



**Heavy Engineering Corporation Limited
Heavy Machine Building Plant
(A Govt of India Enterprises)
Ranchi- 834004 (INDIA)**

Tender ref. NO. HMBP/PUR/2017/961962/EL- 5251

Dated: 13.01.2018

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Open Tender Enquiry

No. HMBP/PUR/2017/961962/EL-5251

Dated: 13.01.2018

Due date of opening of tender: 05.02.2018

ENQUIRY SCHEDULE

Subject: Tender enquiry is for "Design, Engineering, Manufacture, Assembly, Inspection, Shop Testing, Supply of items for DSL System FOR HMBP store at Ranchi and supervision of erection of supplied items at site as under :

SI No.	Item Description (REQUIREMENT OF HEC)	Quantity	TO BE QUOTED BY BIDDER
1	Supply of total items for DSL system as per Scope of supply of Technical Specification (Section-III)	As per Clause No. 5 of Section-III	
2	Supervision of Erection at site i.e at VISHAKHAPATTANAM STEEL PLANT, VISHAKHAPATTANAM	01	

NOTE:

- 1. If all items /services (as per SI. No.1 & 2 above) are not quoted by the bidder then offer shall not be considered for evaluation as offers shall be treated as incomplete.**
- 2. Price to be quoted for above separately for "supply of total items for DSL system & Supervision of Erection at site "however L1 shall be decided on total Overall value of all items i.e. covered by SI. No. 1& 2 above.**
- 3. Bidders to quote for total scope of work of supply & supervision of erection at site as per technical specification of NIT because order shall be finalized & placed on overall L1 value of all materials & services i.e. L1 price shall be calculated on the basis of total price which will be combined price of material value & Charges for Supervision of Erection at site.**
- 4. Detailed Technical Specification of Electrics will be as per enclosed technical Specification as per section-III.**
- 5. Make of all items shall be as per preferred make list of VSP which is enclosed in the last of NIT.**
- 6. Please fill Section-I and submit along with techno-commercial bid (Part-I of offer). This is mandatory.**



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7. **Validity of offer: should be minimum 120 days from the date of opening of tender. The offer with a lower validity period other than 120 days will not be acceptable and such offer shall be ignored without assigning any reason.**
8. **Earnest Money Deposit & Tender Cost: EMD for Rs. 11, 00,000.00 & Tender Cost for Rs. 3,000.00 has to be furnished as per clause No.25 of this tender .If not submitted, your offer can be summarily rejected and no further correspondence shall be done.**
9. **Bidders to furnish audited balance sheet & profit-loss statement of last three financial years (2014-15, 2015-16, 2016-17).**

Pre-Qualifying Criteria:

1. Bidders must have executed one purchase order of at least 2.00 Crores or more than one purchase orders having total combined value of at least Rs. 2.00 Crores during the last five financial years(2012-13,2013-14,2014-15,2015-16,2016-17) , for similar items of DSL system.
Orders value means basic order value in INR.
2. Firms should have supplied similar DSL items to any PSU Steel Plant /any Reputed Private Steel Plants.
3. Bidders must furnish self attested copies of such purchase orders.
4. Bidders have to submit proof of completion of supply against submitted Purchase Order copies for Sl. No. 2 & 3.
5. Contact Details (Email Address, Communication address & Mobile No.) of their customer for ascertaining the submitted documents.

Schedule of Tender:

Due Date & Time of submission : 05.02.2018 up to 1.00 PM

Date & Time of opening of Bid : 05.02.2018 at 03:00 PM

Method of submission of offer:

1. **Quotation to be submitted in TWO - BID System i.e.**
 - (a) **Techno commercial bid (Part I)**- This techno-commercial bid shall be conforming all technical specifications, commercial terms and conditions, EMD, Tender Cost & price format as per section-II with price column blanked (Un-priced) .
 - (b) **Price bid (Part II)** –This part shall comprise price format duly filled in.
2. Techno-commercial bid should be sealed in separate envelope super scribing as part-I & Price bid should be sealed in a separate sealed envelope super scribing as part-II with tender enquiry reference, date, due date of opening & tenderer's name & address on each envelope.
Note: Bidder has to ensure that offer is submitted in TWO BID system as explained above & should indicate "TWO BID "on the top of cover envelope.



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3. Both bids i.e. part-I & part-II has to be sealed in **one sealed envelope** clearly super scribing on the top of envelope tender reference no. with date, due date of opening & tenderer's name & address on it. Bidder has to ensure that offer is strictly submitted in two bid system & must indicate "TWO BID" on the top of cover envelope & both the sealed covers must bear with the enquiry no. & date & due date of tender opening at its top.

Terms & Conditions:-

1. The offer has to be quoted exactly as per the detailed technical specification (Section-III).
2. **Price:** The rate quoted by the tenderer must be firm and the offers may remain valid for acceptance for 120 days from the due date of opening of the tender. Quotation erased or over written are likely to be rejected unless all corrections are authenticated with the tenderer's signature. Price bid format is based on the major supplies & activities but the firm shall be accountable & responsible for the completeness of the system as a whole and any item /Material /Activity which has not been covered by the Scope of work & supply of the specification shall be within the scope of the supplier, if it is required for the successful installation & commissioning in line with our approved Drawings & Bill of Material for which NO extra cost shall be payable.

2.1 FOR SUPPLIES:

Prices quoted must be firm till completion of work defined under the scope of supplier. The prices must be quoted as indicated in Section-II enclosed herewith.

2.2 Supervision of Erection at site :

- i) **For making payment to the manpower, firm has to take care of all applicable taxes, levies, expenses towards various statutory and regulatory body and insurance coverage.**
- ii) GST for supervision of erection, if applicable shall be reimbursed against documentary evidence by PURCHASER. The price also includes all charges towards to and fro travel, boarding, local transportation, medical etc.
- iii) Price shall remain firm and binding and shall not be subject to any variation whatsoever on any account except for statutory variation on taxes (GST).
- iv) Purchaser will not entertain any additional visit charges under following circumstances :
 - a) In case of delay in supervision of erection at site due to delay by supplier's engineer.
 - b) Due to lack of proper documents / knowledge to be possessed by supplier's engineer.
 - c) In case of additional visit necessitated due to fault / repair in the supplier's supplied equipment, because of design / manufacturing / workmanship fault.
 - d) In case of delays / loss of time beyond purchaser's control.
 - e) In case of short supplies by the supplier.
3. **Offer has to be quoted on FOR HMBP Stores, Ranchi basis. The rate quoted shall be inclusive of all packing & forwarding charges but exclusive of TAXES (GST).**



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4. If quoted on Ex Work's basis then Freight charge to be clearly notified otherwise offer may not be acceptable.

5. **Payment terms shall be as under:**

For supply of total materials	<p>90% of basic order value of supply part along with 100% taxes shall be released through RTGS within 60 days of receipt of materials along with Guarantee certificate ,test certificate inspection certificate /CRV(To be issued by HEC) ,original invoice & Performance bank guarantee of 10% of total order value to be valid till full guarantee period from any nationalized bank only in HEC's Format."</p> <p>Submission of bills:</p> <p>Following documents are required to be submitted for processing of payment after receipt of material at our stores/HMBP:</p> <ol style="list-style-type: none">a. Copies of Receipted Lorry Consignment Note.b. Copies of Packing List & Delivery Challan including originals.c. Copies of Inspection Certificate including originals.d. Dispatch clearance issued by PURCHASER.e. Original copy i.e. Buyer's copy of Invoice as per GST Norms.f. Documentary evidence regarding handing over of Transporter copy of Tax Invoice to the Site /Stores of PURCHASER.g. Material Test Certificate.h. Performance bank Guarantee for 10% of total order value.i. Certificate from the supplier that the contents in each case are not less than those entered in the invoice and packing list and the quality of goods are guaranteed as new and as per the Relevant technical specification. <p>Balance 10% of supply part shall be released within 30 days after submission of completion certificate of erection from Marketing / HMBP.</p>
For supervision of erection at site.	<p>100% payment + GST for supervision of erection at site shall be released within 30 days after completion of erection of supplied items against submission of completion certificate of erection from Marketing/HMBP & Invoice as per GST Norms.</p>

Note: If you offer any other payment terms other than NIT payment terms then your offer can be Loaded with bank interest rate (Presently 1% per month) as per the rules of the company for L1 consideration only.

6. The applicable rate of Taxes on the date of submission of offer should be clearly indicated.
7. In line with GST implementation, all tax invoices must have GST No. of supplier/bidder/contractor.
8. **Firm delivery:** In days/weeks/months to be clearly mentioned.
9. The percentage of taxes should be clearly mentioned in the offer.



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10. Schedule for drawing submission, Delivery of materials & "Supervision of Erection " at site :

Drawing/Documents submission for approval after placement of PO as per Clause 13 of technical specification.	Total drawings as per clause No. 13 of technical specification shall be furnished within 7-10 working days from the date of receipt of PO
Delivery of materials	Firm will raise inspection call within 3 months maximum from the date of approval of drawings /manufacturing Clearance from HEC. Material shall be delivered to Stores/HMBP within 15 days after issuing dispatch clearance.
Supervision of Erection at site	Supplier shall depute their engineers at site for supervision of erection of supplied material within maximum 5-7 days from the date of intimation from HEC/VSP for site availability. Note: It will be supplier's responsibility to make the manpower available at site for supervision of erection till the completion of Erection without any extra cost implication other than quoted charges for supervision of erection at site.

Note: After receiving comments on drawings, revised drawing incorporating comments shall be submitted within maximum 2-3 working days until or unless there is some extraordinary situation. For submission of drawings to HEC and thereafter getting approval from MECON, It shall be the prime responsibility of the firm. HEC shall provide all sort of support.

