

# THERMAL INSULATION - R-MATTRESSES/P-SECN

## GeM Tender Enquiry for 5 X 800 MW YADADRI TPS

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**Project: - 5 X 800 MW YADADRI TPS**  
**Package: - THERMAL INSULATION - R-MATTRESSES/P-SECN**  
**GeM BID No... BID NO: GEM/2023/B/3766420, Dtd. 05.08.2023.**  
**ANNEXURE -I**

**Additional clauses of NIT**

**1. Dispatch Markings: -**

Each box shall be marked with Capital Letters in “Red” indicating the PEM supply (Main Supply OR Commissioning spare) for **5 X 800 MW YADADRI TPS**. Each package delivered under the Contract shall be marked by Supplier and such marking must be distinct and in English Language (all previous irrelevant markings being carefully obliterated). Such marking shall show the description and quantity of contents, the name and address of consignee, the Gross weight and Net weight of the package, the name of the Supplier, PEM P.O. reference number, with a distinctive number of mark sufficient for purposes of identification. Besides above necessary, packing shall bear a special marking ‘TOP’, ‘BOTTOM’, ‘DO NOT TURN OVER’, “KEEP DRY”, “HANDLE WITH CARE”, etc.

**IMPORTANT**

- Two copies of respective standard manufacturer’s erection instruction/operation instruction manual shall be kept in each package / container for immediate reference by BHEL site and same shall be reflected in packing slip also
- The Packing list details for the consignment must be put inside the Box/Boxes.

**2. Liquidated Damages: -**

a) **Main Supply:-** Purchaser reserves the right to recover from the Seller/ Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half (½) percent and applicable GST thereon, of the total main supply & commissioning spares contract price excluding GST per week or part thereof, subject to a maximum of ten(10) percent of the total main supply & commissioning Spares contract price excluding GST, if the Seller/ Contractor fails to deliver any part of the ordered goods/stores within the period stipulated in the Order/ Contract.

**NOTE:**

- i. LR/RR date for indigenous supplies (Bill of Lading/AWB for Foreign supplies) shall be treated as the date of dispatch for levying LD. However, if receipted LR date for indigenous supply is beyond 30 days for FTL/ 45 days for PTL from the date of LR (PTL to be clearly mentioned in LR), such excess period shall be considered for LD purpose irrespective of dispatch date. Import General Manifest (IGM)/Bill of entry date (whichever is earlier), for foreign supplies, is beyond 90 days from the date of Bill of Lading/AWB, such excess period shall be considered for LD purpose irrespective of dispatch date.
- ii. In case of any amendment/ revision, LD shall be linked to the amended/ revised contract value and delivery date(s).
- iii. If Order/ Contract involves two or more Units/ Sets/ Lots/ Stages, then Liquidated Damages shall be levied on order/ contract value excluding GST of the delayed Unit/ Set/ Lot/ Stage, provided delivery stipulated in the Order/ Contract is Unit/ Set/ Lot/Stage wise, however total LD amount shall be limited to 10% of total order/ amended

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order value excluding GST of delayed Unit/ Set/ Lot/Stage. Any subsequent lot released (not envisaged in original contract) due to increase in quantity within permissible quantity variation shall be treated as separate lot for the purpose of LD.

iv. The sum specified above is not a penalty but a genuine pre-estimate of the loss/ damage which will be suffered by purchaser on account of delay on the part of the Contractor/Seller and the said amount will be deductible without proof of actual loss or damage caused by such delay.

### **3. Risk & Cost Purchase**

BHEL reserves the right to terminate the contract or withdraw portion of work and get it done through other agency, at the risk and cost of the contractor after due notice of a period of 14 days, by BHEL in any of the following cases:

i) If the Seller/Contractor fails to deliver the goods or materials or any instalment thereof within the period(s) fixed for such delivery or the Seller's poor progress of the supply/ services vis-à-vis delivery/execution timeline as stipulated in the Contract, backlog attributable to seller including unexecuted portion of supply does not appear to be executable within balance available period;

ii) Delivers goods or materials not of the contracted quality and failing to adhere to the contract specifications;

iii) Withdrawal from or repudiation/ abandonment of the supply/ services by Seller before completion as per contract or if the Seller refuses or is unable to supply goods or materials covered by the Order/Contract either in whole or in part or otherwise fails to perform the Order/Contract;

iv) Non-supply by the Seller within scheduled completion/delivery period as per Contract or as extended from time to time, for the reasons attributable to the Seller;

v) Termination of Contract on account of any other reason (s) attributable to Seller.

vi) Assignment, transfer, subletting of Contract without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.

vii) If the Seller be an individual or a sole proprietorship Firm, in the event of the death or insanity of the Seller;

viii) If the Seller/Contractor being an individual or if a firm on a partnership thereof, shall at any time, be adjudged insolvent or shall have a receiving order for administration of his estate made against him or shall take any proceeding for composition under any Insolvency Act for the time being in force or make any assignment of the Order/Contract or enter into any arrangement or composition with his creditors or suspend payment or if the firm dissolved under the Partnership Act;

ix) If the Seller/Contractor being a company is wound up voluntarily or by order of a Court or a Receiver, Liquidator or Manager on behalf of the debenture holders and creditors is appointed or circumstances shall have arisen which entitles the Court of debenture holder and creditors to appoint a receiver, liquidator or manager;

x) Non-compliance to any contractual condition or any other default attributable to Seller.

Such defaulting vendor/Seller shall not be eligible to participate in re-tendering conducted on account of risk purchase made due to fault of such vendor/Seller.

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**3.1 Risk & Cost Amount against Balance Work:**

Risk & Cost amount against balance work shall be calculated as follows:

$$\text{Risk \& Cost Amount} = [(A-B) + (A \times H/100)]$$

Where,

A= Value of Balance scope of Work (\*) as per rates of new contract

B= Value of Balance scope of Work (\*) as per rates of old contract being paid to the contractor at the time of termination of contract i.e. inclusive of PVC & ORC, if any.

H = Overhead Factor to be taken as 5

In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero).

**3.2 Balance scope of work (in case of termination of contract):**

Difference of Contract Quantities and Executed Quantities as on the date of issue of Letter for 'Termination of Contract', shall be taken as balance scope of Work for calculating risk & cost amount.

Contract quantities are the quantities as per original contract. If, Contract has been amended, quantities as per amended Contract shall be considered as Contract Quantities.

Items for which total quantities to be executed have exceeded the Contract Quantities based on drawings issued to contractor from time to time till issue of Termination letter, then for these items total Quantities as per issued drawings would be deemed to be contract quantities.

Substitute/ extra items whose rates have already been approved would form part of contract quantities for this purpose.

Substitute/ extra items which have been executed but rates have not been approved, would also form part of contract quantities for this purpose and rates of such items shall be determined in line with contractual provisions.

However, increase in quantities on account of additional scope in new tender shall not be considered for this purpose.

NOTE: In case portion of work is being withdrawn at risk & cost of contractor instead of termination of contract, contract

quantities pertaining to portion of work withdrawn shall be considered as 'Balance scope of work' for calculating Risk & Cost amount.

**3.3 LD against delay in executed work in case of Termination of Contract:**

LD against delay in executed work shall be calculated in line with above LD clause, for the delay attributable to contractor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of work till termination of contract.

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Method for calculation of LD against delay in executed work in case of termination of contract” is given below.

