and the Vent to be kept open till the Pump gets depressurized and cooled completely. Pump is to be decoupled after obtaining clearance from the Engineer in-charge. The Cooling water inlet lines to be isolated and all Cooling water connections to be removed. Flange Connections at the Suction and Discharge Nozzles to be opened and the Foundation Bolts to be opened. With the help of the Monorail, Pump to be lifted and shifted out of the Pump House.

01.53 Clause:C-1.01.01 : Dismantling the Pump: Bearings, Mechanical Seals, and End Flanges are to be separated from the Pump Proper. Casing Parting plane Flange Bolts to be opened and the Casing Halves to be separated. Rotor assembly to be taken out and the impeller to be separated. The entirely dismantled Pump should be offered for Inspection by the Engineer in charge/ his representative.

Clause C-1.01.02: Repair / Salvaging: If required, Buildup, Hard facing, Drilling , and tapping etc are to be done on various parts to reuse the dismantled parts as per the instructions of the Engineer in charge or his representative. All worn out parts are to be replaced by new spares , which are to be obtained from TPP Stores. Transportation from TPP stores is under the scope of the Contractor. Any welding on the casing/Suction or discharge Nozzles shall be of IBR Quality.

Clause C - 1.01.03: Assembly of Pump:

Assembly of the Pump with the salvaged / new spares to be done in conformity with the Drawing and as per the guidance of the Engineer In Charge. Hold points and stage Inspections shall be determined by the Engineer In charge to ensure the quality of assembly. Complete assembly Including Mechanical Seal assembly and Bearing Assembly is to be done outside the pump house.

Clause C -1.01.04: The Non return Valve Unit in the Discharge side of the Pump also is considered as a part of this Overhauling work and falls under IBR purview. Assembled pump is to be shifted to the location with the help of Monorail and is to be placed on foundation, with due consideration to the Motor position. Suitable modifications of the Pump Foundation/ Base plate if needed is to be done. Foundation Bolts , All line flanges etc are

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to be connected back with suitable gaskets. Coupling to be done after obtaining clearance from Engineer in charge. After Charging the Pump, leakages if any found are to be rectified .

01.54 Clause: C-2.00.00: REPLACEMENT OF INLET/OUTLET COMPENSATOR OF GETS

Clause: C-2.00.01: The Main BF Gas inlet duct to GETS Turbine is of 1400 mm diameter. There are 4 single lens compensator in the Gas inlet duct between Gas heater outlet and Turbine inlet, for each Turbine. The BF Gas Outlet duct from GETS Turbine is of 2000 mm diameter. There are 2 double lens compensators in the Gas outlet duct .

Clause: C-2.01.00 : The Duct portion upstream and downstream of the Compensator to be replaced shall be properly arrested by giving proper supports . This shall be done by welding up suitable structural elements in convenient positions. The required steel shall be issued by VSP. Structural fixture of adequate size should be erected to facilitate the easy removal of the cut off compensator and the easy lifting of the new compensator. Adequate number of Chain pulley Blocks to be arranged for the said work. Compensator to be cut off by circumferential gas cutting at planes , keeping a minimum distance of 50 mm from the existing weld seam. The thickness of the main duct also is to be considered while deciding on the cutting plane. If required spool pieces of half meter length are also to be replaced on either side of the compensator . In such a case the duct spool shall be also to be cut off and removed.

01.55 Clause: C-2.01.01: ERECTION OF NEW COMPENSATOR :

Edge preparation can be done with Gas or with Grinding machine. Spare spool pipe and Compensators shall be supplied by VSP. Fit up of all items shall be done to the satisfaction of the engineer in charge. Vertical Seams of the adjacent pieces should be displaced by 90 degrees during fit up. All pieces should be in proper alignment after fit up. Direction of the compensator should be in conformity with the flow. Welding should be started after taking clearance from Engineer in charge. As far as possible welding should be done from inside towards outside. Edge preparation also should be done accordingly. All root runs shall be of IBF quality TIG in consideration of the safety aspects involved. The TIG wire used should be ER 80 S D2. After Root run, DPT should be done , before proceeding to the subsequent runs.

Clause: C-2.01.02: Soap solution testing of the newly welded seams to be done with soap solution , by using compressed air across the joint. Leaks if any are to be rectified as per the instructions of the Engineer in charge. All Temporary fixtures erected and the Supports erected to arrest the lines are to be removed completely.

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01.56 PART - D

Clause D-1.00.00 Scope of work covered in this part pertains to BOQ Sl Nos 27 to 41 : Works defined vide Clauses D-1.01.00 to D-5.00.01 are applicable only for CDCP 4 Boilers, whereas works defined vide clauses D-6.00 to D-7.00.00 are applicable for all Auxilliary units of TPP. The scope of Work

Clause D-1.01.00 OVERHAULING OF ONE CDCP 4 BOILER: (BOQ Sl No: 28) .

Clause D-1.01.01. Opening of Boiler man holes. Blank the Feed water line, Super Heater steam line , CBD, PBD lines, and all such lines that are connected to common facilities as Phosphate dosing, Preheating line etc . Removing the coke dust from the hopper and transporting the dust to the site shown by the site engineer. After ensuring proper isolation of the Boiler to the satisfaction of Engineer in charge or his representative, Obtain Permit to work , and Entry Permit from concerned agencies. First Entry to the Boiler to be made in the presence of the Engineer in charge or his representative only.

Cleaning of complete boiler tube surfaces with Compressed air/ water jets to remove deposits. Closing of the manholes including gasket replacement after satisfactory completion of hydraulic test by Inspector of boilers.

01.57 Clause D-1.01.02. Inspection of pressure parts including water wall, supporting tubes, screen tubes, economizer, evaporator and super heater, for erosion. Tube thickness survey is to be carried out as directed by the Engineer-in- charge. Protective plates over screen tubes and baffle plates should be replaced/repaired/repositioned as per need. The required plate will be given by VSP Free of cost. Any defect identified in the structural components also is to be repaired. Painting of newly welded structural elements also is under this scope. Paint shall be given free of cost.

Clause D-1.01.03. Opening of boiler drum, internals cleaning, doing necessary repairing, removal ,cleaning and re-fixing of Demister pads, and offering for IBR dry inspection. Gasket replacement and closing of manholes to make the Boiler ready for hydraulic test.

Clause D-1.01.04. Opening the Safety Valves of drum (2nos) and super heater (1no), Lapping of disc/seat, assembling, Setting the lift and seat pressures in a test jig, and fixing back in position. Floating the safety valves (Confirming the Lift and Seat at desired pressures in actual conditions) during boiler steaming.

Clause D-1.01.05 Removal and fixing of insulation wherever required to carry out all the Overhauling works.

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Clause D-1.01.06. Turning of all spectacle blind flanges for blanking and again reversing as per sequential (operational) requirement including gasket replacement.

Clause D-1.01.07. All flow orifices are to be opened, cleaned and reassembled including gasket replacement.

01.58 Clause D-1.01.08. All level gauges are to be opened, cleaned overhauled and reassembled. Inspection repairing of buck stays, rupture flaps, explosion doors, fabric expansion joint and repair of economizer outlet duct and the compensators therein.

Clause D-1.01.09. Overhauling/maintenance (By dismantling, cleaning, lapping of seats, changing gland / gasket packing etc) of all boiler limit valves including actuators of all boiler limit valves such as manual isolating valves, main steam isolating valves, main steam line NRV and startup vent valves including by pass and drain valves of both headers of main superheated steam lines, emergency blow down, periodic blow down, continuous blow down, preheating valves, all drain valves, all vent valves, drum valves, level gauge valves, dozing line valves, sampling line valves.

Clause D-1.01.10. All drain valves, vent valves, which are less than 35 mm dia are to be replaced if need arises. The damaged service water line to sample coolers is to be replaced. The sample heat exchanger is to be overhauled by cutting and re fixing. Overhauling of SWAS.

Clause D-1.01.11 All feed unit valves (total 10 Nos) circulation pump suction valves, (2 nos) delivery valves (2 Nos), NRVs (2 Nos), Desuperheater valves (8 nos) are to be opened and overhauled. Seat lapping, gasket changing are to be done. Cleaning of circulation pump mechanical seal cooler, pump pedestal, bearing housing etc. to be done.