11. PROGRESS REPORT:

Progress of delivery/inspection must be given to the concerned officer who has signed the purchase order, on the 15th and 30th of each month during currency of delivery period. In case delivery period is crossed by the supplier, firm has to take approval of buyer in writing before dispatch.

12. SUBLETTING AND ASSIGNMENT:

The supplier shall not, have without the previous consent in writing of the purchasers, sublet, transfer or assign the purchase order or any part thereof or interest therein or benefit or advantage thereof in any manner whatsoever. Provided nevertheless that any such consent shall not relieve the supplier from any obligation, duty or responsibility under the purchase order.

13. Inspection Clause: -

Inspection Shall be arranged by Sr DGM, I/c/QCA, HMBP/HEC or his representative(s), however, HEC reserves the right to inspect after receipt of material at HMBP and if it is not found confirming to our specification, the material shall be rejected and firm have to replace it at no extra cost and Inspection shall be done at per Clause No. 8 & 9 (Inspection & Tests) of Technical Specification of NIT (Section-III) .



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14. The Price quoted by the tenderers should be exclusive of Taxes. The rate and nature of Tax applicable should be shown separately. Tax will be paid to the seller at the rate at which it is liable to be assessed or has actually been assessed on the date of supply provided the transaction of sale is legally liable to tax and within the delivery period. Any change on the taxes structure beyond the delivery period will not be considered by HEC.

15. Quotations erased or over written are likely to be rejected unless all corrections are authenticated with the tenderer's signature.

16. Full particulars i.e. specification, literature and / or drawing wherever applicable has to be submitted along with the quotation. The brand and 'Make' name must be indicated.

17. The Corporation does not pledge itself to accept the lowest or any tender and reserves to itself the right of accepting the whole or any part of tender or portion of the quantity offered and you shall supply the same at the rate quoted.

18. Order placed as a result of this tender will be subject to the Corporation's General Terms and Conditions of contract which can be down loaded from our website (www.hecltd.com).

19. Corporation reserves the right to call for and examine at any time the books of accounts and other documents and papers of the firm for the purpose of ascertaining whether any excess payments has been made or the firm likely to be received / received undue benefit out of execution of the particular contract.

20. The final quantity may vary at the time of finalization of tender; however the proper clarification / confirmation shall be taken from the firms.

21. Delivery: The time for and the date of delivery of the Stores stipulated in the acceptance of tender shall be deemed to be the essence of the contract and delivery must be completed no later than the dates specified therein.

22. Based on HEC's requirement and in order to ensure security of supply from more than one sources, the total tendered quantity of any item may be split amongst more than one successful bidder at L1 Landed price. Hence Purchase Order may be placed on more than one firms and the repeat order for 100% quantity may be placed on successful bidder with mutual consent.

23. LD & Risk Purchase Clause – If the material is not supplied with in the stipulated period then material can be procured at the risk & cost of the firm without giving any notice to the firm. Otherwise:

a) The purchaser to recover from the contractor a sum of 0.5 % per week (completed week) of the price of the stores (up to maximum 10 %) as liquidated damages, which the contractor has failed to deliver as aforesaid or

b) The purchaser may procure the undelivered stores / similar items from elsewhere, without notice to the contractor at the risk of the contractor without canceling the contract in respect of the consignment not yet due for delivery or,

c) To cancel the contract or a portion thereof.

24. There is no obligation on our part to accept delayed / late tenders. Tenders received after the due date of opening are liable to be summarily rejected.



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25. Earnest Money & Tender Cost - Earnest money Rs. 11, 00,000.00 & Tender Cost of Rs. 3,000.00 will have to be deposited by demand draft / bank guarantee from any nationalized bank Payable on the State Bank of India, Ranchi Hatia Branch, in favor of Heavy Engineering Corporation Ltd. Ranchi. - 4. EMD Should be submitted along with techno-commercial bid **(Part – 1)**.

Note: No EMD shall be required under the following cases:

- A. National Small Industries Corporation / Small Scale Industries / Micro, Small Scale industry (MSE), as per Government directive *.
- B. Firms registered with DGS&D for only those items if they are under this tender.

26. Security Deposit- Successful tenderer will have to deposit security deposit equal to 5% of the basic value of the contract within 21 days from the date of award of contract, failing this, the contract will be cancelled and the stores will be procured at the Risk and expenses of the contractor. This will be in addition to other remedies available to the purchaser for the successful completion of the contract as provided in general terms & conditions of the contract of HEC. The validity of the security deposit shall be up to the receipt of the last consignment.

27. Performance Bank Guarantee: Successful bidder/s will have to deposit the performance bank guarantee as per HEC format for 10% of total order value from any nationalized bank to be valid till full guarantee/ Warranty period.

28. Genuineness of documents – Firm shall be responsible for the genuineness of all the submitted documents/certificates and if any time these are found false/fabricated then firm shall be liable for punishment as per rules of the company and can be debarred from any further participation in any tender in HEC.

29. Guarantee Clause: The tenderer shall stand guarantee for design, manufacturing and satisfactory performance of the equipment / items/ electrics for a period of 18 months after supply or 12 months from the date of issue of last FAC (Final acceptance test conducted by M/s VSP). During this period elimination of defect in the design, manufacture, material quality and replacement of defective parts shall be to the satisfaction of M/s VSP / MECON / HEC. Cost of dismantling, transport and refitting, if any, during the elimination of defects / replacement of defectives parts shall be fully borne by the successful tenderer without any price implication.

30. Law Governing contract-

(1) This contract shall be governed by the laws of India for the being in force.

(2) Irrespective of the place of delivery, the place of payment under the contract, the contract shall be deemed to have been made at the place from which the acceptance of tender has been issued.

(3) Jurisdiction of Courts: The court of the place from where the acceptance of tender / purchase order has been issued shall alone have jurisdiction to decide any dispute arising out of or in respect of the contract,

(4) Marking of Stores: The marking of the stores must comply with the requirements of the laws relating to Merchandise Marks for the time being in force in India.

31. ARBITRATION

In the event of any dispute or difference of opinion between the Heavy Engineering Corporation or any of its units / division and the contractors as to the respective rights and obligation of the parties hereafter or to the true intent and meaning of these presents and the many articles of conditions thereto, such dispute of difference of opinion shall be referred to the many articles of conditions thereto, such dispute



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of difference of opinion shall be referred to the sole arbitration of the Chairman, Heavy Engineering Corporation and his decision shall be final, conclusive and binding on the parties.

32. Mode of dispatch:

By Road to the consignee at In-charge stores /HMBP/HEC Ltd. Ranchi. For the consignments dispatched by road, the supplier shall ensure that the following are observed by them:

- i) All dispatches must be affected only on receipt of written dispatch clearance from the purchaser.
- ii) Material shall be dispatched to In-charge stores/HMBP/HEC Ltd, Ranchi.
- iii) Care shall be taken to avoid damages during transit to ensure that all the packages are firmly secured.

33. PACKING, FORWARDING & SHIPMENT

- a. The supplier has to ensure proper packing so that material reaches destination without damage.
- b. The supplier shall notify the purchaser of the date of each shipment from his works and the expected date of arrival at the site for information.
- c. The following markings are to be done on each package:

a)	From	
b)	For	
c)	Case No.	The case no. shall be written in the form of a fraction the numerator of which shall be serial number of the case and the denominator representing the total number of cases.
d)	Order No.	
e)	Net Weight	
f)	Gross Weight	

34. Integrity Pact: Successful bidders must have to sign integrity pact as per format enclosed in NIT.

35. OTHER TERMS & CONDITIONS

Other terms & conditions which are not mentioned above shall be as per General conditions of contract of the corporation which can be downloaded from our website www.hecltd.com.

Special Note:

While submitting tender pl. mention your Registration No. with HEC as a registered vendor with valid paper. If not pl. get registered your firm with HEC Limited immediately. Please submit the form of Terms & Conditions duly filled in and signed by the tenderers along with your offer.

(P K SINGH)
Sr.DGM/PUR
HMBP/ HEC Ltd/ Ranchi-4



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INTEGRITY PACT
< Non Judicial Stamp Paper of Rs. 100>

INTEGRITY PACT

Between

Heavy Engineering Corporation Ltd.(HEC) 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, contract/s forThe 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).

In order to achieve these goals, the Principal will appoint an Independent External Monitor (IEM), who will monitor the tender process and the execution of the contract for compliance with the principles mentioned above.

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 third person, any material or immaterial benefit which the person is not legally entitled to.



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- b. The Principal will, during the tender process treat all Bidder(s) with equity and reason. The Principal will in particular, before and during the tender process, provide to all Bidder(s) the same information and will not provide to any Bidder(s) 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 the Chief Vigilance Officer and in addition can initiate disciplinary actions.

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

1. The Bidders(s) / Contractor (s) commit himself to take all measures necessary to prevent corruption. He commits himself 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.
 - 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 cartelisation in the bidding process.
 - c. The Bidder(s) / Contractor(s) will not commit any offence under the relevant 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.



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- d. The Bidder(s)/Contractor(s) of foreign origin shall disclose the name and address of the Agents/ representatives in India, if any. Similarly the Bidder(s) /Contractors(s) of Indian Nationality shall furnish the name and address of the foreign principals, if any. Further details as mentioned in the “Guidelines on Indian Agents of Foreign Suppliers” (enclosed) shall be disclosed by the Bidder(s) / Contractor(s). Further, as mentioned in the Guidelines all the payments made to the Indian agent/ representative have to be in Indian Rupees only. Copy of “Guidelines on Indian Agents of Foreign Suppliers” attached.
- e. The Bidder(s) / Contractor(s) will, when presenting his bid, disclose any and all payments he has made, is 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

If the Bidder(s) / Contractor(s), before award or during execution 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) / Contractors) from the tender process or take actions like Banning of business dealings etc.