- i. Let the time period from scheduled date of start of work till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1
- ii. Let the value of executed work till the time of termination of contract = X
- iii. Let the Total Executable Value of work for which inputs/fronts were made available to contractor and were planned for execution till termination of contract = Y
- iv. Delay in executed work attributable to contractor i.e.  $T2 = [1-(X/Y)] \times T1$
- v. LD shall be calculated in line with LD clause (clause 16) of the Contract for the delay attributable to contractor taking “X” as Contract Value and “T2” as period of delay attributable to contractor.

**3.4 Recoveries arising out of Risk & Cost and LD or any other recoveries due from Contractor**

Without prejudice to the other means of recovery of such dues from the Seller recoveries from the Seller on whom risk & cost has been invoked shall be made from the following:

- a) Dues available in the form of Bills payable to seller, SD, BGs against the same contract.
- b) Dues payable to seller against other contracts in the same Region/Unit/ Division of BHEL.
- c) Dues payable to seller against other contracts in the different Region/Unit/ division of BHEL.

In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against contractor.

4. For recognition of dispatch, vendor to submit following documents to BHEL by e-mail/ fax immediately on dispatch: - GST compliant invoice, LR for Indian Vendors (indicating Invoice No., no. of boxes, PTL (if applicable) etc.) / Bill of Lading or AWB for foreign vendor, Packing List (Must be indicating No. of boxes, Packing size, Gross weight and net weight of each package, Contents of the package with cross reference to BoM item code no. or item serial no. and Quantity of each item separately), Insurance Intimation to underwriter through email/fax, Dispatch Clearance.

**B. Following ATC available in GEM shall also be part of NIT: -**

- i. Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any.
- ii. Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %.
- iii. Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.

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**iv.** The bidder is required to upload, along with the bid, all relevant certificates such as BIS license, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document.

**v.** While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

**VI.** Nominated Inspection Agency: On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance:

Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC): BHEL TPIA

Post Receipt Inspection at consignee site before acceptance of stores: NA

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**Additional Terms and Conditions for subject Tender Enquiry to be complied by Bidders for Consideration in this tender:**

- A.** Bidders to ensure that Third party/Customer issued certificates being submitted as proof of PQR qualification should have verifiable details of document/certificate issuing authority such as name & designation of Issuing Authority and its organization contact number and E-mail Id. In case the same is found not available, BHEL has the right to reject such document from evaluation.
- B.** “This item /package/system falls under the list of items defined in para 3 of ministry of finance guideline date 20.09.16 (procurement of items related to public safety, health, critical security operations and Equipment’s etc.) & hence criteria of prior experience /turnover shall be same for all bidders including start up /MSME”.
- C.** **Guarantee & Warrantee** shall be as per Cl. No. 10 of GTC on GeM for the bid. However, Guarantee & Warrantee time period shall be 18 months from the date of last supply in the contract for Main Supply.
- D.** Evaluation shall be on the basis of total all inclusive, landed price at consignee destination (Refer cl. No. 6 of GTC on GEM).
- E.** **Terms of Delivery:** - Terms of delivery shall be F.O.R. dispatch station. All dispatches shall be through Road Carriers on Freight Pre-Paid basis. Road Permit/E-way Bill if required will be arranged by Supplier. However, loading & Transit insurance shall be in the scope of Seller and unloading of items at delivery point shall be in the scope of BHEL. Bidder to quote prices accordingly.
- F.** Further, w.r.t. Transit Insurance supplier has to inform the details of dispatches (such as Policy No., Consignee Name, Consignment Packing details, Project Name, Purchase Order No., LR No. & date, Invoice No. & date, Dispatch Origin & destination details etc.) to policy underwriter.
- G.** Bidder has to provide the details as per TECHNICAL PQR (attached with Specifications of product catalogue) in its offer and has to note that bids of only those bidders shall be evaluated who meet the Technical Pre-Qualifying requirements'. The terms of technical PQR shall prevail in conflict (if any).
- H.** PQR criteria uploaded with Buyer uploaded Bid Specific document shall prevail Value of Experience criteria and Past performance parameter mentioned in GeM bid.
- I.** **Inspection call to be raised by bidder on BHEL CQIR portal** (details shall be shared at the of execution of order) and Inspection agency shall attend at the inspection within seven (07) days of the date on which the material is notified as being ready. In case of delay in witnessing of inspection beyond stipulated time (i.e. 7 days from the date on which the material is notified as being ready), by BHEL arising due to reasons not attributable to vendor, BHEL will extend the delivery period for such delay in carrying out inspection. If BHEL is not able to witness inspection up to 15 days then in addition to delay beyond stipulated period, extension in delivery time of 07 days for arranging fresh inspection will be given.

When the tests have been satisfactorily completed at Seller/ Contractor's works, the Inspection Agency shall issue an inspection report that effect within seven (07) days after completion of the tests, but if the tests were not witnessed by the Inspection Agency or his representative, the material acceptance report would be issued within seven (07) days after receipt of the test certificates by the Purchaser.

Purchaser will issue MDCC to the Seller/ Contractor within 7 days based on inspection report/ test certificates/Certificate of Conformance as applicable. In case of delay in issuance of MDCC beyond 7 days stipulated time (i.e. from the date of successful inspection report), by BHEL arising due to reasons not attributable to vendor, BHEL will extend the delivery period for such delay in issuing MDCC. If BHEL is not able to issue MDCC up to 15 days then in addition to delay beyond stipulated period, 7 days' additional time shall be given to vendor to facilitate the vendor for arranging logistics arrangements.

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- J.** All Bidders shall be required to submit applicable Freight % & GST % included in their prices during clarification stage of Tender.
- K.** Performance Bank Guarantee: shall be as per Cl. No. 7 of GTC of GeM. Performance Security amount shall be @5% of the value of contract value. In case any benefit with respect to BG reduction is applicable at later stage, then similar benefit shall be passed onto the bidders for subject tender as well.
- L. Payment Terms:** For Supply Portion : - As per clause no. 12 (i) of GTC on GeM. Supplier has to provide original+1 copy of Tax invoice, Packing List, LR/RR or AWB, CRAC, Insurance intimation, Guarantee Certificate, E-way bill (as applicable) for payment.  
Offline payment mode shall be selected. Payment will be released within 90 days for Non MSME after submission of complete documents (45 days for Micro & Small Enterprises (MSEs), 60 days for Medium Enterprises.
- M. Bid reserved for Make in India products:** - Bidders have to note, "For this procurement, the local content to categorize a supplier as a Class I Local Supplier / Class II Local Supplier / Non Local supplier and Purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), (PPP-MII) Order 2017 dt. 16/09/2020 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT."

Following may also pls. be noted by the bidders:

**Eligibility of Suppliers : Class I Local Suppliers & Class II Local Suppliers,** (as per para no. 3(b) of Public Procurement (Preference to Make in India), (PPP-MII) Order 2017 dt. 16/09/2020 issued by DPIIT and subsequent amendments).

In accordance with para 9 (a) of DPIIT's PP-MII order 2017 revision dated 04/06/2020, Class-I local suppliers" / "Class-II local suppliers" at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for the Class-I local supplier" / "Class-II local supplier" as the case may be. They shall also give details of the location(s) at which the local value addition is made.

Regarding verification of local content, the local supplier at the time of tender, bidding or solicitation shall be required to provide certification w.r.t minimum local content (as per enclosed annexure-IV) as per para 9 of PP-MII order revision dated 16.09.2020.

The package is Divisible in nature. MSE/MII preference shall be applicable as per "Concurrent application of Public Procurement Policy for Micro and Small Enterprises Order, 2012 and Public Procurement (Preference to Make in India) Order, 2017" circular No. F.1/4/2021-PPD dated 18.05.2023.