Clause D-1.01.12. Necessary modifications of minor nature, not exceeding 10 man days for the upkeep of House keeping in the Boiler Floor/ Pump House , contributing towards OHSAS/ 5S Requirements, as instructed by the Engineer In charge or his representative.

01.59 Clause D-1.01.13. Scaffolding is to be erected at 3 locations to gain 100% access to all the Boiler Tubes .
a) 5.2 m wide x 12.7 m high near side Water Wall (Outside) where structure/platform coverage is not provided
(b) 4.7 m wide x 5.2 m high near Front Side (Outside) at Top of Boiler &
c) [2x 4.7 m wide + 2 x 5.2 m long] x 4.5 m high Inside Boiler at Boiler Top to access Roof Panel- Scaffolding on all 4 sides. Cleaning of the boiler tubes (heating surfaces) and drum internals is to be carried out to the satisfaction of the IBR / statutory authorities. General cleaning of complete boiler, its platforms, loaders/ stair cases, working floor including its auxiliaries is to be carried out.

Clause D-1.01.14. Circulation water pump suction strainer opening,

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cleaning, changing of gasket, strainer mesh repair and assembling back.

Clause D1.01.15. In CDCP 4 Boilers, , the following Valves also are provided , in addition to those existing in CDCP1,2,3 Boilers, which also are to be overhauled during Boiler Overhauls as per IBR.

- a) 1 x Attenuation Control Valve
- b) 1 x 200 NB Pneumatic On/Off valve for natural Circulation Control
- c) 1 x NRV 150 NB in Main Steam line
- d) 1 x 80 NB NRV in Eco Outlet line
- e) 1 x Start Up Vent Valve

Clause D-1.01.16. CDCP4 boilers are equipped with 2 Drum Safety Valves each (Whereas CDCP 1,2&3 Boilers have only 1 each). The additional valves also are to be (a) Overhauled during Boiler Overhauls and after Overhauls (b) Floating also to be done .

Clause D-1.01.17. CDCP4 Boilers have 2 Silencers (One for Start Up Vent and One for Sup Heater Safety valve.) . Both silencers and their structure are to be painted after making suitable scaffolding.

01.60 Clause D-1.01.18. The CDCP4 Boiler Drums are provided with removable Demister pads. They have to be taken out for inspection after which they have to be fixed back in position, after doing necessary repairs if any. Spares shall be provided by VSP.

Clause D1.01.19. All 45 numbers of Screen tubes are provided with Vertical SS shield Plates (half Round) which are welded on to the screen tubes. Size of the shield is 40 mm wide x 2500mm long x 1.5 mm thk. They are to be replaced during every overhaul of boilers.

Clause D-1.01.20 Associating in hydraulic test, Conducting the Internal hydraulic testing , checking and attending all the leakage points observed during hydraulic test and to make the Boiler fit for Statutory Hydraulic testing. Associate & Conduct the Statutory hydraulic testing to the satisfaction and acceptance of statutory authorities as well as the Engineer in charge.

01.61 Clause D1.02.00 REPLACEMENT OF BOILER TUBES /IBR WELD JOINTS IN CDCP4 BOILERS (BOQ SL No: 29)

Clause D1.02.01. Replacement of boiler tubes With IBR quality Weld joints excluding radiography. The weld joint should be as per IBR. The tube size will be maximum 50.8 mm dia and 5 mm thickness. The root welding is to be done by TIG welding wherever applicable / possible. The subsequent welding can be TIG or arc welding. Necessary edge preparation / joint preparation are included in the scope of work. One Tube replacement shall consist of two IBR joints at both ends of the replaced tube. Failed weld joints should be cut open and replaced with a short tube of minimum half meter length. Regrinding and re-welding over failed joints shall not be

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done. Bending of boiler tubes as per the site conditions, if required. The tube size will be a maximum of 50.8x5 mm.

Clause D-1.03.00 PLUGGING OF BOILER TUBES IN CDCP BOILERS (BOQ Sl No: 30)

Clause D-1.03.01 Plugging of the tubes shall be done whenever tube replacement is found not feasible by the Engineer in charge. The defective tubes of CDCP Boilers are to be cut by hacksaw at their header ends and the respective Header nozzles are to be plugged by IBR welding. The plugs will be supplied by VSP free of cost.

01.62 Clause D-1.04.00 CUTTING , REMOVAL OF BOILER MEMBRANE WALL INCLUDING REMOVAL AND RE-FIXING OF REFRACTORY WELDING BACK THE WALL , AFTER COMPLETION OF THE WORK IN CDCP BOILERS. (BOQ Sl No: 31)

Clause D-1.04.01 Membrane walls are to be cut whenever the need arises for (a) Identification of Tube leaks, (b) Removal of tubes from Bundles, (c) Removal of Bundle itself , or (d) Repair of the wall itself. Engineer in charge or his representative shall mark the extent of the cut to be made. Cutting to be done by grinding only.

Clause D-1.04.02 After completion of work, the wall is to be welded back in position by first welding the IBR tubes involved in the concerned cut area , as per D1.02.00 and later the fin welding to be done with E 6018 SAW. Fin welding to be tested by DPT . Painting of newly welded structural elements also is under this scope. Paint shall be given free of cost

Clause D-1.04.03 Necessary repair jobs/ refix jobs of refractory to be done at no extra cost to VSP.

Clause D-1.04.04 Repair of structural parts of boilers and EOT cranes of CDCP-1,2 &3. The damaged structural parts including CDCP-1, 2 & 3. The damaged structural parts including walkways, Grills, platforms, railings are to be replaced. All required structural materials such as channels, beams, flats, grills will be supplied by VSP free of cost.

01.63 Clause D-2.00.00. TUBE LEAKAGE RECTIFICATION WORKS: (BOQ Sl No: 27)

Clause D-2.00.01. Assist in Isolation / Disconnection of the Tube Leak Boiler. Opening of Boiler man holes. Blank the Feed water line, Super Heater steam line , CBD, PBD lines, and all such lines that are connected to common facilities as Phosphate dosing, Preheating line etc .Removing the coke dust from the hopper and transporting the dust to the site shown by the site engineer. After ensuring proper isolation of the Boiler to the satisfaction of Engineer in charge or his representative, Obtain Permit to work , and Entry Permit from concerned agencies. First Entry to the Boiler is to be made in the presence of the Engineer in charge or his

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representative only. Cleaning of complete boiler tube surfaces with Compressed air/ water jets to remove deposits. Closing of the manholes including gasket replacement after satisfactory completion of hydraulic test by Inspector of boilers.

Clause D-2.00.02. Coke dust to be unloaded from the Boiler hopper to the ground by removal of necessary pipe sections/ valves . Cleaning of boiler internals as per the instructions of Engineer-in-charge.

Clause D-2.00.03. Identification of Tube leak and tracing the punctured tube at bottom and top headers. Repair to be done as per the instructions of Engineer in charge, by tube replacement vide clause 1.02.00 or Plugging vide clause 1.03.00 . Such Tube Replacement/ Plugging if any shall be dealt separately for payment.

01.64 Clause D-2.00.04. Both CWPs suction filters cleaning and re-assembly as per the need and instructions of engineer-in-charge at no extra cost to VSP.

Clause D-2.00.05. Tube thickness survey is to be done if directed by engineer-in-charge, for all bundles (economizer, evaporator & super heater) and membrane wall tubes.

Clause D-2.00.06. The boiler is to be inspected thoroughly and any damages to the, baffle plates, should be replaced / repaired / repositioned as per the need at no extra cost to VSP . The required plates will be given by VSP free of cost.

Clause D-2.00.07. The gland leakages if found, are to be rectified.

Clause D-2.00.08. Association in hydraulic test up to the satisfaction and acceptance of IBR authorities / engineer-in-charge. Boxing up of the boiler and cleaning of all boiler platforms, pump house, header floors etc. once the repair work is completed. Necessary modifications if any , of minor nature, not exceeding 10 man days for the upkeep of House keeping in the Boiler Floor/ Pump House , contributing towards OHSAS/ 5S requirements to be done, as instructed by the Engineer incharge or his representative.