Section 4 – Compensation for Damages

- (1) If the Principal has disqualified the Bidder(s) from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent to Earnest Money Deposit / Bid Security.
- (2) If the Principal has terminated the contract according to Section 3, or if the Principal is entitled to terminate the contract according to Section 3, the Principal shall be entitled to demand and recover from the Contractor liquidated damages of the Contract value or the amount equivalent to Performance Bank guarantee.

Section 5 – Previous transgression



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- (1) The Bidder declares that no previous transgressions occurred in the last 3 years with any other Company in any country conforming to the anti corruption approach or with 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 or action can be taken against the bidder.

Section 6 - Equal treatment of all Bidders / Contractors / Subcontractors

- (1) The Bidder(s)/ Contractor(s) undertake (s) to demand from all subcontractors a commitment in conformity with this Integrity Pact, and to submit it to the Principal before contract signing.
- (2) The Principal will enter into agreements with identical conditions as this one with all Bidders, Contractors and Subcontractors.
- (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 violation by the Bidder(s) / Contractor(s) / Subcontractor(s)

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

Section 8 – Independent External Monitor / Monitors

- (1) The Principal appoints competent and credible Independent External Monitor for this Pact. The task of the Monitor is to review independently and objectively, whether and to what extent the parties comply with the obligations under this agreement.
- (2) The monitor is not subject to instructions by the representatives of the parties and performs his functions neutrally and independently. He reports to the CMD, HEC.
- (3) The Bidder(s) / Contractor(s) accepts that the Monitor has the right to access without restriction to all Project documentation of the Principal including that provided by



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the Contractor. The Contractor will also grant the Monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his project documentation. The same is applicable to subcontractors. The Monitor is under contractual obligation to treat the information and documents of the Bidder(s) / Contractor(s)/ Subcontractor(s) with confidentiality.

- (4) The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the Project provided such meetings could have an impact on the contractual relations between the Principal and the Contractor. The parties offer to the Monitor the option to participate in such meetings.
- (5) As soon as the Monitor notices, or believes to notice, a violation of this agreement, he will so inform the Management of the Principal and request the Management to discontinue or take corrective action, or to take other relevant action. The monitor can in this regard submit non-binding recommendations. Beyond this, the Monitor has no right to demand from the parties that they act in a specific manner, refrain from action or tolerated action.
- (6) The Monitor will submit a written report to the CMD, HEC within 8 to 10 weeks from the date of reference or intimation to him by the Principal and, should the occasion arise, submit proposals for correcting problematic situations.
- (7) Monitor shall be entitled to compensation on the same terms as being extended to / provided to Independent Directors on the HEC Board.
- (8) If the Monitor has reported to the CMD HEC, a substantiated suspicion of an offence under relevant IPC / PC Act, and the CMD HEC has not, within the reasonable time taken visible action to proceed against such offence or reported it to the Chief Vigilance Officer, the Monitor may also transmit this information directly to the Central Vigilance Commissioner.
- (9) The word 'Monitor' would include both singular and plural.

Section 9 – Pact Duration

This Pact begins when both parties have legally signed it, it expires for the Contractor 12 months after the last payment under the contract, and for all other Bidders 6 months after the contract has been awarded.



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If any claim is made / lodged during this time, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged / determined by CMD HEC.

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. Ranchi.
- (2) Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.
- (3) If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.
- (4) Should one or several provisions of this agreement turn out to be invalid, the remainder of this agreement remains valid. In this case, the parties will strive to come to an agreement to their original intentions.

(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) _____



**Heavy Engineering Corporation Limited
Heavy Machine Building Plant
(A Govt of India Enterprises)
Ranchi- 834004 (INDIA)**

Tender ref. NO. HMBP/PUR/2017/961962/EL- 5251

Dated: 13.01.2018

Format of EMD Bank Guarantee

BANK GURANTEE FOR EARNEST MONEY DEPOSIT

NO.

Dated:

TO

SDGM/PURCHASE /MM DIVISION
HEAVY MACHINE BUILDING PLANT
HEAVY ENGINEERING CORPORATION LTD.
RANCHI-834004, JHARKHAND
INDIA

Dear Sirs,

In consideration of your agreeing to accept the Earnest money deposit of Rs.------(Rs-----
-----) furnishable to you by M/s-----
------(Hereinafter Referred to As
Contractor) In terms of the Enquiry No. -----Dtd. -----
---- for Supply of ----- (Hereinafter Referred to as the Contract) in
the form of a Bank Guarantee in the Manner hereinafter contained we -----
-----, having registered office at -----do
hereby covenant and agree with you as follows.

1. We hereby undertake to indemnify you up to a sum of Rs. ----- (Rs. -----
----- only) against any loss or damage caused to or suffered by you or that may
be caused to or suffered by you by reason of any breach or breaches on the part of the
contractor of any of the terms and conditions contained in the said contract and in the event the
Contractor shall make any default or defaults in carrying out any of the works under the said
contract or otherwise in the observance and performance of any of the terms and conditions
relating thereto in accordance with the true intent and meaning thereof, we shall forthwith on
demand and without any protest or demur pay to you such sum or sums not exceeding in total
the said sum of Rs.----- (Rs. -----*amount*-----only) as may be
claimed by you as your losses and/or damages, costs, charges or expenses by reason of such
default or defaults on the part of the contractor.



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2. Notwithstanding anything to the contrary contained in this guarantee your decision as to whether the contractor has made any such default or defaults and the amount or amounts to which you are entitled by reasons thereof will be binding on us and we shall not be entitled to ask you to establish your claim or claims or damages or losses suffered by you but will pay the amount demanded by you under this guarantee forthwith on your demand without any protest or demur.

3. This guarantee shall continue and hold good until it is released by you on the application by the contractor after expiry of the related warranty period of the said contract and after the contractor have discharged all their obligations under the said contract and produced a certificate of due completion of the work under the said contract and submitted a "NO Demand Certificate" provided always that this guarantee shall in no event remain in force after the date of----- without prejudice to your claim or claims arisen and demanded from or otherwise notified to us in writing before the expiry of six months from the said date which will be enforceable against us not withstanding that the same is or are enforced after the said date.

4. We-----, further undertake to extend the validity of this beyond the period prescribed in clause 3 or as extended from time to time for such further period as may be required in writing before the Expiry of this and upon such extension(s), all terms and conditions of this shall remain in full force till the expiry of this extended period(s).

5. You will have the fullest liberty without affecting this guarantee from time to time to vary any of the terms and conditions of the said contract or extend the time of performance of the contractor or to postpone for any time or from time to time any of your rights or powers against the contractor and either to enforce or forbear to enforce any of the terms and conditions of the said contract and we shall not be released from our liability under this guarantee by the exercise of your liberty with reference to matters aforesaid or by reason of any time being given to the contractor or any other forbearance, act or omission on your part or any indulgence by you to the contractor or by any other variation or modification of the said contract or any other act, matter or things whatsoever, which, under the law relating to sureties, would but for the provisions hereof, have the effect of so releasing us from our liability hereunder provided always that nothing herein contained will enlarge our liability hereunder beyond the limit of Rs. ------(Rs.-----) -----) as aforesaid or extend the period of the guarantee beyond the said Date of -----unless expressly agreed to by us in writing in terms of clause 4 hereof.

6. This guarantee shall not in any way be affected by your taking or varying or giving up any securities from the contractor or any other person, firm or company on its behalf or by the winding up, dissolution, insolvency or death as the case may be of the contractor.



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7. In order to give full effect to the guarantee herein contained, you shall be entitled to act as if we are your principal debtors in respect of all your claims against the contractor hereby guaranteed by us as aforesaid and we hereby expressly waive all our rights of suretyship and other rights, if any, which are in any ways inconsistent with any of the provisions of this guarantee.

8. Subject to the maximum limit of our liability as aforesaid this guarantee will cover all your claim or claims against the contractor from time to time arising out of or in relation to the said contract and in respect of which your claim in writing is lodged on us before expiry of six months from the date of expiry of this guarantee.

9. Any notice by way of demand or otherwise hereunder shall be in writing and may be sent by special Courier or Telefax to us or our Local Address as aforesaid.

10. This guarantee and the powers & provisions herein contained are in addition to and not by way of limitation or substitution for any other guarantee or guarantees heretofore given to you by us whether jointly with others or alone and now existing uncanceled and that this guarantee is not intended to and shall not revoke or limit such guarantee or guarantees.

11. This guarantee shall not be affected by any change in the constitution of the contractor or us nor shall it be affected by any change in your constitution or by any Amalgamation or absorption thereof or therewith but will ensure for the benefit or and be available to and enforceable by the absorbing or amalgamated company or concern.

12. This guarantee is irrevocable during the period of its currency and shall not be revoked without your previous consent in writing.

13. We further agree and undertake to pay you the amount demanded by you in writing irrespective of any dispute or controversy between you and the contractor or any reference to arbitration of the said dispute/controversy pending or a civil suit filed by the contract or in respect of the dispute or controversy.

14. Notwithstanding anything contained herein above our liability under this guarantee is restricted to Rs.----- (Rs. -----only) and this guarantee shall remain in force until -----unless a written claim is lodged on us for payment under this guarantee within six months from the date of expiry of this guarantee . i.e. On or before-----all your rights under this guarantee shall be forfeited and we shall be



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deemed to have released and discharged from all liabilities there under, irrespective of whether or not the original guarantee is returned to us.

15. We have power to issue this guarantee in your favour under the memorandum and articles of association of the bank and the undersigned has full power to execute this guarantee under the power of Attorney Granted to them by the Bank.