- N. This is conditional tender enquiry. Financial bid opening (Part-II) of a bidder shall be subjected to following: -**
- (i) Techno-Commercial evaluation/recommendation by BHEL.
  - (ii) Qualification of Technical PQR
  - (iii) Offered item should mandatorily conform to PP-MII order provisions.

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(iv) Approval of vendor from end Customer (TSGENCO). shall be taken up by BHEL-PEM with customer. Bidders who are not approved from TSGENCO (end customer) should furnish the credentials as per TSGENCO (end customer) format - (Annexure -C) along with their bid.

- O. Consignee Details** (for PRC - Provisional Receipt Certificate & CRAC - Consignee's Receipt cum Acceptance Certificate, as applicable) shall be as per Project Site official details.
- P.** The Bidder has to declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). 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. In case, the bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/guidelines.

**Q. Bidders to ensure the following: -**

- Ensure compliance to Ministry of Power (MoP) Order No. 11/05/2018 Coord. dt. 28/07/2020, if applicable.
- Ensure compliance of Ministry of Finance (MoF) Order (Public Procurement No. 1 & 2) F. No. 6/18/2019/PPD dt. 23/07/2020.
- to submit "Model Certificate for Tenders" as per Annexure-III of Ministry of Finance (MoF) Order (Public Procurement No. 1 & 2) F. No. 6/18/2019/PPD dt. 23/07/2020. Bidder to submit the following undertaking on their letter head duly signed from the highest competent authority at your end (i.e Owner, partner, CMD, Director etc.)

**"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that this bidder is not from such a country and is eligible to be considered"**

Note: - This bidder is to be replaced with bidders' organizational name.

- R. Delivery Period** : Delivery completion for Main supply—shall be 208 days from the PO date. other terms of delivery mentioned at Annexure –A of this ATC. Also refer tender documents for delivery schedule.
- S.** For registration in BHEL PEM- Online registration portal is operational, Non-registered Vendors who wish to apply for registration in BHEL-PEM can apply through Online Registration Portal available at [www.pem.bhel.com](http://www.pem.bhel.com) - vendor section - Online Supplier Registration. All credentials and/or documents duly signed and stamped related to registration can be uploaded on the website and submit the application for registration. However, registration of suppliers is not mandatory in case of open tender
- T.** A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. **The bidder found to have a conflict of interest shall be disqualified.** A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:
- a) They have controlling partner (s) in common; or
  - b) They receive or have received any direct or indirect subsidy/financial stake from any of them; or
  - c) They have the same legal representative/agent for purposes of this bid; or

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- d) They have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
- e) Bidder participates in more than one bid in this bidding process. Participation by a bidder in more than one bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/sub-assembly/sub-assemblies from one bidding manufacturer in more than one bid; or
- f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorise only one agent /dealer. There can be only one bid from the following:
1. The principal manufacturer directly or through one Indian agent on his behalf; and
  2. Indian /foreign agent on behalf of only one principal;
- Or
- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or
- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidder must proactively declare such sister/common business/management units in same/similar line of business.

**U.** Instructions to Packing List (annexure –III) and Certification reg. Local content (annexure –IV) to be complied by bidders.

**V. Quantity Variation: - Qty Variation shall be 0%.**

**W.** (a) PVC is applicable for this package.

(b) PVC ceiling limit shall be positive (+ve) 10% and negative (-ve) 10%.

(c) PVC formula shall be attached with Technical specification (tender documents).

**X.** Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for percentage of 25% of total value.

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- Y. INTEGRITY PACT** - Integrity pact is applicable for subject package. IP is a tool to ensure that activities and transactions between the Company and its Bidders/ Contractors are handled in a fair, transparent and corruption free manner. Following Independent External Monitors (IEMs) on the present panel have been appointed by BHEL with the approval of CVC to oversee implementation of IP in BHEL.

SI	IEM	Email
1	Shri Otem Dai, IAS (Retd.)	<a href="mailto:iem1@bhel.in">iem1@bhel.in</a>
2	Shri Bishwamitra Pandey, IRAS (Retd.)	<a href="mailto:iem2@bhel.in">iem2@bhel.in</a>
3	Shri Mukesh Mittal, IRS (Retd.)	<a href="mailto:iem3@bhel.in">iem3@bhel.in</a>

The IP as enclosed with the tender is to be submitted (duly signed by authorized signatory) along with techno-commercial bid (Part-I, in case of two/ three part bid). Only those bidders who have entered into such an IP with BHEL would be competent to participate in the bidding. In other words, entering into this Pact would be a preliminary qualification.

Please refer Section-8 of IP for Role and Responsibilities of IEMs. In case of any complaint arising out of the tendering process, the matter may be referred to any of the above IEM(s). All correspondence with the IEMs shall be done through email only.

**Note:**No routine correspondence shall be addressed to the IEM (phone/ post/ email) regarding the clarifications, time extensions or any other administrative queries, etc. on the tender issued. All such clarification/ issues shall be addressed directly to the tender issuing (procurement) department's officials whose contact details are provided below:

**Details of contact person(s):**

Mr.SUMANT KUMAR, DY. MANAGER /PG I-2 M/s Bharat Heavy Electricals Ltd., Project Engineering Management, PPEI Building, HRD & ESI Complex, Plot No 25, Sector-16 A, Noida-201301 E-MAIL: <a href="mailto:sumantkumar@bhel.in">sumantkumar@bhel.in</a> Ph. No. 0120-4368779	Ms. Naina Singh, Sr. MANAGER /PG I-2 M/s Bharat Heavy Electricals Ltd., Project Engineering Management, PPEI Building, HRD & ESI Complex, Plot No 25, Sector-16 A, Noida-201301 E-MAIL: <a href="mailto:nainasingh@bhel.in">nainasingh@bhel.in</a> Ph. No. +91-120-4368762
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- Z.** All the Buyer Added Bid Specific Additional Terms and Conditions shall supersede relevant terms & conditions of GeM GTC and shall prevail in case of conflict with any other terms & conditions of tender (if any).
- AA.** All other terms & conditions shall be as per selected Additional Terms & Conditions for subject bid from GeM library and GTC version 4.0 (Version 1.11) available on GeM Portal on enquiry floating date shall be applicable.

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**An undertaking regarding Model Clauses (To be provided alongwith bid)**

Refer,

PROJECT	:- 5 X 800 MW YADADRI TPS.
PACKAGE	:- THERMAL INSULATION - R-MATTRESSES/P-SECN
Primary product category on GeM	:-.....
BID No. (Through GeM)	:- GEM/2023/B/3766420, Dtd. 05.08.2023

M/s .....

Reference:

## **TO WHOM SO IT MAY CONCERN**

This is with reference to Ministry of Finance circular dated 23.07.20 reg. restriction under rule 144 (xi) of GFR.

“I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India. I hereby certify that M/s ..... is not from such a country and is eligible to be considered against GeM enquiry no: ....., **Dtd.** .....”

Sign & Signature

Date:

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**GeM BID No... BID NO: GEM/2023/B/3766420, Dtd. 05.08.2023.**

**ANNEXURE -III TO INSTRUCTIONS TO PACKING LIST**

For faster verification of bills, successful bidder to submit detailed Bill of Material (BOM) at the time of drawings/ documents submission after placement of PO. Each item of the BOM to be uniquely identified with item code no. or item Sl. No. Supplier to ensure that all items which will find separate mention in the packing list are covered in this detailed BOM.

Supplier to also give the following undertaking in the BOM:

“The BOM provided herewith completes the scope (in content and intent) of material supply under PO No. .... Dated ..... Any additional material which may become necessary for the intended application of the supplied items/package will be supplied free of cost in most reasonable time.