Clause D-2.00.09. During the course of work, any minor insulation works arises, for which material will be supplied free of cost by VSP, are to be done at no extra cost to VSP

01.65 Clause D-2.00.10. Scaffolding to be erected as per need and as instructed by Engineer in charge.

Clause D-2.00.11. Protection shields for Screen Tubes are to be replaced if found damaged.

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Clause D-2.00.12. Coke Dust unloaded from boiler bottom Hopper is to be transported by wheel barrows and dumped at a place shown by Engineer-in-charge,. The amount of dust removed should be measured and appraised to the Engineer in charge. The dumping place shall not be more than 200 m from the Boiler Bottom. Wheel Barrows shall be provided by VSP.

Clause D-2.00.13. De-blank all the lines blanked for isolation. Assist in Normalisation activities before handing over the Boiler for Regular Operation

01.66 Clause D-3.00.00 OVERHAULING OF CIRCULATION WATER PUMPS OF CDCP # 4 BOILERS: (BOQ Sl No; 35)

Clause D-3.00.01 Circulation water pumps of CDCP # 4 are of SULZER make, Model Being part of the pressurized circuit of the HP Boiler, it falls under IBR Purview.

Clause D-3.00.02 REMOVING THE PUMP:
The valves at the suction and discharge pipes should be closed tight and the vent to be kept open till the pump gets depressurized and cooled completely. Pump is to be decoupled after obtaining clearance from the Engineer-in-charge. The cooling water inlet lines are to be isolated and all cooling water connections to be removed. Flange connections at the suction and discharge nozzles to be opened and the foundation bolts to be opened. With the help of the monorail, the pump to be lifted and shifted out of the pump house.

Clause D-3.00.03 DISMANTLING THE PUMP:
Bearings, Mechanical seals, and End flanges are to be separated from the pump proper. Casing parting plane flange bolts to be opened and the casing halves to be separated. Rotor assembly to be taken out and the impeller to be separated. The entirely dismantled pump should be offered for Inspection by the Engineer-in-charge / his representative.

01.67 Clause D-3.00.04 REPAIR / SALVAGING:
If required, Build up, hard facing, Drilling, and tapping etc are to be done on various parts to reuse the dismantled parts as per the instructions of the Engineer-in-charge or his representative. All worn out parts are to be replaced by new spares, which are to be obtained from TPP Stores. Transportation from TPP stores is under the scope of the contractor. Any welding on the casing/Suction or discharge Nozzles shall be of IBR Quality.

Clause D-3.00.05 ASSEMBLY OF PUMP:
Assembly of the pump with the salvaged / new spares to be done in conformity with the drawing and as per the guidance of the Engineer-in-charge. Hold points and stage inspections shall be determined by the Engineer-in-charge to ensure the quality of assembly. Complete assembly including mechanical seal assembly and bearing assembly is to be done,

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preferably outside the pump house.

Clause D-3.00.06 The non-return valve unit in the discharge side of the pump also is considered as a part of this overhauling work. This valves also comes under IBR purview. Assembled pump is to be shifted to the location with the help of Monorail and is to be placed on foundation, with due consideration to the Motor position. Suitable modifications of the pump foundation / base plate if needed is to be done. Foundation bolts, All line flanges etc are to be connected back with suitable gaskets. Coupling to be done after obtaining clearance from Engineer-in-charge. After charging the pump, leakages if any found are to be rectified.

01.68 Clause D-4.00.0 REPLACEMENT OF NON-METALLIC EXPANSION BELLOW, SIZE 4.4 M x 3.3 M AT BOILER INLET IN CDCP 4 BOILERS (BOQ Sl No: 36)

Clause D-4.00.01 The inlet Gas Duct to Boilers is connected to the Outlet duct of Dust catcher by means of a fabric compensator, rectangular in section and of size 4.4 m x 3.3 mtr. Existing compensator to be removed by opening the fasteners, and the flange mating surfaces on the duct flanges are to be completely cleaned by scrapping. New compensator is to be fixed in position by gluing and fastening with nuts/bolts. All materials including glue, compensator, nuts/ bolts etc shall be given free of cost by VSP. Transportation of the new compensator from VSP stores to the site and the old compensator from site to disposal area within 7 KM range is in the scope of the contractor. Transportation shall be provided by VSP.

01.69 Clause D-5.00.00 REPLACEMENT OF METALLIC COMPENSATOR, 1.2 M dia AT ECO OUTLET IN CDCP 4 BOILERS (BOQ Sl No: 37)

Clause D-5.00.01 The Economiser Outlet ducts from Boiler to the Cyclones (2 Nos) are having metallic compensators of Circular cross section, Dia 1.2 mtr. To replace each such compensator, it is to be removed by gas cutting, after locking the ducts in position. New Compensator to be brought to site from VSP stores and to be lifted and fitted in position by proper alignment. After taking clearance from the engineer in charge, full welding is to be done. Root run is to be tested with DPT after which only overlays area permitted. Transportation of the new compensator from VSP stores to the site and the old compensator from site to disposal area within 7 KM range is in the scope of the contractor. Transportation shall be provided by VSP. Compensator at Economizer Inlet is almost twice the size of Eco Outlet compensators and hence replacement if any done of this inlet compensator will be considered equivalent to 2 outlet compensators.

01.70 Clause D-6.00.00 LP /HP SERVICE WATER PIPE REPAIRS AND SIMILAR WORKS IN AUXILLIARIES OF TPP (BOQ Sl Nos 38 to 41)

Clause D-6.00.01 Various Low Pressure Pipes falling under Non IBR category carrying mainly service water and in some cases LP drain steam from various sources, oil, phosphate solutions etc & HP cooling water lines

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(SS) of Mechanical seals of CWP need be repaired by cutting off a portion of such pipes and replacement with new pipe sections issued by VSP. In Some cases Re routing, or laying a new line altogether also may become necessary as decided by Engineer in charge or his representative. Gasket replacement , Valve replacement, Fitting replacement by welding or fastening, etc falling in the section being repaired also is under the scope . Bends and other fittings for pipe sizes 50 mm dia and above are to be site fabricated from similar size pipes. All materials will be issued free of cost by VSP. Domain of this scope extends to all units of TPP(Auxilliaries).

Clause D-6.00.02 Structural modification associated with this work, if any shall be dealt as per clause A-1.04.00. The total pipes are classified into 4 categories as in clause D-7.00.00.

01.71 Clause D-7.00.0 : Classification of LP/HP service water pipelines by diametrical size, and their respective BOQ Sl nos is as follows
 Clause D-7.00.01 - Sizes 15,20, and 25 NB, less than 50 NB - BOQ Sl No: 38
 Clause D-7.00.02 - Sizes 50,65, and 80 NB, less than 100 NB- BOQ Sl No: 39
 Clause D-7.00.03 - Sizes 100, and 150 NB less than 200 NB - BOQ Sl No: 40
 Clause D-7.00.04 - Sizes 200, and 250 NB up to 300 NB - BOQ Sl No: 41

Clause D-8.00.00 JOB COMPLETION PERIOD:
 For Sl.No: 28 of Bill of quantities the job completion period is 20 days from the date of issue of work permit. For Sl.no: 27 of bill of quantities the job completion period is 7 days from the date of issue of work permit. Balance bill of quantities should be completed along with Bill of quantities 27 or 28 or as per the instructions of Engineer-in-charge. However, if Engineer In charge demands early completion based on site emergency , all efforts are to be put towards early completion. Balance bill of quantities should be completed along with Bill of quantities 1 or 2 or as per the instructions of Engineer-in-charge.

- 1.72.00 **MANUAL BRUSH CLEANING OF ONE CONDENSER TUBE IN COB4 POWER PLANT**
 Water jet flushing to be done through one end to other and then with a wire brush attached to a long 8 mm rod the tube is to be thoroughly cleaned . Intermediately water flushing is to be done and again wire brush to be inserted and the process is to be repeated till the tube inner surface is clean to the satisfaction of the Engineer in charge or his representative.
- 1.73.00 **OPENING COB4PP CONDENSER DOORS BEFORE TUBE CLEANING AND CLOSING THEM AFTER TUBE CLEANING**
- 1.73.01 Scaffolding and platforms are to be erected at both sides of condenser. Agency has to assist in isolating the water lines to the condenser.