FOR AND ON BEHALF OF



**Heavy Engineering Corporation Limited
Heavy Machine Building Plant
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Ranchi- 834004 (INDIA)**

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Dated: 13.01.2018

Format of BANK GUARANTEE of Security Deposit

TO,
M/S HEAVY ENGINEERING CORPORATION LIMITED
PLANT PLAZA ROAD,
DHURWA,
RANCHI – 4

DEAR SIR,

IN CONSIDERATION OF YOUR AGREEING TO ACCEPT THE SECURITY DEPOSIT OF RS.'amount'..... FURNISHABLE TO YOU BY M/S 'firms name'..... (HEREINAFTER REFERRED TO AS CONTRACTOR) IN TERMS OF THE CONTRACT NO.'HEC's purchase order no'.....FOR SUPPLY OF 'details of items'.....(HEREINAFTER REFERRED TO AS THE 'CONTRACT') IN THE FORM OF A BANK GUARANTEE IN THE MANNER HEREINAFTER CONTAINED WE.....'bank details'..... BRANCH, HAVING REGISTERED OFFICE AT 'place'..... DO HEREBY COVENANT AND AGREE WITH YOU AS FOLLOWS:

1. WE HEREBY UNDERTAKE TO INDEMNIFY YOU UP TO A SUM OF RS.'amount'.....(RUPEES 'amount in words'.....) AGAINST ANY LOSS OR DAMAGE CAUSED TO OR SUFFERED BY YOU OR THAT MAY CAUSED TO OR SUFFERED BY YOU BY REASON OF ANY BREACH OR BREACHES ON THE PART OF THE CONTRACTOR OF ANY OF THE TERMS AND CONDITIONS CONTAINED IN THE SAID CONTRACT AND IN THE EVENT THE CONTRACTOR SHALL MAKE ANY DEFAULT OR DEFAULTS IN CARRYING OUT ANY OF THE WORKS UNDER THE SAID CONTRACT OR OTHERWISE IN THE OBSERVANCE AND PERFORMANCE OF ANY OF THE TERMS AND CONDITIONS RELATING THERETO IN ACCORDANCE WITH THE TRUE INTENT AND MEANING THEREOF, WE SHALL FORTHWITH ON DEMAND AND WITHOUT ANY PROTEST OR DEMUR PAY TO YOU SUCH SUM OR SUMS NOT EXCEEDING IN TOTAL THE SAID SUM OF RS.'amount'.....(RUPEES 'amount in words'.....) AS MAY BE CLAIMED BY YOU AS YOUR LOSSES AND / OR DAMAGES, COSTS, CHARGES OR EXPENSES BY REASON OF SUCH DEFAULT OR DEFAULTS ON THE PART OF THE CONTRACTOR.
2. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED IN THIS GUARANTEE YOUR DECISION AS TO WHETHER THE CONTRACTOR HAS MADE ANY SUCH DEFAULT OR DEFAULTS AND THE AMOUNT OR AMOUNTS TO WHICH YOU ARE ENTITLED BY REASONS THEREOF WILL BE BINDING ON



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US AND WE SHALL NOT BE ENTITLED TO ASK YOU TO ESTABLISH YOUR CLAIM OR CLAIMS OR DAMAGES OR LOSSES SUFFERED BY YOU BUT WILL PAY THE AMOUNT DEMANDED BY YOU UNDER THIS GUARANTEE FORTHWITH ON YOUR DEMAND WITHOUT ANY PROTEST OR DEMUR.

3. THIS GUARANTEE SHALL CONTINUE AND HOLD GOOD UNTILL IT IS RELEASED BY YOU ON THE APPLICATION BY THE CONTRACTOR AFTER EXPIRY OF THE RELATED WARRANTY PERIOD OF THE SAID CONTRACT AND AFTER THE CONTRTACTOR HAVE DISCHARGED ALL THEIR OBLIGATIONS UNDER THE SAID CONTRACT AND PRODUCED A CERTIFICATE OF DUE COMPLETION OF THE WORK UNDER THE SAID CONTRACT AND SUBMITTED A 'NO DEMAND CERTIFICATE' PROVIDED ALWAYS THAT THIS GUARANTEE SHALL IN NO EVENT REMAIN IN FORCE AFTER THE DATE OF ...'date'..... WITHOUT PREJUDICE TO YOUR CLAIM OR CLAIMS ARISEN AND DEMANDED FROM OR OTHERWISE NOTIFIED TO US IN WRITING BEFORE THE EXPIRY OF SIX MONTHS FROM THE SAID DATE WHICH WILL BE ENFORCEABLE AGAINST US NOTWITHSTANDING THAT THE SAME IS OR ARE ENFORECED AFTER THE SAID DATE.
4. WE*'bank name'*....., FURTHER UNDERTAKE TO EXTEND THE VALIDITY OF THIS BEYOND THE PERIOD PRESCRIBED IN CLAUSE 3 OR AS EXTENDED FROM TIME TO TIME, FOR SUCH FURTHER PERIOD AS MAY BE REQUIRED IN WRITING BEFORE THE EXPIRY OF THIS AND UPON SUCH EXTENSION(S), ALL TERMS AND CONDITIONS OF THIS SHALL REMAIN IN FULL FORCE TILL THE EXPIRY OF THIS EXTENDED PERIOD(S).
5. YOU WILL HAVE THE FULLEST LIBERTY WITHOUT AFFECTING THIS GUARANTEE FROM TIME TO TIME TO VARY ANY OF THE TERMS AND CONDITIONS OF THE SAID CONTRACT OR EXTEND THE TIME OF PERFORMANCE OF THE CONTRACTOR OR TO POSTPONE FOR ANY TIME OR FROM TIME TO TIME ANY OF YOUR RIGHTS OR POWERS AGAINST THE CONTRACTOR AND EITHER TO ENFORCE OR FOREBEAR TO ENFORCE ANY OF THE TERMS AND CONDITIONS OF THE SAID CONTRACT AND WE SHALL NOT BE RELEASED FROM OUR LIABILITY UNDER THIS GUARANTEE BY THE EXERCISE OF YOUR LIBERTY WITH REFERENCE TO MATTERS AFORESAID OR BY REASON OF ANY TIME BEING GIVEN TO THE CONTRACTOR OR ANY OTHER FORBEARANCE , ACT OR OMISSION ON YOUR PART OR ANY INDULGENCE BY YOU TO THE CONTRACTOR OR BY ANY OTHER VARIATION OR MODIFICATION OF THE SAID CONTRACT OR ANY OTHER ACT, MATTER OR THINGS WHATSOEVER, WHICH, UNDER THE LAW RELATING TO SURETIES, WOULD BUT FOR THE PROVISIONS HEREOF, HAVE THE EFFECT OR SO RELEASING US FROM OUR LIABILITY HEREUNDER PROVIDED ALWAYS THAT NOTHING HEREIN CONTAINED WILL ENLARGE OUR LIABILITY HEREUNDER BEYOND THE LIMIT OF RS.*'amount'*.....(RUPEES*'amount in words'*.....) AS



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AFORESAID OR EXTEND THE PERIOD OF THE GUARANTEE BEYOND THE SAID DATE OF ...'date'.... UNLESS EXPRESSLY AGREED TO BY US IN WRITING IN TERMS OF CLAUSE 4 HEREOF.

6. THIS GUARANTEE SHALL NOT IN ANY WAY BE AFFECTED BY YOUR TAKING OR VARYING OR GIVING UP ANY SECURITIES FROM THE CONTRACTOR OR ANY OTHER PERSON, FIRM OR COMPANY ON ITS BEHALF OR BY THE WINDING UP, DISSOLUTION, INSOLVENCY OR DEATH AS THE CASE MAY BE OF THE CONTRACTOR.
7. IN ORDER TO GIVE FULL EFFECT TO THE GUARANTEE HEREIN CONTAINED, YOU SHALL BE ENTITLED TO ACT AS IF WE ARE YOUR PRINCIPAL DEBTORS IN RESPECT OF ALL YOUR CLAIMS AGAINST THE CONTRACTOR HEREBY GUARANTEED BY US AS AFORESAID AND WE HEREBY EXPRESSLY WAIVE ALL OUR RIGHTS OF SURETYSHIP AND OTHER RIGHTS, IF ANY, WHICH ARE IN ANY WAY INCONSISTENT WITH ANY OF THE PROVISIONS OF THIS GUARANTEE.
8. SUBJECT TO THE MAXIMUM LIMIT OF OUR LIABILITY AS AFORESAID THIS GUARANTEE WILL COVER ALL YOUR CLAIM OR CLAIMS AGAINST THE CONTRACTOR FROM TIME TO TIME ARISING OUT OF OR IN RELATION TO THE SAID CONTRACT AND IN RESPECT OF WHICH YOUR CLAIM IN WRITING IS LODGED ON US BEFORE EXPIRY OF SIX MONTHS FROM THE DATE OF EXPIRY OF THIS GUARANTEE.
9. ANY NOTICE BY WAY OF DEMAND OR OTHERWISE HEREUNDER SHALL BE IN WRITING AND MAY BE SENT BY SPECIAL COURIER, SPEED POST OR TELEFAX TO US AT OUR LOCAL ADDRESS AS AFORESAID.
10. THIS GUARANTEE AND THE POWERS & PROVISIONS HEREIN CONTAINED ARE IN ADDITION TO AND NOT BY WAY OF LIMITATION OF OR SUBSTITUTION FOR ANY OTHER GUARANTEE OR GUARANTEES HERETOFORE GIVEN TO YOU BY US WHETHER JOINTLY WITH OTHERS OR ALONE AND NOW EXISTING UNCANCELLED AND THAT THIS GUARANTEE IS NOT INTENDED TO AND SHALL NOT REVOKE OR LIMIT SUCH GUARANTEE OR GUARANTEES.
11. THIS GUARANTEE SHALL NOT BE AFFECTED BY ANY CHANGE IN THE CONSTITUTION OF THE CONTRACTOR OR US NOR SHALL IT BE AFFECTED BY ANY CHANGE IN YOUR CONSTITUTION OR BY ANY AMALGAMATION OR ABSORPTION THEREOF OR THEREWITH BUT WILL ENSURE FOR THE BENEFIT OF AND BE AVAILABLE TO AND ENFORCEABLE BY THE ABSORBING OR AMALGAMATED COMPANY OR CONCERN.