Packing List must indicate:

- a) Packing size
- b) Gross weight and net weight of each package
- c) Contents of the package with cross reference to BOM item code no. / Sl. No.
- d) Quantity of each items separately.

The packing list must cover all the BOM items.

Supplier to give following undertaking in the packing list:

The Packing list provided herewith is as per BOM approved under PO No. ----

Project: - 5 X 800 MW YADADRI TPS

Package: - THERMAL INSULATION - R-MATTRESSES/P-SECN

GeM BID No... BID NO: GEM/2023/B/3766420, Dtd. 05.08.2023.

**ANNEXURE IV**

**Letter head of Company**

Ref.....

Date.....

To,  
Bharat Heavy Electricals Limited  
PEM, PPEI Building, Plot No 25,  
Sector 16A, Noida (U.P) 201301

**Subject: Certification regarding local content**

Reference: Tender Enquiry No . GEM/2023/B/3766420, Dtd. 05.08.2023

Name of Package: **THERMAL INSULATION - R-MATTRESSES/P-SECN.**

Dear Sir,

We hereby certify that items offered by us of **THERMAL INSULATION - R-MATTRESSES/P-SECN** for **5 X 800 MW YADADRI TPS**, M/s ..... meets the requirement of minimum local content as a Class – I/ CLASS-II local supplier in line with clause of NIT (GeM NIT) and the Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 28.05.2018 & 29.05.2019, 04.06.20 & 16.09.20.

We hereby certify that items offered by us for **THERMAL INSULATION - R-MATTRESSES/P-SECN** for **5 X 800 MW YADADRI TPS** has local content of ..... %

We further confirm that details of location at which the local value addition is made will be our registered works at

.....  
...(address of the works)

Yours very truly

..... (authorized signatory of company)

..... (firm name)

authorized signatory  
of company

## **Annexure - A**

### **Delivery Term**

#### **1. Delivery Schedule**

- a. **Main Supply including quantity variation:** Delivery completion for Main supply shall be 208 days from the PO date.

#### **Notes:**

- a. Supplier to start manufacturing/supply only after getting the applicable engineering Drgs. /docs approved from BHEL/End Customer.
- b. Drawings /documents submission/re-submission schedule shall be as indicated in revised Annexure A on next page) shall be used for progress monitoring purpose and required course correction, if any.
- c. The delivery date specified is for completion of the deliveries. Deliveries to start progressively so as to meet the completion schedule.
- d. The delivery conditions specified are for contractual purposes. However, to meet project requirement, BHEL may ask for early deliveries without any compensation thereof.

2. **Validity of contract (PO rates, terms and conditions):** Vendor has to make supply of goods/services as per the delivery time mentioned above. However, due to unavoidable circumstances if delay happens in providing inputs/clearances (inputs, Engineering approvals, deputing inspector for inspection, issuance of MDCC and any hold imposed owing to site issues etc.) for which delivery time extension is admissible as per point no.3, in such situation it shall be obligatory at vendor part to execute the contract at PO rates, terms and conditions where inputs/ clearances has been accorded within validity of contract. Validity period for various activities shall be as defined below or as mentioned in the NIT.

#### **2.1. Validity of the contract for main supply including quantity variation.**

- Contract shall be valid for 730 days from the PO date. However, delay at vendor's end (if any) shall be added to the validity period and contract validity shall get extended by the delay period at vendor's end.

For example: Original Delivery period for main supply: "208" A (in days)  
if Delay at vendor's end: B (in days beyond "A" days)  
Contract validity: C (730) + B (in days)

#### **Notes:**

- a. B is the Vendor delay days beyond original contractual delivery period for main supply /extended delivery period owing to time taken by BHEL at point no. 2 above.

**Project: - 5 X 800 MW YADADRI TPS**

**Package: - THERMAL INSULATION - R-MATTRESSES/P-SECN**

**GeM BID No... BID NO: GEM/2023/B/3766420, Dtd. 05.08.2023.**

- b. Main supply including quantity variation, **O&M Spares (Recommended Spares)** applicable in the contract released/ cleared for manufacturing within contractual validity period, to be supplied by vendor/supplier at PO rates, terms and conditions.
- c. Execution of the contract quantities released beyond contract validity period shall be decided on mutual consent basis at PO rates, terms and conditions.

**3. Delivery Extension: Extension of contractual delivery time:**

Delivery time mentioned in the NIT includes Engineering completion time (time for drawing/document submission/resubmission by the vendor and review/approval of the same by the BHEL/End customer), manufacturing, inspection, Packing and dispatch time. Due diligence is to be observed by the vendor to ensure timely completion of engineering and supply.

During the execution of the contract, time loss occurred owing to the reason attributable to BHEL besides force majeure shall be considered for delivery time extension to the vendor as given below: -

- i. Any Delay in providing comments/ approval on Primary drawing/documents beyond the stipulated time as specified in NIT.
- ii. Time Loss in approval of the drawing/document as a result of increase in the iteration not attributable to the vendor (i.e. resubmission owing to end customer comments) as certified by BHEL. Time extension equivalent to the resubmission time noted in the tech. spec and consequential increase in the approval time in lieu of increase in iteration shall be applicable. However, for incomplete re- submission time loss shall be in vendor account.
- iii. Delay in providing engineering input/material by BHEL.
- iv. Delay in deputing inspector for inspection and delay in release of MDCC in line with GCC/ GEM ATC terms.
- v. Any hold put by BHEL for whatever reasons during execution of contract (within contract validity period), time extension equivalent to hold period shall be admissible. However, in the event hold period continues for more than 30 days then, an additional fifteen days for the purposes of mobilization and demobilization of resources shall also be admissible.

**Note:** Extension in delivery period if any with or without imposition of LD shall be considered after detailed delay analysis based on provisions given above. However, no delay analysis will be applicable if supply is completed within delivery schedule as specified in Purchase order.

**ANNEXURE - A****DOCUMENTS TO BE SUBMITTED AFTER AWARD OF CONTRACT:**

Description	Document no.	Vendor Sub (Days) *	BHEL and Customer comment/approval * (3 Days for BHEL and 15 days for customer)	Total Engineering Time (Days) *
QUALITY PLAN	PE-QP-417-169-M031A	10	18	28

\* Days from PO Date


<b>CUSTOMER/ BHEL LOGO</b>	<b>Annexure - C</b>
<b>VENDOR CREDENTIALS SUMMARY SHEET (TO BE FILLED BY BIDDER AND SUBMITTED WITH BID)</b>	

i.	Item/Scope				
ii.	Address of the registered office	Details of Contact Person (Name, Designation, Mobile, Email)			
iii.	Name and Address of the proposed vendor's works where item is being manufactured	Details of Contact Person: (Name, Designation, Mobile, Email)			
iv.	Annual Production Capacity for proposed item				
v.	Annual production for last 3 years for proposed item				
vi.	Details of proposed works				
1.	Year of establishment				
2.	Factory Registration Certificate	Details attached at Annexure – F2.1 (Page No....)			
3.	Overall organization Chart with Manpower Details (Design/Manufacturing/Quality etc.)	Details attached at Annexure – F2.2 (Page No....)			
4.	After sales service set up in India, in case of foreign sub-vendor(Location, Contact Person, Contact details etc.)	Applicable / Not applicable Details attached at Annexure – F2.3 (Page No....)			
5.	Sources of Raw Material/Major Bought Out Item	Details attached at Annexure – F2.4 (Page No....)			
6.	Quality Control exercised during receipt of raw material/BOI, in-process, Final Testing, packing	Details attached at Annexure – F2.5 (Page No....)			
7.	Manufacturing facilities (List of machines, special process facilities, material handling etc.)	Details attached at Annexure – F2.6 (Page No....)			
8.	Testing facilities (List of testing equipment)	Details attached at Annexure – F2.7 (Page No....)			
9.	Supply reference list including recent supplies (Preferably of reputed, well known clients to whom the vendor has supplied the material and are of quantum of item/scope at point (i) above)	Reputed client name (s)..... Details attached at Annexure – F2.8 (as per format given below) (Page No....)			
<b>Project/ package</b>	<b>Customer Name</b>	<b>Supplied Item (Type/Rating/Model /Capacity/Size etc)</b>	<b>PO ref no/date</b>	<b>Supplied Quantity</b>	<b>Date of Supply</b>