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- 1.73.02 both side half doors to be opened by opening the fasteners to aid cleaning of one half condenser. New Gasket is to be made for closing . Gasket sheet will be issued by VSP
- 1.73.03 Immediately after getting clearance from EIC , the opened half is to be boxed up and the other half is to be opened for facilitating cleaning of other side half of the condenser. New Gasket is to be made for closing . Gasket sheet will be issued by VSP
- 1.73.04 During water charging if any leak appears it is to be rectified.
- 1.73.04 Each set of half door closing operation or opening operation is to be completed within 2 shifts after receiving clearance.
- 1.74.00 OVERHAUL OF SHRPP BOILER
- 1.74.01 Opening of Boiler man holes. Blank the Gas Ducts Feed water line, Super Heater steam line , CBD, PBD lines, and all such lines that are connected to common facilities as Phosphate dosing, Preheating line etc .Removing the coke dust from the hopper and transporting the dust to the site shown by the site engineer. After ensuring proper isolation of the Boiler to the satisfaction of Engineer in charge or his representative, Obtain Permit to work , First Entry to he Boiler to be made in the presence of the Engineer in charge or his representative only. All isolations done are to be lifted / deblanked once the work is completed.
- Cleaning of complete boiler tube surfaces with Compressed air/ water jets to remove deposits. Closing of the manholes including gasket replacement after satisfactory completion of hydraulic test by Inspector of boilers.
- 1.74.02 Inspection of pressure parts including economizer, evaporator and super heater, for erosion. Tube thickness survey is To be carried out as directed by the Engineer-in- charge. Any defect identified in the structural components also is to be repaired. Painting of newly welded structural elements also is under this scope. Paint shall be given free of cost.
- 1.74.03 Opening of boiler drum, internals cleaning, doing necessary repairing, removal ,cleaning and re-fixing of Demister pads, and offering for IBR dry inspection. Gasket replacement and closing of manholes to make the Boiler ready for hydraulic test.
- 1.74.04 Opening the Safety Valves of drum and super heater (1no), Lapping of disc/seat, assembling, Setting the lift and seat pressures in a test jig, and fixing back in position. Floating the safety valves (Confirming the Lift and Seat at desired pressures in actual
- 1.74.05 Deploying manpower for 5S activities after annual overhaul as in the case of CDCP Boilers is included in the scope Agency has to arrange for the Hydraulic testing Pump for internal and Statutory hydraulic testings. Agency has to Assist in all charging activities for restart of Boilers. 5 days from satisfactory conduct of Statutory hydraulic testing Is the work completion period for this item.

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Cond No	Cond Desc
1.0	<p>TERMS AND CONDITIONS</p> <p>1.1 Before Quoting, the Contractor may visit the site, understand the scope of the subject work, and the ways and means available for execution at site, including material handling equipments, tools and tackles, man power required for doing the job etc.,</p> <p>1.2 The contractor has to make temporary platforms wherever necessary for carrying out the various jobs, and same has to be removed after the completion of job. Safety Belts provided by the contractor to the workers should have valid certificates.</p> <p>1.3. The contractor has to arrange welding machines and gas cutting sets. One Welding Generator should be available always in CDCP 4 to avoid delays in attending Tube leaks as and when they appear. All electrodes (except electrodes required for high pressure welding), DA and Oxygen Cylinders (DA or LPG) and argon cylinders will be supplied by VSP free of cost.</p>
2.0	<p>2.1. The contractor has to arrange the following items (contractors scope of supply):</p> <ul style="list-style-type: none"> a) Cotton waste b) Rustoline/ equivalent c) Marking cloth d) Filler rods e) Brushes for cleaning & Painting . f) Special electrodes for high pressure boiler tube welding i.e. E 7018 (Attest)/ E 8018 (Attest)/Equivt, and TIG wires . g) Personal protective safety appliances to the workers viz safety shoes, safety helmet, belts, goggles, hand gloves and any other safety appliances are required by the job. h) All tools and tackles required for carrying out the job excluding special purpose tools. i) Grinding machines and grinding wheels. <p>ALL OTHER ITEMS EXCLUDING THE ABOVE SHALL BE GIVEN BY VSP FREE OF COST.</p>
3.0	<p>3.1. All the spares and structural steel including SS plates, plugs, valves, tubes, paints Special putty etc. required for carrying out the repairs will be supplied by VSP free of cost. They have to be collected from VSP stores and transported to the site by the contractor. Truck if required for transportation will be arranged by VSP free of cost.</p> <p>3.2. Electrical supply shall be given to a switch board to be arranged by the party. Separate individual connections to various equipments to be drawn by a qualified electrician of the party. The contractor has to use all standard electrical fittings duly earthed.</p> <p>3.3. Flood lights / hand lamps required shall have to be arranged by the party. Only 24V hand lamps to be issued.</p>

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Cond No	Cond Desc
4.0	<p>4.1. The contractor has to follow VSP safety rules while executing the job. Safety clearance to be taken by the contractor from VSP Safety Department before starting the job.</p> <p>4.2. No workmen will be allowed to work without wearing safety helmet and shoes.</p> <p>4.3. The party has to remove all the scrap in the area and shift to a place shown by the Engineer-in-charge and work area is to be cleaned after the completion of the job.</p> <p>4.4. Any job which is not included in the scope of work, and is of minor in nature and is inherent part of the job shall be executed by the contractor at no extra cost to VSP. This includes house keeping work inside Stores building also.</p>
5.0	<p>5.1. During the course of contract if the contractor is allowed to erect any temporary shed for storing his materials the same has to be dismantled and the area is to be cleaned completely before submitting his final bill.</p> <p>5.2. At any time during the course of contract, work should not get affected due to lack of manpower or of tools and tackles. This includes BOQ Item No: 18, "Deployment of Man power during exigencies" also where providing advance intimation to the Contractor is not generally possible.</p> <p>5.3. The party should be in a position to start the work on telephonic information.</p> <p>5.4. The party has to take work authorization / permit to work from Engineer-in-charge before starting the job and the same has to be returned immediately after the completion of job.</p> <p>5.5. The contractor has to fulfill following statutory requirements:</p> <p>a) Before starting the job the contractor should submit the ESI documents.,</p> <p>b) The contractor should submit the labour license obtained from competent authority before starting the job. The contractor should maintain wage register, which will also include the PF contribution (employees & employers).</p> <p>c) The extract of the above is to be submitted to contract labour cell on or before 15th of the month in which payment is made.</p>
6.0	<p>6.1. The contractor must submit the required documents along with the RA Bills without fail. However, he may be asked to submit any other documents which may come into force from time to time.</p> <p>6.2. The contractor may note that the work is not of continuous in nature. The capital repair, tube leakage rectification header weld joints jobs of CDCP Boilers have to be carried out on round the clock basis.</p>
7.0	7.1. Each boiler capital repair of CDCP have to be completed within 20