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12. THIS GUARANTEE IS IRREVOCABLE DURING THE PERIOD OF ITS CURRENCY AND SHALL NOT BE REVOKED WITHOUT YOUR PREVIOUS CONSENT IN WRITING.

13. WE FURTHER AGREE AND UNDERTAKE TO PAY YOU THE AMOUNT DEMANDED BY YOU IN WRITING IRRESPECTIVE OF ANY DISPUTE OR CONTROVERSY BETWEEN YOU AND THE CONTRACTOR OR ANY REFERENCE TO ARBITRATION OF THE SAID DISPUTE / CONTROVERSY PENDING OR A CIVIL SUIT FILED BY THE CONTRACTOR IN RESPECT OF THE DISPUTE OR CONTROVERSY.

14. NOTWITHSTANDING ANYTHING CONTAINED HEREIN ABOVE OUR LIABILITY UNDER THIS GUARANTEE IS RESTRICTED TO RS.'amount'.....(RUPEES*'amount in words'*.....) AND THIS GURANTEE SHALL REMAIN IN FORCE UNTILL*'date'*.... UNLESS A WRITTEN CLAIM IS LODGED ON US FOR PAYMENT UNDER THIS GUARANTEE WITHIN SIX MONTHS FROM THE DATE OF EXPIRY OF THIS GUARANTEE i.e. ON OR BEFORE ...*'date'* + *'6 month'*..... ALL YOUR RIGHTS UNDER THIS GUARANTEE SHALL BE FORFEITED AND WE SHALL BE DEEMED TO HAVE REALEASED AND DISCHARGED FROM ALL LIABILITIES THEREUNDER. IRRESPECTIVE OF WHETHER OR NOT THE ORIGINAL GUARANTEE IS RETURNED TO US.

15. WE HAVE POWER TO ISSUE THIS GUARANTEE IN YOUR FAVOUR UNDER THE MEMORANDUM AND ARTICLES OF ASSOCIATION OF THE BANK AND THE UNDERSIGNED HAS FULL POWER TO EXECUTE THIS GUARANTEE UNDER THE POWER OF ATTORNEY GRANTED TO THEM BY THE BANK.

FOR AND ON BEHALF OF
'name of bank'

'signature with seal'



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FORMAT OF PERFORMANCE BANK GUARANTEE

(TO BE STAMPED IN ACCORDANCE WITH STAMP ACT & TO BE ISSUED BY ANY NATIONALISED /SCHEDULED BANK AUTHORISED BY RBI TO ISSUE A BANK GUARANTEE)

Name of Equipment: ----- Gurantee NO-----
Purchase Order No.:----- dated: ----- Date:-----
Validity -----
Claim period-----

To:
M/s Heavy Engineering Corporation Ltd.
Heavy Machine Building Plant
Ranchi-834004 Jharkhand

In consideration of your having placed an order bearing Purchase Order No.-----
dated:----- with-----

(hereinafter referred to as Supplier) for the supply of-----
----- (hereinafter referred to as the-----

We ----- do hereby agree with you
irrevocably that, should the machinery and equipment fail to give the guarantee
performance and achieve the efficiency as stipulated in the Purchase Order within the
period of guarantee or should the material and/or workmanship of the machinery and
equipment supplied or any part thereof be found defective and/or fully, as per the
purchase order, we undertake to pay without any demur merely on demand a sum of Rs.
-----being 10% of
the value of Rs. -----for the supply of -----

Your decision whether the supplier have made any such defaults and the amount to
which you are entitled by reasons thereof shall be conclusive and bind on us, subject to
maximum of Rs. ----- as aforesaid.

We-----further guarantee
that the machinery and equipment manufactured and supplied by the supplier shall be
new, of good quality materials and of the first class workmanship as specified in the
Purchase order and should the machinery and equipment supplied or any part thereof be
found defective and that should the defect as pointed out in inspection note be not made



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good and/or in case of failure within guarantee period same shall be replaced on free of cost or repaired on free of cost to the entire satisfaction of Heavy Engineering Corporation Ltd.

We -----agree that the guarantee herein contained shall remain in full force and effect till the machinery and equipment give the desired performance and it shall continue to be enforceable till your dues have been fully paid and claims satisfied or discharged subject to a period not later than----- . In the event of any extension granted for commissioning/dispatch suitable extension shall be given on your request.

We-----, further agree that any neglect, omission or forbearance or indulgence in enforcing any claim as per the terms and conditions of your purchase order or performance guarantee or any of them or any extension of the time granted for the performance or payment of penalty under the guarantee or any dispute between the supplier and yourselves as regard performance of machinery and equipment supplied or issued related to your Purchase order, shall not effect in any way our liability under this guarantee until the full payment, but in any case, shall not extend beyond-----
-----.

This guarantee is in addition and not substitution for guarantee given to you by the seller or by their bankers on their behalf.

We----- lastly undertake not to revoke this bank guarantee during its currency except with the previous consent of the corporation in writing.

Notwithstanding anything to contrary stated above, our liability under this guarantee will be restricted to Rs.----- and shall remain in force up to -----, unless a demand or claim under this guarantee is made from the date i.e. on or before-----all your rights under the said guarantee shall be forfeited and we shall be released and discharged from all liabilities thereunder.

Dated at ----- day of -----

Seal of the Bank



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**SECTION-I
(COMMERCIAL TERMS & CONDITIONS)**

Note: This sheet to be filled by bidder & must be enclosed with Part-I (Techno-commercial bid)

Sl No.	Terms & Conditions	Desired BY HEC	Bidders Comment (Accepted/Not accepted /Furnished /Not furnished)	Remarks
1	Price Term (Ex-Works / FOR HMBP	FOR HMBP Stores		
2	Packing and Fwd. (Extra/Included/Not Applicable)	Amount to be indicated clearly if P&F charges are extra.		
3	TAXES in line with GST Policy	To be indicated separately (Please Indicate % of GST as extra on the basic quoted value)		
4	GST registration certificate	Must be furnished		
5	Payment Terms	As per Clause No. 5 of NIT under heading "Terms & Conditions"		
6	Validity of Offer	Minimum 120 days from the date of opening of techno-commercial bid. To be accepted.		
7	Price Variation Clause	Price will be firm till the execution of contract (Must be accepted)		
8	Delivery Schedule	Within 3 months from the date of approval of drawings & Manufacturing clearance as per clause No. 10 of NIT under heading "Terms & Conditions"		
9	Inspection	By QCA/HMBP or authorized representative		
10	Freight Charges only if Price Terms is Ex-Works	To be quoted separately		
11	EMD of Rs. 11,00,000.00 (Mandatory)	A) DD /Bank Guarantee from any nationalized bank in favor of HEAVY ENGINEERING CORPORATION LIMITED, payable at Ranchi (Exempted for NSIC/SSI/MICRO, SMALL SCALE INDUSTRIES [MSE] registered firms). B) Firms registered with DGS&D for the items under tender		
12	Tender Cost of Rs. 3,000.00 (Mandatory)	DD from any nationalized bank in favor of HEAVY ENGINEERING CORPORATION LIMITED, payable at Ranchi (Exempted for NSIC/ SSI/MICRO, SMALL SCALE INDUSTRIES[MSE] registered firms).		



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13	Security Deposit for 5% of total order value as per NIT Clause No. 26	To be deposited by successful bidder within 21 days after placement of order by HEC (Exempted for NSIC/SSI registered firms)		
14	Performance bank guarantee for 10% of total order value as per NIT Clause No. 27	BG for performance from any nationalized bank in favor of HEAVY ENGINEERING CORPORATION LIMITED, Ranchi as per tender enquiry.		
15	Guarantee/Warranty Certificate as per NIT Clause No. 29 of NIT under heading "Terms & Conditions"	12 months after final acceptance by Customer (VSP).		
16	L/D & Risk Purchase Clause as per clause No. 23 of NIT under heading "Terms & Conditions"	To be Accepted (As per NIT)		
17	Integrity Pact	To be signed by successful bidder as per NIT Clause No.34 of NIT under heading "Terms & Conditions"		
18	Confirmation of Supplying the material as per Enquiry Schedule	YES/ NO		
19	All other NIT conditions/clauses are acceptable	Yes/No, if no then state the clause wise deviation		
20	Confirmation of Firm being owned by SC/ST Entrepreneurs	Yes/ NO		
21	Confirmation of Firm being NSIC/SSI/MSME Registered	YES / NO , If yes documentary evidence to be furnished with techno-commercial bid		



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SECTION-II

PRICE BID FORMAT

Sl No.	Description	Value in Rs. (Excluding Taxes) In digits	Value in Rs. (Excluding Taxes) in Words
1	Total material as per clause no.5 of Technical Specification. (Section-III)		
2	Charges for Supervision of Erection of supplied material at site, as per Technical Specification(Section-III)		
	Total value in Rs. =		

L1 shall be decided on combined value of “Material value” and “Charges for Supervision of Erection at site of the supplied items.”