<b>CUSTOMER/ BHEL LOGO</b>	<b>VENDOR CREDENTIALS SUMMARY SHEET (TO BE FILLED BY BIDDER AND SUBMITTED WITH BID)</b>
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10.	Product satisfactory performance feedback letter/certificates/End User Feedback	Attached at annexure - F2.9 (Page No....)			
11.	Average annual turnover for last three years with documentary proof.				
12.	Summary of Type Test Report (Type Test Details, Report No, Agency, Date of testing) for the proposed product (similar or higher rating) Note:- Reports need not to be submitted	<b>Applicable / Not applicable</b>  Details attached at Annexure – F2.10 (if applicable) (Page No....)			
13.	Copy of ISO 9001 certificate (if available)	Attached at Annexure – F2.11 (Page No....)			
14.	Product technical catalogues for proposed item (if available)	Details attached at Annexure – F2.12 (Page No....)			
<b>Name</b>		<b>Desig</b>		<b>Sign:</b>	
					<b>Date</b> :

**Company's Seal/Stamp:-**

		<b>DATA SHEET- A</b> <b>ROCKWOOL MATTRESS - ESTIMATE</b> <b>5x800 MW YADADRI STAGE-II</b>				SPECIFICATION NO.: PE-TS-020-100-M004		
						SECTION: II		
						REV. NO.: 00 DATE: 11.07.2023		
						SHEET: 1 Of 1		
1	2	3	4	5	6	7	8	9
S. No.	Item Description	Density (Kg/CuM)	Thick. (mm)	BOQ (SqM)	Unit Ex-Works Price (INR)	PVC	Unit Ex-Works Price (INR) [6x7]	Total Ex-Works Price (INR) [5x8]
1.0	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	150	40	514.00				
1.1	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	150	50	3603.00				
1.2	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	150	60	18256.00				
1.3	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	150	75	40001.00				
2.0	Bonded mineral (Rock) wool mattresses with ONE side SS wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm SS wire	150	75	15150.00				
3.0	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	100	25	2302.00				
3.1	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	100	40	9083.00				
3.2	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	100	50	12232.00				
3.3	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	100	60	18005.00				
3.4	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	100	75	22217.00				



**PRE - QUALIFYING REQUIREMENTS**

DOCUMENT NO: PE-TS-417-000-M053

REVISION NO: 00, DATE: 13.07.2023

SHEET: 1 of 3

Standard document No.:PE-TS-999-000-M053

**Enquiry No. (To be filled by PG):**

**Project: 5x800MW YADADRI TPS**

**Package: Thermal Insulation - Bonded Mineral (Rock) Wool Mattresses**

**CRITERIA FOR EVALUATION (TECHNICAL / FINANCIAL):**

**1. Technical Pre-Qualifying Requirements:**

1.1 The bidder (including cases as defined in clause no. 2.1 below) should have designed, in-house manufactured, tested, inspected and supplied thermal insulation - Bonded mineral (rock) wool mattresses for use in a power plant or for similar application.

Supply of material through requisite tie-up with specified manufacturing unit(s) shall also be acceptable. In such cases, tied up manufacturing unit(s) shall be binding for the contract and bidder shall meet PQR pertaining to all manufacturing units individually. Manufacturing units quoting through such tie-up shall not be eligible to quote separately or through any other tie-up.

Bidder to provide authorization letter from manufacturing units along with scope matrix in support of such Tie-up.

Manufacturing units, which have tie-up with parties quoting to BHEL, shall not be qualified for separately quoting to BHEL.

1.2 The item(s) mentioned in point 1.1 should have performed successfully in similar installations for at least one year. To establish meeting this requirement, the bidder shall conform to any one of the following clauses:

- (i) Execution of two purchase orders for different End-users with the item(s) performing successfully for one (1) year from date of commissioning to the date of bid submission as defined by BHEL-PEM in NIT. Different projects of a customer shall be considered as different End-users.
- (ii) Minimum one (1) repeat contract from two (2) different Purchasers (i.e. 2 Nos of Purchase orders from each purchaser). A contract shall be considered as repeat, when the second contract is given by the same purchaser after lapse of minimum one (1) year from supply completion of first contract.
- (iii) Execution of one (1) purchase order as per sl. no. (i) above from one End-user and one (1) repeat contract from another Purchaser as per sl. No. (ii) above.
- (iv) Three (3) contracts from one (1) purchaser. Second and third contracts shall be after lapse of minimum one (1) & two (2) years respectively from supply completion of first contract.

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**APPROVED BY:**

B K Agarwal

**NAME: B.K. AGARWAL**  
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**PRE - QUALIFYING REQUIREMENTS**

DOCUMENT NO: PE-TS-417-000-M053

REVISION NO: 00, DATE: 13.07.2023

SHEET: 2 of 3

1.3 The bidder to furnish the following documents, as applicable, in support of the above:

- a) For point 1.2 (i): Performance certificates from End-user (duly signed & dated) specifying that the product is performing successfully for one (1) year from date of commissioning along with correlated purchase order(s).
- b) For point 1.2 (ii) & (iv): Purchase order(s), Material dispatch clearance certificate (MDCC)/ Material receipt certificate (MRC)/Lorry receipt (LR)/ Supply invoice.

1.4 In addition to above, bidder or its tied up manufacturing units should have the following facilities:

- a) In-house capability of manufacturing thermal insulation - Bonded mineral (rock) wool mattresses of minimum 250 MT per month.
- b) In-house testing facilities for carrying out tests as per relevant standards & Quality plan. In case, the in-house testing facilities are not available, then bidder shall furnish undertaking that test(s) will be carried out from govt. approved lab or test house recognized by reputed customers.

Bidder to submit supporting documents (Certificate indicating capacity and details/ undertaking of manufacturing & testing facilities) for point (a) & (b) above.

1.5 To establish business continuity, bidder to submit minimum two (2) Purchase order for item(s) as specified in points 1.1 in last 3 (three) years prior to the date of bid submission defined by BHEL-PEM.

2. Bidder to also comply with general points mentioned below.

2.1 Offers of the JV companies/ Joint Bidders/ bidders having collaboration/ licensing agreement/ MOU/ Indian subsidiaries shall be evaluated as follows:

- a) If bidder happens to be an Indian subsidiary of foreign OEM, then the credentials of the foreign OEM can also be considered for meeting PQR.
- b) If bidder happens to be the Joint Venture Company, then the credentials of any of JV partners can be also considered for meeting PQR.
- c) If bidder happens to be the having valid collaboration agreement/ MOU/ licensing agreement with some other company, then the credentials of collaborator/ MOU partner/ licensing company can also be considered for meeting PQR.