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Cond No	Cond Desc
	<p>days respectively from the date of issuing work permit. Contractor has to complete the job in all respects so that the statutory authority clears the boiler after dry inspection and hydraulic test.</p> <p>7.2. After work permit is issued for starting the job, contractor shall make arrangements to guard all the equipment related to contractors area of work till the boiler is lighted up. If any brass copper, cable etc. items are is stolen during the period of capital repair the same has to be replaced by the contractor free of cost, before lighting up the boiler. No extra payment shall be made on this account.</p> <p>7.3. Any defective work is observed during the defect liability period the contract shall rectify the defective work at his own cost immediately after receiving information from the Engineer-in-charge.</p>
8.0	<p>8.1. Contractor should have valid IBR grade welders.</p> <p>8.2. All material issued by VSP on cost free basis are to be accounted properly and consumption statement submitted along with RA Bills.</p> <p>8.3. All materials issued on loan basis shall be returned to VSP on acceptable condition.</p> <p>8.4. Agency should possess a valid license, while tendering and throughout the contract period, for carrying out Category-I Boiler repairs issued by/ Endorsed by Boiler Inspectorate ,Andhra Pradesh.</p>
9.0	<p>9.1 SALES TAX CLAUSE : The scope of Material Supply and Consumables supply in the present proposal are as follows.</p> <p>A) MATERIALS TO BE SUPPLIED BY VSP: Spares, Steel and structural items, SS plates, Gland Ropes. Plugs and Gaskets.</p> <p>B) CONUSMABLES TO BE SUPPLIED BY VSP: DA/LPG Cylinders, Oxygen Cylinders Chemicals for Alkali wash out, Argon Cylinders, MS Electrodes, SS Electrodes, Gouging Electrodes, Paint, Red Oxide, Rustolin, Shellac , DP Test kits, Hack saw Blades etc.,</p> <p>C) MATERIALS TO BE SUPPLIED BY CONTRACTOR : NIL</p> <p>D) CONSUMABLES TO BE SUPPLIED BY CONTRACTOR: TIG filler wires, Electrodes E-7018/ 8018 for IBR Welding of Carbon Steel/ Alloy steel pipes and tubes:</p> <p>THE DEDUCTION IN SALES TAX SHALL BE DONE AS PER RULES PREVAILING TIME TO TIME.</p>
10.0	<p>10.1 SAFETY CLAUSE:Contractor shall ensure usage fo ISI markedregulator, oses, Nozzles, Cutting Torches, Welding Holders and Cables for teh cutting and welding works. This must be adhered to strictly.</p>
11.00	Welfare allowances viz., SMA, ASMA are applicable in this contract.

ADDITIONAL SPECIAL CONDITIONS

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Cond No	Cond Desc	
1.0	ADDITIONAL SPECIAL CONDITIONS	
	1. As it is highly skilled nature of work and involves statutory authorities, sub contracting is not allowed	
	2. If the contractor intends to work through GPA, the issue of such GPA (General Power of Attorney) will be limited to the Contractor / HisPartner / Director of the Company / His employees only.	

QUESTIONNAIRE

WORK DESC		: Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant	
Cond No	Cond Desc		
1	The Agency shall visit the site and fully understand the site conditions (nature of job including man power deployment needs). Have you visited the site and understood the site conditions and nature of job. Yes/No		
2	If no, confirm whether you are fully aware of the site condition and nature of job and manpower deployment needs Yes/No		
3	Have you successfully executed / erection repair of pressure parts of high pressure boilers of capacity not less than 25 T/hr and pressure not less than 40 kg/sq.cm ? Yes / No If yes, Please furnish the following details of jobs carried out by you during last Seven years: a) What is the capacity of pressure of Boilers b) Name & Address of the organization where repairs of Boiler pressure parts were carried out. Furnish the proof of execution including job completion certificate, Scope of work, performance certificate.		
4	Furnish the list of tools and tackles and other equipments such as welding generators grinding machines etc. that will be mobilised for the above job Yes/No		
5	Do	you	have valid IBR Grade Welders Yes/No
If yes, furnish a photocopy of valid IBR certificates			
6	Some of the jobs needs round the clock man power deployment. Can you meet the requirement ? Yes / No		
7	Whether you are possessing the valid boiler repair license of Category - 1 issued by / endorsed by the Direcotorate of Boilers of A.P ? Yes /		
8	Note: Condition No: 2,3&7 are Fatal. If party says "NO" his offer will be rejected.		

RASTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
WORKS CONTRACT DEPARTMENT
VISAKHAPATNAM 530 031
PHONES: 0891 2518763, 2758705, FAX: 0891 2518763

IMPORTANT INSTRUCTIONS TO TENDERERS

The Tenderers are requested to note the following:-

- 1.0. The blank Integrity pact document (consisting of 7 Pages) is attached to the Tender document. The same is to be detached while submitting the Tender.
- 2.0. The detached Integrity pact document should be signed on all pages by the tenderer after filling the blanks, wherever required and is to be submitted along with the Pre-Qualification papers, Cost of Tenders and EMD Etc., in Cover-1.
- 3.0. The Cover -2 should contain price bid part only.
- 4.0. Please note that non submission of duly filled and signed Integrity Pact in prescribed format enclosed with Tender schedule will entail to disqualification of tender and price bid of such tenderer will not be opened.

INTEGRITY PACT

Rashtriya Ispat Nigam Limited (RINL) hereinafter referred to as **"The Principal"**,

And

..... hereinafter referred to as **"The Bidder/Contractor"**

Preamble

The Principal intends to award, under laid down organizational procedures, a contract for **"Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant"**. The Principal values full compliance with all relevant laws of the land, rules, regulations, economic use of resources, and of fairness/transparency in its relations with its Bidder(s) and /or Contractor(s).

The Principal will nominate an External Independent Monitor(s) (EIM(s)) by name at the tender stage/will appoint in case of receipt of any reference, from the panel of EIMs, for monitoring the tender process and the execution of the contract in order to ensure compliance with the Integrity Pact by all the parties concerned.

Section 1 – Commitments of the Principal:

- (1) The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles:-
 - (a) No employee of the Principal, personally or through family members, will in connection with the tender for, or the execution of a contract, demand, take a promise for or accept, for self or for third person, any material or non material benefit which the person is not legally entitled to.
 - (b) The Principal will, during the tender process treat all bidders with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidders the same information and will not provide to any Bidder confidential/additional information through which the Bidder(s) could obtain an advantage in relation to the tender process or the contract execution.
 - (c) The Principal will exclude from the process all known prejudiced persons.
- (2) If the Principal obtains information on the conduct of any of its employees which is a criminal offence under the IPC/ PC Act, or if there be a substantive suspicion in this regard, the Principal will inform Chief Vigilance Officer of RINL and in addition can initiate disciplinary action.

Section 2 – Commitments of the Bidder(s)/contractor(s) :

- (1) The Bidder(s)/ Contractor(s) commits to take all measures necessary to prevent corruption. He commits to observe the following principles during his participation in the tender process and during the contract execution.
- (a) The Bidder(s)/Contractor(s) will not, directly or through any other person or firm, offer, promise or give to any of the Principal's employees involved in the tender process or the execution of the contract or to any third person any material or other benefit which he/she is not legally entitled to, in order to obtain in exchange any advantage of any kind whatsoever during the tender process or during the execution of the contract or to vitiate the Principal's tender process or contract execution.
 - (b) The Bidder(s)/ Contractor(s) will not enter with other Bidders into any undisclosed agreement or understanding, whether formal or informal. This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process or to vitiate the Principal's tender process or execution of the contract.
 - (c) The Bidder(s)/Contractor(s) will not commit any offence under the IPC/ PC Act; further the Bidder(s)/Contractor(s) will not use improperly, for purposes of competition or personal gain, or pass on to others, any information or document provided by the Principal as part of the business relationship regarding plans, technical proposals and business details including information contained or transmitted electronically.
 - (d) The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agent(s)/representative(s) in India, if any. Similarly the Bidder(s)/Contractor(s) of Indian Nationality shall furnish the name and address of a foreign supplier/contract Agency, if any. Further details, as mentioned in the *Guidelines on Indian Agents of Foreign "Suppliers/contract agencies"*, shall be disclosed by the Bidder(s)/Contractor(s) wherever applicable. Further, as mentioned in the Guidelines, all the payments made to the Indian agent(s)/representative(s) have to be in Indian Rupees only.
Copy of the *Guidelines on Indian Agents of Foreign "Suppliers/contract agencies"* is enclosed.
 - (e) The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made or committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.
- (2) The Bidder(s)/Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

Section 3 – Disqualification from tender process and exclusion from future contracts:

- (1) A transgression is considered to have occurred, if the principal after due consideration of the available evidence, concludes that a reasonable doubt is possible.
- (2) If the Bidder(s)/Contractor(s), before award of contract or after award of contract has committed a transgression through a violation of *Section 2* above or in any other form such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s) from the tender process or to terminate the contract, if already awarded, for that

reason, without prejudice to other remedies available to the Principal under the relevant *GCC* of the tender/contract.