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**SECTION-III
TECHNICAL SPECIFICATION**

1.0 OPERATING CONDITION:-

- | | | |
|--------|----------------------------------|---|
| 1.1 | Vibration | : Severe shocks & vibration as encountered by the Wagon Pusher. |
| 1.2 | Climate | : Hot & dusty (Conductive dust, near sea). |
| 1.3 | Average elevation Mean Sea Level | : 10.5 M |
| 1.4 | Latitude | : 17 ⁰ 37' N |
| 1.5 | Longitude | : 83 ⁰ 12' E |
| 1.6 | Ambient temp. | : 50 ⁰ C |
| 1.7 | Lowest recorded temp. | : 16.5 ⁰ C |
| 1.8 | Relative Humidity (Maximum) | : 100% (Not occuring simultaneously with maximum temperature) |
| 1.9 | Climate | : Tropical humid |
| 1.10 | Maximum wind velocity | : 35.2 Km/hr. |
| 1.11 | Rain fall : | |
| 1.11.1 | Highest monthly | : 606 mm |
| 1.11.2 | Highest daily | : 370 mm |
| 2.0 | <u>POWER SUPPLY:-</u> | |



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Main supply : 415V±10%, 50Hz ± 5%, 3Ø

Fault level : 50KA for 1 sec

System Neutral : Solidly earthed

3.0 STANDARDS:-

The equipments shall be designed, assembled & tested in accordance with latest IS, IPSS, GTS and GS of M/s VSP.

4.0 GUARANTEE:- : 18 months after Supply of items/Equipments/Electrics or 12 months after final acceptance by Customer (M/s VSP).

5.0 SCOPE OF SUPPLY :-

5.1 The scope of supply of the items of the tenderer includes design, engineering, manufacture, assembly, inspection, shop testing, supply FOR HMBP store at Ranchi and supervision of erection of supplied items at site.

5.2 Specification of Equipments/Electrics/Items covers Intermediate brackets with insulators assly, Sectionalizing brackets with insulators assly, Expansion joints, Ladder type GI Cable trays-600mm wide along the trolley lines, Bidirectional signal Lamp assly with 3M of 1.1KV grade, HRPVC insulated armoured copper cable size-4x6sq. mm , Insulation barriers, Steel - Aluminum strap, Steel – Copper straps, 125A Switch-sockets, Switch boxes for Lightings, Isolators panels (800A, 4P, MCCB), 150W HPSV Lights, Junction boxes, Lighting Distribution boards, 15KVA, Lighting transformers & Power Junction Boxes etc.

5.3 Scope of supply of items is mentioned below :-

Sl. No.	Description	Material	Material Code	Total qty.	Remarks
1	Angle Iron ISA 75.75X10	E250B as per IS2062: 2011	5535613138	9200 Mtr.	
2	Aluminium Bus-Bars, size - 100x10	Aluminium as per IS:5082: 1998	5535613139	6900 Mtr.	
3	DSL Supporting Intermediate Bracket with insulator assly. for 3Ph+E @2.4mtr. along the Trolley line.	Assly.	5535613140	880 Nos.	



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4	DSL supporting sectionalizing bracket with double insulator assly. for 3Ph+E @30mtr. Along the Trolley lines.	Assly.	5535613141	80 Nos.	
5	Steel–Aluminum strap @1.5mtr. for supporting parallel Aluminum Bus bars	Assly.	5535613142	4600 Nos.	
6	Steel–Aluminum strap for Feeding and Looping cables	Assly.	5535613143	1320 Nos.	
7	Trolley line Expansion Joint @30M along the Trolley line.	Assly.	5535613144	312 Nos.	
8	Ladder type Cable Tray of 600mm wide (3Nos. of parallel Cable trays all along the trolley lines)	Galvanised Iron	5535613145	6900 mtr.	
9	Steel–Copper strap for Bidirectional Signal lamp connection @100Mtr. along the trolley lines.	Assly.	5535613146	96 Nos.	
10	GI strip size 50 x 6 mm for earthing.	Assly.	5535613147	2600 mtr.	
11	Insulation Barrier	Assly.	5535613148	16 Nos.	
12	Isolator panel , (800A, 4Pole. MCCB) with over current, short circuit and earth fault release in Hot dip galvanized, MS Kiosk, IP55 protection enclosure with canopy, sheet thickness - 2mm, gland plate thickness 3mm and with dummy panel for cable terminations for feeding cables and looping cables etc.	Assly.	5535613150	20 Nos.	
13	Dry type, Natural air cooled, Lighting Transformers , 15KVA, 415/415V AC, 3Ph, double wound copper conductors, class – F insulated with temperature rise limited to class - B limit, sheet steel enclosed with degree of protection of enclosure -IP42.	Assly.	5535613151	4 Nos.	



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14	150W, 240VAC, 1Ph, HPSV Lamp fittings with 150W lamp for DSL Lighting.	Assly.	5535613152	220 Nos.	
15	Power junction box , sheet steel enclosed, CRCA sheet, sheet thickness – 2.0mm, gland plate thickness – 3.0mm wall mounting type, degree of protection IP55 with canopy consisting of stud type power terminals for 125A, TPN, Switch sockets.	Assly	5535613153	4 Nos.	
16	Junction box , sheet steel enclosed, CRCA sheet, sheet thickness – 2.0mm, gland plate thickness - 3.0mm, wall mounting type, degree of protection - IP55 with canopy consists of 6Nos. of ELMEX make CATM4 type terminals or equivalent for lighting of DSL.	Assly.	5535613154	220 Nos.	
17	Switch box , sheet steel enclosed, CRCA sheet, sheet thickness – 2.0mm, gland plate thickness – 3.0mm, wall mounting type, IP55 protection with canopy having 1 No.32A TP MCB, 4 Nos.16A DP MCBs, terminals, etc. for DSL Lightings.	Assly.	5535613155	24 Nos.	
18	125A, 3P+N+Earth, Switch - Socket with 125A, 415VAC, TPN, MCCB, The sockets shall be metal clad, degree of protection IP65. The switch and socket shall be mounted on enclosure made of CRCA sheet, sheet thickness - 2.0 mm, gland plate thickness - 3.0 mm, Enclosure shall be with double door construction, degree of protection - IP55 with canopy, wall mounting type.	Assly.	5535613156	40 Nos.	
19	Power Plug , 125A, 3P+N+Earth, 500V, industrial type, metal clad, degree of protection - IP65, The plug shall be matched with 125A, Socket for welding	Assly.	5535613157	2 Nos.	



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	(Item sl. no.-19).				
20	Lighting Distribution Board , wall / floor mounting type, sheet steel enclosed, CRCA sheet, sheet thickness- 2.0mm, gland plate thickness- 3.0mm, IP54 protection, having 2 Nos.-100A 4P MCCBs, 6 Nos.-40A DP MCBs, LED type Signal lamps and with primary and secondary protections for 15KVA, Lighting transformers etc.	Assly.	5535613158	4 Nos.	
21	Gravity type, Current collectors for 3Ph + Earth, suitable for outdoor duty, rated 1000A, 500V (Each set consists of 3P+Earth).	Assly.	5535613159	4 Sets	
22	Bidirectional, cluster LED type, Indicating lamp assembly (R,Y,B) provided with 3mtr.- 1.1KV grade HRPVC insulated, armoured, copper cable, Size- 4x6 sq.mm for connecting to DSLs.	Assly.	5535613160	24 Nos	
23	Lighting Transformers , 15KVA, 415/415V AC, 3Ph, 50Hz, double wound copper conductors, class – F insulated with temperature rise limited to class - B limit, sheet steel enclosed with degree of protection of enclosure – IP42.	Assly.	5535613161	2 Nos.	
24	List of Commissioning spares				
24.1	Insulating washer		5535613162	16 Nos.	
24.2	Insulating tube		5535613163	08	



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				Nos.	
24.3	Insulator for power conductor		5535613164	24 Nos.	
24.4	Clustor LED type Signal lamps (R,Y, B)		5535613165	2 Set	
24.5	Current collector shoe (3Ph+E)		5535613166	1 Set	
Notes:- Quantity may increase or decrease during detail engineering.					

- 5.4** Make of all the items / electrics / components shall be as per M/s VSP's Preferred make list only. If Make of any electrics / Items / Components is not appearing in the Preferred makes List of M/s VSP, shall be subjected to approval / acceptance by M/s VSP / MECON.
- 5.5** No. of feeding cables considering the voltage drop for DSL System indicated in the Drg. No.- SK-EDB-1337 are tentative and may change during detail engineering.
- 5.6** The equipment to be supplied against this specifications shall be complete in all respects and all items / electrics essential for proper design, operation, satisfactory performance and ease of maintenance, whether specifically mentioned or not are included in the tenderer's scope.
- 6.0** The DSL system with lighting and Lighting Transformers for 30 M High Mast Tower Lighting shall be designed assembled and tested in accordance with the relevant IS / IRS published by Bureau of Indian Standard (BIS) / Indian Railway Standard, wherever applicable. In case, where these standards are not available, generally accepted International Standards / codes shall be followed.
- 6.1** All electrical equipment / component / parts shall also conform to the latest Indian Electricity Regulations as regards safety, earthing and other provisions specified therein for installation and operation of electrical plants and equipment.
- 6.2** All materials machinery / fabricated items used in the subject package shall be strictly accordingly to the specifications / drawings.
- 6.3** All components / parts of the equipment shall be suitably located for ease of operation and accessibility for inspection, repairs and replacement.
- 6.4** The equipment can be inspected and tested during different stages of its manufacturing by the authorized representative of M/s VSP / MECON / HEC at the tenderer's works or their sub-vendor's works. This inspection shall be regarded as a check up and shall be in no way binding. All facilities and necessary drawings and documents shall be provided to the Inspector



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by the tenderer at the time of inspection. However, this inspection shall not relieve the tenderer from his overall responsibility for correctness of design, supply and satisfactory performance of the equipment.