Note: If bidder(s) qualifies on the basis of credentials of his principal/ JV partner/ Collaborator/ joint bidder etc., then the principal/ JV partner/ Collaborator/ MOU partner/ joint bidder shall be responsible for overall design vetting and warranty/ guarantee of the package. The scope matrix clearly defining their respective roles

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	<b>PRE - QUALIFYING REQUIREMENTS</b>	DOCUMENT NO: PE-TS-417-000-M053
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		SHEET: 3 of 3

including design vetting, manufacturing of critical component, E&C etc. and warranty/ guarantee shall be submitted along with the offer.

2.2 Bidder to note that the arrangement of bidding (joint bid partners/ collaborator/ MOU partner/licensing company etc.) once offered to BHEL as a part of bidding documents cannot be changed till the execution of contract(s).


2.3 Consideration of offer shall be subject to customer's approval of bidders, if applicable.

2.4 Bidder to submit all supporting documents in English. If documents submitted by bidder are in language other than English, a self-attested English translated document should also be submitted.

2.5 Notwithstanding anything stated above, BHEL reserves the right to assess the capabilities and capacity of the bidder/collaborators to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL.

2.6 After satisfactory fulfilment of all the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.

2.7 Bidder to ensure that Third Party/customer issued certificates being submitted as proof of PQR qualification should have verifiable details of document/ certificate issuing authority such as name & designation of issuing authority and its organization contact number and email-id etc. In case the same found not available, purchaser has right to reject such document from evaluation.

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# **5x800MW YADADRI TPS**

**TECHNICAL SPECIFICATION  
FOR  
BONDED MINERAL (ROCK) WOOL MATTRESSES**

**SPECIFICATION NO. PE-TS-417-169-M032  
Rev. No.: 00**



**BHARAT HEAVY ELECTRICALS LIMITED, POWER SECTOR  
PROJECT ENGINEERING MANAGEMENT  
NOIDA, INDIA**

	<b>TECHNICAL SPECIFICATION BONDED MINERAL (ROCK) WOOL MATTRESSES FOR 5x800MW YADADRI TPS</b>	SPECIFICATION NO. PE-TS-417-169-M032	
		REV. NO.: 00	DATE: 24.07.2023
		SHEET 1 OF 1	


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### SECTION – I

- SPECIFIC TECHNICAL REQUIREMENT

### SECTION – II

- DATA SHET- A
- QUALITY PLAN
- COMPLIANCE SHEET

	<b>SPECIFIC TECHNICAL REQUIREMENT FOR BONDED MINERAL (ROCK) WOOL MATTRESSES</b>	SPECIFICATION NO:PE-TS-417-169-M032
		SECTION : I
		REV. NO. 00
		DATE: 24.07.2023
		SHEET 1 OF 5

## 1.00.00 GENERAL

This specification covers the requirements of manufacture, physical & chemical properties, inspection & testing and packing for supply of bonded mineral (rock) wool mattresses having metallic hexagonal wire netting as facing on one or both side, suitable for service temperatures up to 750 deg C.

## 2.00.00 CODES AND STANDARDS

### 2.01.00 INDIAN STANDARD

- 2.01.01 The manufacture, physical & chemical properties, inspection and testing of the bonded mineral rock wool mattresses shall conform to the latest editions of the following appropriate standards.
- 2.01.02 IS: 8183 Specification for bonded mineral wool.
- 2.01.03 IS: 3144 Methods of test for mineral wool thermal insulation materials.
- 2.01.04 IS: 3346 Methods for the determination of thermal conductivity of thermal insulation materials (two slab, guarded hot plate method).
- 2.02.00 In case of any conflict between the above standards and this specification, the latter shall be final.

## 3.00.00 MANUFACTURE


- 3.01.00 The mattresses shall be made from rock processed from a molten state into fibrous form with minimum organic thermosetting binder, and shall be machine felted, baked and metallic stitched / faced with metallic hexagonal wire netting on one or both sides (as specified in the BOM).
- 3.02.00 The metallic hexagonal wire netting shall be of Galvanized steel (made from wire conforming to IS: 280 medium coated to IS: 4826) / Stainless steel (made from wire to IS: 6528) having wire size and aperture conforming to IS: 3150, as specified in the BOM.
- 3.03.00 The mattress shall be continuously stitched / tied on to the wire netting with minimum 0.4 mm dia. galvanized steel / stainless steel wire, as specified in the BOM. The spacing between the stitching / ties shall not be more than 250 mm along the width and 150 mm along the length.

## 4.00.00 DIMENSIONS AND DIMENSIONAL TOLERANCES

- 4.01.00 The length and width of the mattresses shall be 1520 mm x 1220 mm or 1640 mm x 1220 mm. Nominal thickness shall be 25, 40, 50, 60, 70, 75 or 80 mm.
- 4.02.00 The method of measuring the dimensions i.e. length, width and thickness shall be as prescribed in IS: 3144. Tolerance on length and width shall be as per IS:8183. Tolerance on thickness shall be +6mm/-2mm.

## 5.00.00 BULK DENSITY AND TOLERANCES ON DENSITY

- 5.01.00 The bulk density of the bonded mineral (rock) wool mattresses without the facings, shall be 150 / 100 kg/m<sup>3</sup> unless otherwise specified. Tolerances on bulk density shall be +15 % and - 5% when tested as per method prescribed in IS: 3144.

	<b>SPECIFIC TECHNICAL REQUIREMENT FOR BONDED MINERAL (ROCK) WOOL MATTRESSES</b>	SPECIFICATION NO:PE-TS-417-169-M032
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		SHEET 2 OF 5

## 6.00.00 MATERIAL PROPERTIES

### 6.01.00 SHOT CONTENT:

The method for determination of shot content shall be as prescribed in IS: 3144. The maximum shot content shall be 5% by weight.

Any shot present in the materials shall not be greater than 5 mm in any dimension.

### 6.02.00 THERMAL CONDUCTIVITY

The thermal conductivity (k-value) of the bonded mineral wool mattresses shall not exceed the values given in IS: 8183 Latest when determined in accordance with the method prescribed in IS: 3346.

K' Value test (for minimum three mean temperatures i.e. 100°C, 200°C & 300°C) results to be provided to BHEL for acceptance in accordance with conditions given below: -

If 'K' Value test has been conducted against any BHEL order, on sample collected within 12 months prior to the date of present inspection, the related test results may be provided. Otherwise, the test will be carried out on samples identified and sealed by customer / BHEL authorized representative and related test results to be provided. The test will be carried out at govt. approved labs or test houses (at CBRI – Roorkee, IIT – Chennai, PIBCO R & D Centre - N. Delhi, NIRMA University, Ahmedabad) recognized by reputed customers.


### 6.03.00 HEAT RESISTANCE

When a sample of mattress is heated to the maximum recommended temperature of use (550 °C for 100 kg/m<sup>3</sup> density and 750 °C for 150 kg/m<sup>3</sup> density) as per method prescribed in IS:3144 (test for maximum recommended temp), the material shall not suffer visible deterioration of the fibrous structure, any fusion of fibers and shall not show any evidence of internal self-heating. Any colour change shall not be considered as visible deterioration in fibrous structure.

### 6.04.00 OTHER TESTS

The following tests are to be conducted as per IS:3144/IS:8183 and the acceptance norms shall be as per IS:8183.