- (3) If the bidder/Contractor has committed a transgression through a violation of any of the terms under *Section 2* above or in any other form such as to put his reliability or credibility into question, the Principal is entitled also to exclude the bidder / Contractor from future tenders/Contract award processes. The imposition and duration of the exclusion will be determined by the principal keeping in view the severity of the transgression. The severity will be determined by the circumstances of the case, in particular the number of transgressions, the position of the transgressors within the company hierarchy of the bidder /Contractor and the amount of the damage.
- (4) If it is observed after payment of final bill but before the expiry of validity of Integrity pact that the contractor has committed a transgression through a violation of any of the terms under *Section 2* above during the execution of contract, the Principal is entitled to exclude the Contractor from future tenders/Contract award processes.
- (5) The exclusion will be imposed for a minimum period of six (6) months and a maximum period of three (3) years.
- (6) If the bidder / Contractor can prove that he has restored/ recouped the damage to the principal caused by him and has installed a suitable corruption prevention system, the Principal may revoke the exclusion before the expiry of the period of such exclusion.

Section 4 – Compensation for Damages:

- (1) If the Principal has disqualified the bidder from the tender process prior to the award in accordance with *Section 3* above, the Earnest Money Deposit (EMD)/Bid security furnished, if any, along with the offer as per the terms of the Invitation to Tender (ITT) shall be forfeited. This is apart from the disqualification of the Bidder as may be imposed by the Principal as brought out at *Section 3* above
- (2) If the Principal has terminated the Contract in accordance with *Section 3* above, or if the Principal is entitled to terminate the Contract in accordance with *Section 3* above, the Security Deposit/performance bank guarantee furnished by the contractor, if any, as per the terms of the ITT/Contract shall be forfeited without prejudicing the rights and remedies available to the principal under the relevant General conditions of contract. This is apart from the disqualification of the Bidder, as may be imposed by the Principal, as brought out at *Section 3* above.

Section 5 – Previous transgressions:

- (1) The Bidder declares that, to the best of his knowledge, no previous transgressions occurred in the last three (03) years with any other Company in any country conforming to the anti-corruption approach or with Government/any other Public Sector Enterprise in India that could justify his exclusion from the tender process.
- (2) If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process. The contract, if already awarded, can be terminated for such reason.

Section 6 – Equal treatment of all Bidders / Contractors / Subcontractors:

- (1) The Bidder(s)/Contractor(s) undertakes to demand from all his subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before seeking permission for such subcontracting.

- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors.
- (3) The Principal will disqualify from the tender process all bidders who do not sign this Pact or violate its provisions.

Section 7 – Criminal charges against violating Bidder(s) /Contractor(s)/ subcontractor(s):

If the Principal obtains knowledge of conduct of a Bidder, Contractor, Subcontractor or of any employee or a representative or an associate of a Bidder/Contractor/ Subcontractor which constitutes corruption, or if the Principal has substantive suspicion in this regard, the Principal will inform the same to CVO of RINL.

Section 8 – External Independent Monitor(s)(EIM(s)):

- (1) The Principal appoints competent and credible External Independent Monitor(s) with clearance from Central Vigilance Commission & Transparency International (India). The EIM(s) reviews independently, the cases referred to him/them to assess whether and to what extent the parties concerned comply with the obligations under this Integrity Pact,
- (2) In case of noncompliance of the provisions of the Integrity pact, the complaint/noncompliance is to be lodged by the aggrieved party with the Nodal Officer only appointed by CMD/RINL. The Nodal Officer shall refer the complaint / non compliance so received by him to the EIM, already appointed or to be appointed for that case.
- (3) The EIM is not subject to instructions by both the parties and performs his functions neutrally and independently. The EIM(s) will submit report to the CMD, RINL.
- (4) The Bidder(s)/Contractors(s) accepts that the EIM has the right to access without restriction, to all tender/contract documentation of the Principal including that provided by the Bidder/Contractor. The Bidder/Contractor will also grant the EIM upon his request and demonstration of a valid interest, unrestricted and unconditional access to his tender/contract documentation. The same is applicable to Subcontractors also. The EIM is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s)/Subcontractor(s) with confidentiality.
- (5) The Principal will provide to the EIM sufficient information about all meetings among the parties related to the tender/contract for the cases referred to EIM, provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the EIM the option to participate in such meetings.
- (6) As soon as the EIM notices, or believes to notice, a violation of this pact, he will so inform the Principal and request the Principal to discontinue or take corrective action or to take other relevant action. The EIM can in this regard submit non binding recommendations. Beyond this, the EIM has no right to demand from the parties that they act in a specific manner, refrain from action or tolerate action.
- (7) The EIM will submit a written report to the CMD, RINL within four (04) to six (06) weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for corrective actions for the violations or the breaches of the provisions of the agreement noticed by the EIM.
- (8) EIM may also submit a report directly to the CVO of RINL and the Central Vigilance Commission, in case of suspicion of serious irregularities attracting provisions of the IPC/ PC Act.
- (9) Expenses of EIM shall be borne by RINL/VSP as per terms of appointment of EIMs.
- (10) The word '**Monitor**' means External Independent Monitor and would include both singular and plural.

Section 9 - Duration of the Integrity Pact:

- (1) This Pact comes into force upon signing by both the Principal and the Bidder/Contractor. It expires for the Contractor twelve (12) months after the last payment under the contract, and for all unsuccessful Bidders, six (06) months after the contract has been awarded and accordingly for the Principal after the expiry of respective periods stated above.
- (2) If any claim is made/ lodged during the valid period of the IP, the same shall be binding and continue to be valid even after the lapse of this pact as specified above, unless it is discharged/determined by CMD of RINL.

Section 10 - Other provisions:

- (1) This agreement is subject to Indian Law. Place of performance and jurisdiction is the Registered Office of the principal, i.e. Visakhapatnam, State of Andhra Pradesh, India.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements to this pact have not been made.
- (3) If the Contractor is a partnership firm/ consortium, this agreement must be signed by all partners/ consortium members, or their Authorized Representative(s) by duly furnishing Authorization to sign Integrity Pact.
- (4) Should one or several provisions of this agreement turnout to be invalid, the remaining part of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.
- (5) Wherever he or his is indicated in the above sections, the same may be read as he/she or his/her, as the case may be.

(For & On behalf of the Principal)_____
(For & On behalf of Bidder/
Contractor)

(Office Seal)

(Office Seal)

Place -----

Date -----

Witness 1:
(Name & Address)_____
_____Witness 2:
(Name & Address)_____

**GUIDELINES FOR INDIAN AGENTS OF
FOREIGN "SUPPLIERS/CONTRACT AGENCIES"**

- 1.0 There shall be compulsory registration of Indian Agents of foreign suppliers/contract Agencies with RINL in respect of all Global (Open) Tenders and Limited Tenders. An agent who is not registered with RINL shall apply for registration in the prescribed Application Form.
- 1.1 Registered agent needs to submit before the placement of order by RINL, an Original certificate issued by his foreign supplier/ contract Agency (or an authenticated Photostat copy of the above certificate duly attested by a Notary Public) confirming the agency agreement and giving the status being enjoyed by the agent alongwith the details of the commission/remuneration/salary/retainer being paid by them to the agent(s).
- 1.2 Wherever the Indian representative has communicated on behalf of their foreign supplier/contract Agency and/or the foreign supplier/contract Agency have stated that they are not paying any commission to their Indian agent(s) but paying salary or retainer, a written declaration to this effect given by the foreign supplier/contract Agency should be submitted before finalizing the contract.
- 2.0 **DISCLOSURE OF PARTICULARS OF AGENT(S)/REPRESENTATIVE(S) IN INDIA, IF ANY:**
- 2.1 *Bidders of Foreign nationality shall furnish the following details in their quotation/bid:*
- 2.1.1 The name and address of their agent(s)/representative(s) in India, if any, and the extent of authorization and authority given to them to commit them. In case the agent(s)/representative(s) is a foreign Company, it shall be confirmed whether it is a really substantial Company and details of the company shall be furnished.
- 2.1.2 The amount of commission/remuneration included in the quoted price(s) for such agent(s)/representative(s) in India.
- 2.1.3 Confirmation of the Bidder that the commission/remuneration if any, payable to his agent(s)/representative(s) in India, may be paid by RINL in Indian Rupees only.
- 3.0 **DISCLOSURE BY INDIAN AGENT(S) OF PARTICULARS OF THEIR FOREIGN SUPPLIER/CONTRACT AGENCY AND FURNISHING OF REQUISITE INFORMATION:**
- 3.1 *Bidders of Indian Nationality shall furnish the following details/certificates in/alongwith their offers:*
- 3.1.1 The name and address of foreign supplier/contract agency indicating their nationality as well as their status, i.e., manufacturer or agent of manufacturer holding the Letter of Authority.
- 3.1.2 Specific Authorization letter by the foreign supplier/contract agency authorizing the agent to make an offer in India in response to tender either directly or through their agent(s)/representative(s).