- 6.5** M/s VSP / MECON / HEC shall have right to inspect all such materials / equipment and the tenderer shall produce these, if so desired by the M/s VSP / MECON / HEC for his inspection. M/s VSP / MECON / HEC has right to reject & disallow the use of materials, which in his opinion is of sub-standard quality.
- 6.6** The inspection by M/s VSP / MECON / HEC or his authorized representatives shall not relieve the tenderer of his liability for rectification of any defects, which may subsequently appear or be detected during or after commissioning or during the guarantee period. All such defects shall be rectified by the tenderer without any extra cost to M/s VSP / MECON / HEC.
- 6.7** GA & detailed drawings of Intermediate and Sectionalizing brackets with insulator assly for 3Ph+E will be submitted by the tenderer along with the offer.
- 6.8** The tenderer shall submit drgs of Power collection System (Current collectors) of wagon pushers with outdoor duty. 1000A, Gravity type current collectors for three phases and Earth (3Ph+E) matching with DSL system.

7.0 **TECHNICAL PARTICULARS :-**

- 7.1** The power conductor shall be supported by sturdy porcelain insulator assembly for outdoor duty, mounted on composite steel section brackets.
- 7.2** The insulator assembly shall be capable of withstanding high impacts & shocks resulting from wagon pusher movements. It shall also have adequate tension and compression strength to withstand the weight of the wagon pusher power collecting system during the wagon pusher movements.
- 7.3** The porcelain insulator shall conform to IS-1445.
- 7.4** The insulator supporting brackets shall be of rigid construction.
- 7.5** The termination of aluminium cables and aluminium expansion joint jumpers at MS angle shall be by means of "STEEL-COPPER" metallic strap. The strap shall comprise of steel strap brazed by electrode (L&T make - EUTECORD 16FC or eqvt.).
- 7.6** The clearance of the power conductor from wagon pusher rail track shall be as per enclosed Drg no.-SK-EDB-1338. The phase-to-phase distance of the power conductors shall not be less than 450 mm and the vertical clearance between the top of the Wagon pusher rails and the topmost earth conductor shall be as per enclosed Drg. No. - SK-EDB-1338.



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7.7 SPECIFICATION OF ISOLATOR PANEL (800A, 4P, MCCB): -

7.7.1 The Isolator panel shall be free standing type / wall mounting type, 800A, 4Pole, Moulded case circuit breaker with over current, short circuit and earth fault release in hot dip galvanized MS Kiosk, IP55 enclosure cubicle with dummy panel with canopy for cable termination. The Fault level of MCCB shall have 50KA. The panel shall be designed for outdoor installation, preferably of double door construction. The operation of MCCB will be possible with door closed condition.

7.7.2 Stud type terminals or bus-bar with insulator arrangement shall be provided at a height of 400 mm for terminating outgoing Al. power cables and required nos. of power terminals shall also be provided for ease of terminating MCCB looping parallel cables for incoming supply to DSL as per Drg no. – SK-EDB-1337. 2Nos.- Earthing studs shall be provided. Size of cable termination box may change during detail engineering.

7.8 Power junction boxes:-

7.8.1 The power junction box is required for feeding power to 125A, Welding switch socket. All power junction boxes shall be made of stainless steel enclosure suitable for wall / column mounting having enclosure protection IP: 55 with canopy. The Power junction boxes shall be designed to provide adequate space for terminating cables as per Drg no. - SK – EDB – 1337 and shall have aluminum Busbars supporting on pin type insulator with sufficient nos. of holes on busbars for tapping of outgoing cables. 2Nos.- Earthing studs shall be provided.

7.9 Switch socket unit for Welding:-

7.9.1 125A, 415VAC, 3Ph+Earth, Switch socket unit shall be interlocked type with Plug. All Plugs and sockets shall conform to universal standard IEC 60309-2. The Plugs & Sockets shall be industrial grade, metal clad with degree of protection IP65.

7.9.2 The socket with switch (MCCB) shall be mounted on CRCA sheet with thickness – 2mm, gland plate thickness shall be 3.0mm, wall mounting type. The enclosure of Switch socket shall be IP-55 protection with canopy and shall preferably be double door construction. 2Nos.- Earthing studs shall be provided.



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7.10 Lighting Distribution Board :

7.10.1 Lighting distribution board shall be sheet steel enclosed, CRCA sheet, sheet thickness 2.0 mm, gland plate sheet thickness 3.0mm, wall / floor mounting type degree of protection of LDB shall be IP54. LDB shall consist of minimum 2 Nos.- 100A 4P MCCBs, 6 Nos.-40A DP MCBs, Signal lamps, etc. MCBs shall have minimum fault level of 9KA and MCCBs shall have minimum fault level of 50KA. The Lighting Distribution board shall be designed to provide adequate space for terminating cables as per Drg no. - SK – EDB – 1337. Each LDB shall feed 60Nos. of 150W, HPSV Lights. 20% spare control terminals of Elmex make, CAT-M4 type or equivalent shall be provided. 2Nos.- Earthing studs shall be provided,

7.11 150W, HPSV Light Fittings with Light :

7.11.1 150 Watts, 240Volts, HPSV light fittings with 150W lamp and lighting cover.

7.12 Switch boxes for DSL Lighting:

7.12.1 Switch box shall be sheet steel enclosed, CRCA sheet , sheet thickness - 2 mm, gland plate thickness - 3.0 mm, wall mounting type, degree of protection of enclosure shall be - IP55 with canopy. Switch box shall consist of 1 No.32A TP MCB, 4 Nos.16A DP MCBs etc. MCBs shall have minimum fault level of 9KA, Junction box shall have control terminals of Elmex make, CAT-M4 type or eqvt. , 20% spare control terminals shall be provided. 2Nos.- Earthing studs shall be provided.

7.13 Junction box for Lighting:

7.13.1 Junction box shall be sheet steel enclosed, CRCA sheet , sheet thickness - 2 mm, gland plate thickness - 3.0 mm, wall mounting type, degree of protection of enclosure shall be - IP55 with canopy. Junction box shall have six nos. of Elmex make, CATM4 type or equivalent control terminals. 2Nos.- Earthing studs shall be provided.

7.14 Lighting Transformer :

7.14.1 Lighting Transformer for DSL Lighting:

Dry type, natural air cooled, Lighting transformer, 15KVA, 415 / 415VAC, 3Ph, 50Hz suitable for an ambient temperature of 50°C, double wound with copper conductor, insulation class - F with temperature rise limited to Class B- limit. Housing of transformer shall have CRCA sheet, minimum sheet thickness 2.0 mm, gland plate



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sheet thickness 3.0mm. Degree of protection of enclosure shall be IP42 for indoor duty. Lifting hooks shall be provided. 2Nos.- Earthing studs shall be provided.

Sl. No.	Parameter	Description
1	Type	Dry Type
2	Power Rating	15KVA
3	Primary Voltage	415 V, 3Ph
4	Secondary Voltage	415 V, 3Ph
5	Connection	Y-Y
6	Primary Tap	± 5 % & ± 10 %
7	Applicable Standard	IS:11171

Note:- Percentage of tapings may change during detail engineering

7.14.2 Lighting Transformer for 30M High mast tower lights:

7.14.2.1 Dry type, natural air cooled, Lighting transformer, 15KVA, 415/415VAC, 3Ph, 50Hz, suitable for an ambient temperature of 50°C, double wound with copper conductor, insulation class-F with temperature rise limited to Class-B limit. Housing of transformer shall have CRCA sheet, minimum sheet thickness 2.0 mm, gland plate sheet thickness - 3.0 mm. Degree of protection of enclosure shall be IP42 protection for indoor duty. Lifting hooks shall be provided. 2Nos.- Earthing studs shall be provided.

Sl. No.	Parameter	Description
1	Type	Dry Type
2	Power Rating	15KVA



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3	Primary Voltage	415 V, 3Ph
4	Secondary Voltage	415 V, 3Ph
5	Connection	Y-Y
6	Primary Taps	$\pm 2.5 \%$ & $\pm 5 \%$
7	Applicable Standard	IS:11171
Note:- Percentage of tapings may change during detail engineering		

7.15 LT POWER AND CONTROL CABLES :-
7.15.1 HRPVC INSULATED AL. / CU. CABLES FOR FIXED WIRINGS: -

Sl. No.	Specific aspect of Cable	Purchase specifications
1.	Grade	1.1KV grade for aluminium power cable and 1.1KV grade for copper control cables.
2.	Type	Heavy duty, HRPVC.
3.	Conductor	1- Circular conductor made of stranded and compacted electrical grade aluminium wires as per IS 8130 – 1984. 2- Annealed tinned copper wire for control cable as per IS 8130 – 1984.
4.	Maximum conductor temperature with rated current	85 deg C.
5.	Insulation	Extruded, HRPVC insulated, type – C as per IS: 5831 –1984.
6.	Inner sheath	Extruded, HRPVC inner sheath with non-



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		hygroscopic fillers for suitably holding the cores in circular configuration as per table 4, of IS : 1554 (Part-I, 1988).
7.	Armouring	Galvanised round steel wire, armoured as per table – 5 of IS 1554 (Part-I-1988).
8.	Outer sheath	Extruded, HRPVC outer sheath (type ST2 as per IS 5831 – 1984) as per table – 7, of IS: 1554 (Part-I, - 1988).
9.	Maximum conductor temperature withstanding ability during short circuit.	160°C
11.	Control cable	Copper conductor, multi – core with 20% spare cores, minimum size – 2.5 mm ² . Control cables will be selected having number of cores 3, 5, 7, 10, 12, 14, 16, 19 and 27.

8.0 INSPECTION AND TESTS :-

8.1 The tenderer shall submit Quality Assurance Plan (QAP) for all offered items/ equipment/ electrics giving details of all tests proposed during manufacturing, assembly at works & at site.

8.2 The Inspection / testing of offered items/ equipment/ electrics shall be carried out as per approved QAP. All the tests shall be carried out in the presence of M/s VSP / MECON / HEC for which intimation shall be given two weeks in advance.