- a. Moisture content
- b. Moisture Absorption
- c. Incombustibility
- d. Sulphur content
- e. Recovery after Compression
- f. Alkalinity
- g. Chloride Content
- h. Fibre Diameter
- i. Resistance to vibration

	<b>SPECIFIC TECHNICAL REQUIREMENT FOR BONDED MINERAL (ROCK) WOOL MATTRESSES</b>	SPECIFICATION NO:PE-TS-417-169-M032
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		SHEET 3 OF 5

j. Resistance to jolting

## 7.00.00 PACKING AND MARKING

7.01.00 Stack of mattresses shall be packed in unfolded condition and sealed in polythene bags of at least 0.2mm thickness. Then the sealed bags shall be put inside the polythene lined HDPE or HDPP Woven netting bags and sealed by machine stitching.

To account for looseness in packing (if any) due to machine stitching, the bags shall be properly stacked and tightly fastened during transportation to avoid any possible damage due to relative movements. Sharp edges of wire netting shall be bent inwards to avoid damage to packing.

7.02.00 Each bag of mattresses shall be serial numbered. Also, printed sheets indicating the nominal thickness, density and wire netting details (i.e. material and size) shall be placed below the wire netting.

7.03.00 For easy identification of mattresses as per density & wire netting material, following colour codes for the HDPE bags is to be followed:


- a) Yellow bags with marking as shown in Fig 1 (Page 5 of 5) for 150 kg/m<sup>3</sup> with Galvanized steel wire netting
- b) White bags with marking as shown in Fig 1 (Page 5 of 5) for 100 kg/m<sup>3</sup> with Galvanized steel wire netting
- c) Yellow bags with marking as shown in Fig 1 (Page 5 of 5) for 150 kg/m<sup>3</sup> with SS wire netting
- d) In case of both side SS/ GS wire meshing, additional marking "BOTH SIDE MESH" is to be provided.

7.04.00 Following details shall be legibly and indelibly marked on the packages.

- a) Project Name
- b) Vendor name:
- c) Purchase Order No. and Date
- d) Sl. No. of package/Batch No:
- e) Size of mattresses (Thickness x Length x Width)
- f) Density of mattresses
- f) Wire netting material and size
- g) Weight of the package
- h) No. of mattresses in the package
- i) A caution note "Always store under covered shed and on raised platforms"

## 8.00.00 INSPECTION AND TESTING

8.01.00 Bonded mineral wool mattresses to be supplied under this specification shall be of tested quality and workmanship. Inspection and testing of thermal insulation materials shall be as per this specification / quality plan enclosed. Manufacturer shall conduct all tests and stage inspections as per the approved quality plan to ensure that the material conforms to the requirements of this specification and of applicable standards. All shop tests shall be conducted in the presence of BHEL's / BHEL's customer's representative, on the samples identified by him / them.

	<b>SPECIFIC TECHNICAL REQUIREMENT FOR BONDED MINERAL (ROCK) WOOL MATTRESSES</b>	SPECIFICATION NO:PE-TS-417-169-M032
		SECTION : I
		REV. NO. 00
		DATE: 24.07.2023
		SHEET 4 OF 5

8.02.00 The Quality Plan enclosed with this specification specifies minimum quality control requirement. During contract stage vendor shall furnish this Quality Plan duly signed & stamped for BHEL approval. Quality plan shall be approved by BHEL and customer. Inspection and testing shall be carried out as per Quality Plan by BHEL/ BHEL representative and customer (as applicable). In case inspection is by both BHEL and their customer, then the inspection can be carried out jointly or separately, which will be informed later. In case of the foreign bidder, inspection shall be carried out by reputed third party.

8.03.00 The charges for third party inspection (Lloyds, TUV or equivalent) for foreign bidders shall be included in the base price of the item by the bidder. This third party agency shall be approved by BHEL. Bidder to inform the same in the offer and mention the same in Quality Plan.

Note: There may be minor changes in quality plan depending on customer/consultant comments which will HAVE TO BE ACCOMMODATED BY VENDOR AT NO EXTRA COST.

**9.00.00 DOCUMENTS TO BE SUBMITTED AFTER AWARD OF CONTRACT:**

Description	Document no.	Vendor Sub (Days) *	BHEL and Customer comment/approval * (3 Days for BHEL and 15 days for customer)	Total Engineering Time (Days) *
QUALITY PLAN	PE-QP-417-169-M031A	10	18	28