- 3.1. 3** The amount of commission/remuneration included for bidder in the price (s) quoted
- 3.1.4** Confirmation of the foreign supplier/contract Agency of the Bidder, that the commission/remuneration, if any, reserved for the Bidder in the quoted price (s), may be paid by RINL in India in equivalent Indian Rupees.
- 4.0** In either case, in the event of materialization of contract, the terms of payment will provide for payment of the commission/remuneration payable, if any, to the agent(s)/representative(s) in India in Indian Rupees, as per terms of the contract.
- 4.1** Failure to furnish correct information in detail, as called for in para 2.0 and/or 3.0 above will render the bid concerned liable for rejection or in the event of materialization of contract; the same is liable for termination by RINL. Besides this, other actions like banning business dealings with RINL, payment of a named sum etc., may also follow.

FORM 'C'
RASHTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
WORKS CONTRACTS DEPARTMENT
VISAKHAPATNAM-530031
PHONE NO: (MAX)3691, TELEFAX NO:0891-2518763

Name of the work : Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant

TENDER NO: 76322-0

PERIOD OF CONTRACT : 24 (Twenty Four) months
DEFECT LIABILITY PERIOD : 03 (Three) months
ENGINEER : AGM (M) / TPP

ISSUED TO SRI/ M/s. _____

PRICE BID (PART-2)

Note: Tenderer has to fill the data wherever and whatever required in the tender schedule without fail and sign all the pages

No of pages of BOQ alone : 04 (Four) pages only

Total No. of pages : 05 (Five) pages only

(FOR OFFICE USE ONLY)

1. E.M.D. PARTICULARS	:	
2. SI. No.	:	OUT OF TENDERS
3. COVERING LETTER	:	NO. OF PAGES:
4. REBATE OFFERED	:	
5. RATE WRITTEN IN WORDS	:	
6. VALIDITY OF TENDER	:	4 MONTHS FROM THE DATE OF OPENING
SIGNATURE OF CONTRACT DEPT. REPRESENTATIVE		SIGNATURE OF FINANCE DEPARTMENT REPRESENTATIVE



RAHSTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM - 530031

BILL OF QUANTITIES

PR No / Date: 73001787 / 04.08.2016	Report Date : 07.10.2016
Pur . Org.: WORKS CONTRACTS	
MSS: 5050613817 : CAPITAL REPAIRS,TUBE LEAKAGE REPAIRS, HP	
CAPITAL REPAIRS,TUBE LEAKAGE REPAIRS, HP	

The BOQ Items are taken as per the following Rates.						
	Central Rates	VSP Rates				
Skilled	390.000	634.150				
Semi Skilled	333.000	546.050				
Unskilled	294.000	485.750				
Sl.No	Service Number	Description of the item	Qty	UOM	Rate	Amount
1	510003243	OVERHAULING OF BOILER AS PER SL.NO:1.01.01 TO 1.01.14 OF SCOPE OF WORK. CUTTING GAS SUPPLY UNDER VSPSCOPE	24.000	EA	115,530.24	2,772,725.76
2	510003244	TUBE LEAKAGE RECTIFICATION WORKS AS PER SCOPE OF WORK 2.00.00 TO 2.00.12. CUTTING GAS SUPPLY UNDER VSPSCOPE	60.000	EA	57,179.85	3,430,791.00
3	510003218	REPLACEMENT OF BOILER TUBES / IBR WELD JOINTS AS PER SCOPE OF WORK SL.NO:1.02.01.	2,000.000	EA	436.66	873,320.00
4	510003219	TUBE PLUGGING BY WELDING AND ASSOCIATED JOBS AS PER SCOPE OF WORK SL.NO:1.02.02.	150.000	EA	1,923.97	288,595.50
5	510003245	CUTTING, REMOVING OF BOILER SHELL PLATE, INCLUDING REMOVAL OF REFRACTORY. FIXING REFRACTORY AND SHELL PLATE AND WELDING THE SAME AS SL.NO: 1.03.00 OF SCOPE OF WORK. CUTTING GAS SUPPLY UNDER VSPSCOPE	280.000	M2	679.22	190,181.60
6	510003246	FABRICATION AND REPAIR OF STRUCTURAL OF BOILER AS PER SL.NO: 1.04.00 OF SCOPE OF WORK. CUTTING GAS SUPPLY UNDER VSPSCOPE	70.000	TO	11,304.55	791,318.50
7	510003247	REPAIR OF CDCP BOILER TOP PANEL OF SUPERHEATERS AS PER SL.NO: 1.05.00 OF SCOPE OF WORK. CUTTING GAS SUPPLY UNDER VSPSCOPE	40.000	EA	25,671.30	1,026,852.00
8	510003248	REPAIR OF FOUNDATION FRAMES, WALKWAYS AND CRANE PLATFORMS AS PER SL.NO: 3.00.00 OF SCOPE OF WORK. CUTTING GAS SUPPLY UNDER VSPSCOPE	20.000	TO	13,003.80	260,076.00
9	510003224	TUBE CLEANING AND ASSOCIATED WORKS IN CHILLERS OF CHILLED WATER PLANT NO:1.AS PER SCOPE OF WORK SL.NO:4.00.00 TO 4.03.07.	20.000	EA	72,500.25	1,450,005.00
10	510003225	COMPLETE OVERHAUL OF ONE NO.OF CHILLER OF CHILLED WATER PLANT NO:1 AS PER SCOPE OF WORK SL.NO:5.00.00-5.00.07.	10.000	LS	110,692.46	1,106,924.60
11	510003226	SAND BLASTING OF GETS TURBINE ROTOR ETC.AND MISCELLANEOUS WORKS AS PER SCOPE OF WORK SL.NO:6.00.00 TO 6.00.03.	4.000	EA	14,536.49	58,145.96
12	510003365	REPAIR OF VARIOUS HEADER JOINTS 20 MM DIA TO LESS THAN 80 MM DIA IN CDCP 4 BOILERS	250.000	EA	1,508.42	377,105.00
13	510003249	REPAIR OF VARIOUS HEADER JOINTS AS PER SCOPE OF WORK SL.NO:7.00.00 - 8.00.01. CUTTING GAS SUPPLY UNDER VSPSCOPE	200.000	EA	2,923.15	584,630.00
14	510003250	REPAIR OF VARIOUS HEADER JOINTS AS PER SCOPE OF	150.000	EA	6,942.47	1,041,370.50



RAHSTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM - 530031

BILL OF QUANTITIES

Sl.No	Service Number	Description of the item	Qty	UOM	Rate	Amount
		WORK SL.NO: 7.00.00 & 8.00.02. CUTTING GAS SUPPLY UNDER VSPSCOPE				
15	510003251	REPAIR OF VARIOUS HEADER JOINTS AS PER SCOPE OF WORK SL.NO: 7.00.00 & 8.00.03. CUTTING GAS SUPPLY UNDER VSPSCOPE	80.000	EA	10,399.02	831,921.60
16	510003252	REPAIR OF VARIOUS HEADER JOINTS AS PER SCOPE OF WORK SL.NO: 7.00.00 & 8.00.04. CUTTING GAS SUPPLY UNDER VSPSCOPE	120.000	EA	14,626.43	1,755,171.60
17	510003253	REPAIR OF VARIOUS HEADER JOINTS AS PER SCOPE OF WORK SL.NO: 7.00.00 & 8.00.05. CUTTING GAS SUPPLY UNDER VSPSCOPE	12.000	EA	20,875.55	250,506.60
18	910000051	DEPLOYMENT OF MANPOWER DURING EXIGENCIES OF CDCP BOILERS ETC.AS PER SCOPE OF WORK SL.NO:9.00.00.	1,100.000	MDY	485.75	534,325.00
19	510003254	REPLACEMENT OF ECONOMISER COILS BUNDLES AS PER SCOPE OF WORK SL NO: B-1.0.0 TO B-1.2.7 CUTTING GAS SUPPLY UNDER VSPSCOPE	4.000	EA	570,859.17	2,283,436.68
20	510003255	REPALCEMENT OF SET OF EVAPORATOR RISER TUBES AS PER SCOPE OF WORK SL NO: B-2.0.0 TO B-2.2.3 CUTTING GAS SUPPLY UNDER VSPSCOPE	8.000	EA	155,462.38	1,243,699.04
21	510003256	REPLACEMENT OF EVAPORATOR TUBE BUNDLES AS PER SCOPE OF WORK SL NO: B-3.0.0 TO B-3.3.7 CUTTING GAS SUPPLY UNDER VSPSCOPE	4.000	EA	934,445.16	3,737,780.64
22	510003235	CARRYING OUT HYDRAULIC TEST AND ALKALI WASHOUT OUT OF CDCP BOILER AS PER SCOPE OF WORK SL NO:B-4.0.0 TO B-4.1.2	12.000	EA	96,855.05	1,162,260.60
23	510003238	MAKING ONE SET OF ECONOMISER TUBE BUNDLE READY FOR USE CONDITION FOR ONE BOILER AS PER SCOPE OF WORK SL NO:B-6.0.0 TO B-6.0.11	1.000	LS	153,455.96	153,455.96
24	510003257	REPLACEMENT OF SUPER HEATER TUBE BUNDLES	4.000	EA	155,778.46	623,113.84
25	510003241	OVERHAULING OF CIRCULATION WATER PUMP OF CDCP BOILERS	22.000	EA	15,649.86	344,296.92
26	510003242	REPLACEMENT OF INLET /OUTLET COMPENSATOR OF GETS	10.000	EA	55,234.82	552,348.20
27	510003359	TUBE LEAKAGE RECTIFICATION WORKS IN CDCP 4 BOILERS	4.000	EA	53,386.20	213,544.80
28	510003360	OVERHAULING OF ONE CDCP 4 BOILER	8.000	EA	177,072.33	1,416,578.64
29	510003361	REPLACEMENT OF BOILER TUBES/IBR WELD JOINTS IN CDCP 4 BOILERS	240.000	EA	756.07	181,456.80
30	510003362	PLUGGING OF BOILER TUBES IN CDCP4 BOILERS	50.000	EA	2,775.65	138,782.50
31	510003363	CUTTING,REMOVAL OF BOILER SHELL PLATE INCLUDING REMOVAL OF INSULATION, FIXING INSULATION AND SHELLPLATE AND WELDING THTE SAME IN CDCP 4 BOILERS	100.000	M2	646.00	64,600.00
32	510003371	ERECTION OF SCAFFOLDING IN CDCP 4 BOILERS	350.000	M2	256.14	89,649.00
33	510003372	PROTECTION SHIELD REPLACEMENT IN CDCP 4 BOILERS	300.000	EA	226.00	67,800.00
34	330000208	REMOVAL OF UNLOADED COKE DUST FROM CDCP 4 BOILERS BOTTOM	150.000	M3	229.80	34,470.00



RAHSTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
VISAKHAPATNAM - 530031

BILL OF QUANTITIES

Sl.No	Service Number	Description of the item	Qty	UOM	Rate	Amount
35	510003373	OVERHAUL OF CIRCULATION WATER PUMP OF CDCP 4 BOILERS	4.000	EA	15,863.42	63,453.68
36	510003374	REPLACEMENT OF NONMETALLIC EXPANSION BELLOW AT CDCP4 BOILERS INLET	1.000	EA	59,406.99	59,406.99
37	510003375	REPLACEMENT OF METALLIC COMPENSATOR AT ECONOMISER OUTLET IN CDCP4 BOILERS	1.000	EA	33,593.13	33,593.13
38	510003377	LP/HP SERVICE WATER PIPES REPAIR IN AUX UNITS OF TPP .SIZE:15,20 & 25 NB	600.000	M	67.34	40,404.00
39	510003378	LP/HP SERVICE WATER PIPES REPAIR IN AUX UNITS OF TPP .SIZE:50 & 65 NB	1,000.000	M	123.00	123,000.00
40	510003379	LP/HP SERVICE WATER PIPES REPAIR IN AUX UNITS OF TPP .SIZE:100 NB	700.000	M	196.25	137,375.00
41	510003380	LP/HP SERVICE WATER PIPES REPAIR IN AUX UNITS OF TPP .SIZE:200 NB	750.000	M	492.07	369,052.50
42	510006736	MANUAL BRUSH CLEANING OF ONE CONDENSER TUBE OF COB4 PP TURBINE	8,429.000	EA	19.81	166,978.49
43	510006735	OPENING OF COB4PP CONDENSER DOORS BEFORE TUBE CLEANING & CLOSING THEM AFTER TUBE CLEANING	4.000	TO	31,049.69	124,198.76
44	510008325	overhauling of SHRPP Boiler	2.000	EA	435,000.00	870,000.00
Total Value: In words : three crore nineteen lakh eighteen thousand seven hundred two rupees thirty nine paise						31,918,702.39

Signature of the Tendere



FORM 'G'
RASHTRIYA ISPAT NIGAM LIMITED
VISAKHAPATNAM STEEL PLANT
WORKS CONTRACTS DEPARTMENT
BILL OF QUANTITIES (BOQ)

TENDER NO: 76322-0

Name of the work :

Capital Repairs, Tube leakage Repairs, HP Welding in CDCP1,2,3&4 Boilers, Replacement of Economiser & Evaporator Tube bundles in CDCP Boilers, and Misc jobs in Auxilliary units of Thermal Power Plant

- The quantities indicated are approximate and may vary to a wide range. Payment shall be made as per the actual work carried out at corresponding accepted rate.
- Wherever old items are replaced for fixing new items, all related connections are to be made good for proper functioning of new items. Dismantled / old items are to be handed over to the stores.

No.	DESCRIPTION	UNIT	QTY.	RATE (₹.)	AMOUNT (₹.)
1.	<p>As per the detailed Bill of Quantities enclosed in 03 (Three) pages</p> <p>ESTIMATED VALUE (RUPEES THREE CRORES NINETEEN LAKHS EIGHTEEN THOUSAND SEVEN HUNDRED TWO AND PAISE THIRTY NINE ONLY)</p>			<p>AS PER DETAILED BILL OF QUANTITIES ENCLOSED</p>	<p>3,19,18,702=39</p>

TOTAL AMOUNT QUOTED IN FIGURES: Rs. _____

TOTAL AMOUNT QUOTED IN WORDS: Rs. _____

only.

- Note: 1. Tenderer shall write their quoted offer both in WORDS and FIGURES. The quoted offer in WORDS shall be in CAPITAL / BLOCK letters.
2. If there is discrepancy between the amount mentioned in FIGURES and the amount mentioned in WORDS, the amount as mentioned in WORDS only shall be taken as the quotation of the tenderer.
3. **THE ESTIMATE OF THIS TENDER IS BASED ON THE RINL / VSP APPROVED WAGE RATES, CONSEQUENT TO THE MINIMUM WAGE OF CONTRACT WORKER AS NOTIFIED BY THE REGIONAL LABOUR COMMISSIONER (CENTRAL), HYDERABAD, WHICH IS GIVEN BELOW. IN CASE REVISION IN THE MINIMUM WAGES OF CONTRACT TAKES PLACE, ESCALATION DUE TO THIS SHALL BE PAYABLE TO THE CONTRACT AS PER THE ESCALATION FORMULA INDICATED IN THE SPECIAL CONDITIONS OF CONTRACT :**

	UNSKILLED WORKER	SEMI-SKILLED WORKER	SKILLED WORKER
RINL/VSP APPROVED RATE (IN RUPEES)	485=75	546=05	634=15
MINIMUM WAGES AS NOTIFIED BY THE RLC (CENTRAL), HYDERABAD (IN RUPEES)	294=00	333=00	390=00