8.3 The equipment should perform at site at the rated capacity without vibration and noise.

8.4 Checking / Inspection / Testing of all the offered equipment/ items/ electrics shall include the following:-

8.4.1 Material test certificates for important parts / component of bought out / cables / items of the equipment / internal inspection report:-

8.4.2 Visual inspection including dimensional checks.

8.4.3 Operation of equipment at No load & Full load condition.



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8.5 The tests to be carried out on equipment are sub - divided under the following heads:-

8.5.1. **Factory Tests :-**

8.5.1.1 All routine tests as per relevant standards referred in respective IS shall be carried out by the successful tenderer at the manufacturer's works. However, the following Routine test shall necessarily be carried out in the presence of M/s VSP / MECON / HEC unless otherwise waived off in writing by the M/s VSP / MECON / HEC.

8.5.1.2 Visual inspection.

8.5.1.3 Routine Tests shall be carried out on all electrics.

8.5.1.4 Type / routine test certificates for all items not specifically covered above shall be furnished during inspection.

8.5.1.5 Type test certificates shall be provided for identical / similar electrics.

8.5.2 **At site tests:-**

8.5.2.1 Insulation test with 500V Megger.

8.5.3 Acceptable tests.

9.0 PERFORMANCE GUARANTEE TEST:-

9.1 **GUARANTEE TESTS FOR EQUIPMENT AND SYSTEMS :-**

9.1.1 The tenderer shall stand guarantee for all the items supplied by them for the period of 18 months from the supply or one year from date of Final Acceptance by Customer (M/s VSP) . Any defect during said period in the executed work with respect to item shall be rectified and repaired by the successful tenderer at no extra cost.

9.1.2 Performance Guarantee tests shall be carried out by the successful tenderer to establish the performance parameters for individual equipment.

9.1.3 The tenderer shall furnish detailed procedures for conducting all the performance guarantee tests for M/s VSP / MECON approval. These procedures shall conform to applicable codes, norms and/or standard practices and the successful tenderer shall furnish copies of the same in English language for scrutiny by M/s VSP / MECON.



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10.0 GUARANTEE AND WARRANTY:-

10.3.1 The tenderer shall stand guarantee for design, manufacturing and satisfactory performance of the equipment / items/ electrics for a period of 18 months after supply or 12 months from the date of issue of last FAC (Final acceptance test conducted by M/s VSP). During this period elimination of defect in the design, manufacture, material quality and replacement of defective parts shall be to the satisfaction of M/s VSP / MECON / HEC. Cost of dismantling, transport and refitting, if any, during the elimination of defects / replacement of defectives parts shall be fully borne by the successful tenderer without any price implication.

11.0 SPECIAL INSTRUCTIONS TO SUCCESSFUL TENDERER :-

11.1 GENERAL:-

11.1.1 Make, Type and technical parameters of the bought out items shall be subject to approval of the M/s VSP / MECON.

11.1.2 All name plates, instructions, drawings and documents shall be in English language and all weights and dimensions shall be in metric units.

11.2 Painting:-

11.2.1 For all electrical equipment necessary steps shall be taken in treating all enclosures, plates, frames, fixtures etc to prevent any rusting, corrosion, sulphnation, or any other physical damage to the equipment or components thereof, whether or not the equipment are kept energised.

11.2.2 All steel works shall undergo a process of degreasing, pickling, cold rinsing, phosphating and passivating. It shall be given two (2) coats of high corrosion-resistant primer and finished by application of epoxy based paint so as to protect the equipment from saline atmosphere prevailing in the place of installation. Thickness of paint for outdoor and indoor equipment shall be 120 and 60 microns respectively.

11.2.3 Painting procedure shall be as per VSP's painting procedures mentioned at VSP - GS - 09.



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11.2.4 Paint shade of equipments shall be as follows:-

Sl. No.	DESCRIPTION OF EQUIPMENT	COLOUR	PAINT SHADE (RAL CODE)
1.	HT isolator	Traffic Grey A	7042
2.	Transformer	Squirrel grey	7000
3.	Bus-duct	Light grey	7035
4.	Power control centers (PCC)	Light grey	7035
II.	MOTORS		
1.	6.6 KV motors	Traffic Grey A	7042
2.	415 V LT AC motors	Silver Grey	7001
3.	Inverter duty Motors	Dark Grey	7030
III.	MOUNTED ELECTRICS		
1.	Equipment installed on or along with motors viz. Tacho generators, brake etc.	Same as that of motor	
2.	Equipment installed on mechanism but separate from motor viz. Limit switches, pull chord switches, belt sway switches, speed switches, load cells, photo electric relays etc.	Traffic Grey A	7042
IV.	CONTROL GEAR		
1.	VFD panels, UPS panels, Automation system panels, Relay panels, Weighing controller panel, TR controller panel, MCC, PDB, MLDB, MCP, Soft starter, LDB etc. including crane control panels	Light Grey	7035
2.	Lighting distribution and power distribution board	Light Grey	7035
3.	Fire fighting panel	Carmine Red	3002



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4.	Local control box, Junction box	Traffic Grey A	7042
5.	Control desk	Light Grey	7035
6.	Pulpit equipment	Light Grey	7035
7.	Telecommunication panel	Blue Grey	7031
V.	MISCELLANEOUS EQUIPMENT		
1.	Junction boxes	Traffic Grey A	7042
2.	Conduit / pipe pull boxes	Traffic Grey A	7042
3.	Light fittings	Traffic Grey A	7042
4.	415V Welding sockets	Grass green	6010
5.	230V Power sockets	Yellow orange	2000
6.	24V transformer sockets, lamp sets etc.	Sulphor yellow	1016
7.	Earthing strip	Black	

12.0 INFORMATIONS TO BE FURNISHED ALONG WITH THE OFFER, OTHERWISE OFFERS MAY BE IGNORED :-

- 12.1 Point wise confirmation of clauses of enquiry specifications, listing out deviations, if any. Deviations envisaged with the reasons.
- 12.2 GA drgs. of Intermediate bracket assly. with insulator assly for 3Ph+E , Sectionalizing bracket assly. with insulator assly for 3Ph+E , Bimetalic straps, 1000A outdoor Current collector assembly, Insulation barrier, Expansion Joints.
- 12.3 Technical catalog of the offered electrics.
- 12.4 GA drgs. of 800A Isolator Panels, 125A Switch sockets, Junction boxes, Lighting Distribution Boards, Switch boxes, Power Junction boxes etc.
- 12.5 GA of Lighting Transformers for DSL Lightings & 30M High Mast Lighting Towers.



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- 12.6 GA drgs. of Ladder type Cable trays.
- 12.7 GA drgs. of Bidirectional signal lamps assly.
- 12.8 GA drgs. of 150W, 230V, HPSV Lamps.

13.0 DRAWINGS / DOCUMENTS TO BE FURNISHED BY THE SUCCESSFUL TENDERER:-

- 13.1 GA ,SLD, Schematic, BOM and mounting details of 800A Isolator panels, Switch boxes, 125A Switch sockets, Junction boxes, Lighting distribution boards, Power junction boxes, etc.
- 13.2 GA & Details of 1000A Outdoor Current collector assembly.
- 13.3 Internal wiring diagram of supplied equipments.
- 13.4 GA and details of Bidirectional signal lamps assly. with B.O.M.
- 13.5 GA drgs of Insulators indicating make, duty, materials and specifications etc.
- 13.6 Operation & Maintenance manual of their supplied equipments.
- 13.7 GA drgs. & BOM of Lighting transformers.
- 13.8 GA drgs. & BOM of Intermediate Brackets assly with insulator assly for 3Ph+E.
- 13.9 GA drgs. & BOM of Sectionalizing Brackets assly with insulator assly for 3Ph+E.
- 13.10 GA drgs. & BOM of Bimetallic Straps.
- 13.11 GA drgs. & BOM of Insulation barriers
- 13.12 GA drgs. & BOM of Expansion Joints.
- 13.13 GA drgs. & BOM of Cable trays.
- 13.14 GA drgs. & BOM of 150W, 230V, HPSV Lamps.
- 13.15 Drawings / data / documents of the supplied items shall be submitted by the tenderer in (12) copies to the Purchaser for approval / reference by M/s VSP / MECON.
- 13.16 All the submission of drgs. / documents by successful tenderer for approval from M/s MECON / VSP shall be routed through M/s HEC, But the approval of drgs / documents / calculations from M/s MECON / VSP shall be the responsibility of the tenderer
- 13.17 Any minor change required by M/s MECON / VSP during drawing approval stage shall have to be incorporated by the successful tenderer without any price implications.



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13.18 After approval of drgs., another 12 sets of Hard copies of drgs / documents / calculations shall be submitted to M/s MECON / VSP as a distribution copies.

13.19 Quality Assurance Plan for approval.

14.4 Following drawings / datas / documents shall be submitted for inspection of Equipment: -

14.4.1 Type test certificates for identical equipment.

14.4.2 Sub-suppliers / Vendor's catalogues / technical literature.

14.4.3 Test report for identical inspection.

14.4.4 Test certificate of components.

14.4.5 Approved specifications & data sheets of equipment.

14.4.6 Final drawings & documents of each equipment and QAP.

14.4.7 Any other drgs. / documents required by customer / consultant.

ANNEXURE - I

DRAWINGS FOR REFERENCE

Sl. No.	Drawing no.	Description
1.	SK-EDB-1337	SLD INDICATING ITEMS OF DSL SYSTEM WITH DSL LIGHTINGS & LIGHTING TRANSFORMERS OF 30M HIGH MAST TOWERS FOR WHP, VSP, COB#5.
2.	SK-EDB-1338	TYPICAL ARRANGEMENT OF DSL W.R.T CURRENT COLLECTORS AND CABLE TRAYS ALONG TROLLEY LINES FOR WHP, VSP, COB#5.