\* Days from PO Date



**SPECIFIC TECHNICAL REQUIREMENT  
FOR BONDED MINERAL (ROCK) WOOL  
MATTRESSES**

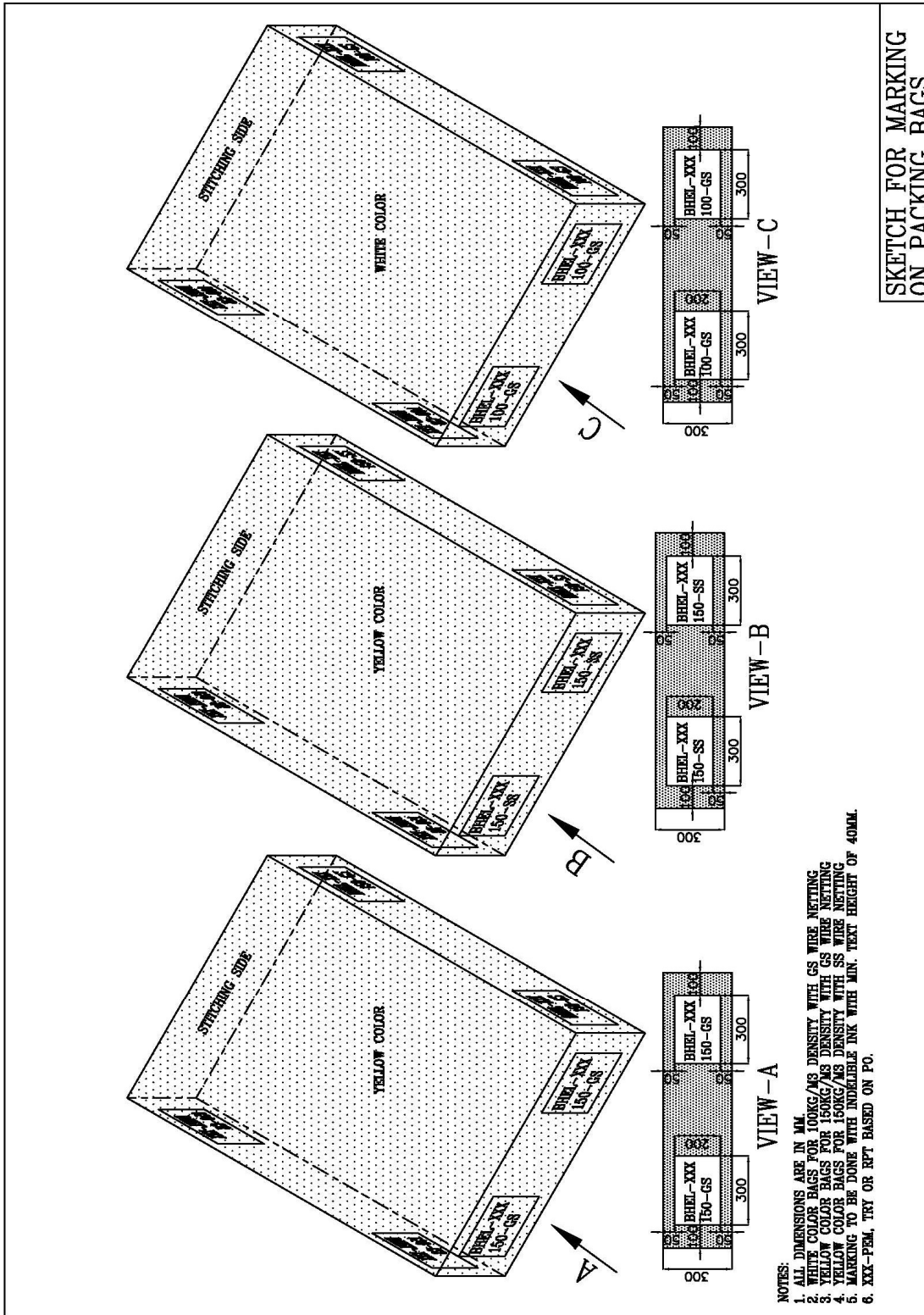
SPECIFICATION NO:PE-TS-417-169-M032

SECTION : I

REV. NO. 00


DATE: 24.07.2023

SHEET 5 OF 5



- NOTES:
1. ALL DIMENSIONS ARE IN MM.
  2. WHITE COLOR BAGS FOR 100KG/M<sup>3</sup> DENSITY WITH GS WIRE NETTING
  3. YELLOW COLOR BAGS FOR 150KG/M<sup>3</sup> DENSITY WITH GS WIRE NETTING
  4. YELLOW COLOR BAGS FOR 150KG/M<sup>3</sup> DENSITY WITH SS WIRE NETTING
  5. MARKING TO BE DONE WITH INDELEIBLE INK WITH MIN. TEXT HEIGHT OF 40MM.
  6. XXX-PEM, TRY OR RPT BASED ON PO.

**Fig 1: Sketch for marking on bags**

	<b>DATA SHEET- A</b>	SPECIFICATION NO. PE-TS-417-169-M032	
	<b>BONDED MINERAL (ROCK) WOOL MATTRESS FOR 5x800MW YADADRI TPS</b>	SECTION: II	
		REV. NO.: 00	DATE: 24.07.2023
		SHEET 1 OF 1	

**B.O.M.**

S. No.	MATERIAL	DENSITY (Kg/m <sup>3</sup> )	THK (mm)	Qty. for Station (m <sup>2</sup> )
1	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	150	40	513.55
			50	3603.25
			60	18255.65
			75	40001.45
2	Bonded mineral (Rock) wool mattresses with ONE side SS wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm SS wire	150	75	15150.20
3	Bonded mineral (Rock) wool mattresses with ONE side GI wire netting of 13 mm x 0.71 mm size stitched with 0.4 mm GI wire	100	25	2302.25
			40	9082.64
			50	12231.90
			60	18004.69
			75	22217.40

**Note: -**

- The above-mentioned B.O.M is for 3 Units only.

# STANDARD TECHNICAL DATA SHEET FOR LIGHT RESIN BONDED MINERAL (ROCK) WOOL MATTRESSES

**PROJECT: 5x800MW YADADRI TPS**

**QP NO:PE-QP-417-169-M031A**

**SPECIFICATION NO: PE-TS-417-169-M032**

S. No.	CHARACTERISTICS	ACCEPTANCE/PERMISSIBLE LIMIT		
1	MATERIAL	LRB Rock wool mattresses confirming to IS:8183/Latest.		
2	Bulk Density	100 Kg/m <sup>3</sup> & 150 Kg/m <sup>3</sup> with (+)15% & (-)5% tolerance.		
3	Mattresses Size	1640mm x 1220mm/1520mm x 1220mm		
4	Thickness	25,40,50,60,75mm (Thickness values as per BOM) Tolerance on thickness shall be +6mm/-2mm.		
5	Service Temperature	Up to 400 <sup>o</sup> C - 100 Kg/m <sup>3</sup> Above 400 <sup>o</sup> C - 150 Kg/m <sup>3</sup>		
6	Thermal Conductivity as per IS 8183/93 (Group 3/Group 4)	Mean Temp.	<b>100 Kg/m<sup>3</sup> (Group 3)</b> K value in mW/cm.°C (Max)	<b>150 Kg/m<sup>3</sup> (Group 4)</b> K value in mW/cm.°C (Max)
		100° C	0.52	0.52
		200° C	0.73	0.68
		300° C	0.95	0.93
7	Chloride content	0.01 % max.		
8	Shot content	Shot shall not exceed 5% maximum by weight.		
		Shot shall not be greater than 5mm in any dimension.		
9	Sulphur content	0.6% max		
10	Moisture Content (Weight gain by moisture absorption)	2 % max		
11	Incombustibility Test (loss of weight after test)	5% max		
12	Resistance to vibration	1 % max		
13	Resistance to jolting	3 % max		
14	Alkalinity	7-10 pH		
15	Recovery After Compression	90% minimum after compression to 75% of the original Thickness.		
16	Fibre Diameter	7.0 Micron max.		
17	SS wire netting (above 400 deg.C)	As per IS:6528 & 3150, Aperture 13mm & Wire Dia 0.71mm.( Wire Dia and single side/ Both sides wire netting as per BOM).		
18	SS Tieing/Stitching wire (above 400 deg.C)	Wire Dia 0.40mm As per IS:6528.		
19	GI wire netting (up to 400 deg.C)	As per IS:280 & 3150, Aperture 13mm & Dia 0.71mm.( Wire Dia and single side/ Both sides wire netting as per BOM).		
20	GI Tieing/Stitching wire (up to 400 deg.C)	Wire dia 0.40mm As per IS:280.		
21	Packing, Marking & other requirement	Stack of mattresses shall be packed in unfolded condition and sealed in polythene bags of at least 0.2mm thickness. Then the sealed bags shall be put inside the polythene lined HDPE or HDPP Woven netting bags and sealed by machine stitching. Packing to be duly marked with a caution note "Always store under covered shed and on raised platforms". For marking and other details Technical specification is to be referred.		
<b>BIDDER/SUPPLIER</b>		<b>BHEL</b>		



**Bharat Heavy Electricals Limited**  
(A Govt. Of India Undertaking)  
**PROJECT ENGINEERING MANAGEMENT**

**THERMAL INSUALTION-LRB (ROCKWOOL) MATTRESS/PIPESECTION OF FRAMEWORK**  
**AGREEMENT FOR 5X800MW YADADRI**

**Price Variation Clause:**

Ex-works prices shall be variable as per PVC formula given below:

$$\text{Current Price} = \text{Order Price} * (0.15+0.4*M1/M0 +0.15*F1/F0 +0.05*S1/S0+0.25 * L1/L0)$$

Where

**M0** = INDICES AS PER RBI BULLETIN TABLE 21 SL NO.: 1.3.13.2 (REFRACTORY PRODUCTS) FOR MONTH OF ORDERING.

**M1** = INDICES AS PER RBI BULLETIN TABLE 21 SL NO.: 1.3.13.2 (REFRACTORY PRODUCTS) FOR 1 MONTH PRIOR TO DESPATCH.

**F0** = INDICES AS PER RBI BULLETIN TABLE 21 SL NO.: 1.2 (FUEL & POWER) FOR MONTH OF ORDERING.

**F1** = INDICES AS PER RBI BULLETIN TABLE 21 SL NO.: 1.2 (FUEL & POWER) FOR 1 MONTH PRIOR TO DESPATCH

**S0** = INDICES AS PER RBI BULLETIN TABLE 21 SL NO.: 1.3.14.4 – (MILD STEEL-LONG PRODUCTS) FOR MONTH OF ORDERING.


**S1** = INDICES AS PER RBI BULLETIN TABLE 21 SL NO.: 1.3.14.4 – (MILD STEEL-LONG PRODUCTS) FOR 1 MONTH PRIOR TO DESPATCH

**L0** = INDICES AS PER RBI BULLETIN TABLE 19 (CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS) FOR MONTH OF ORDERING.

**L1** = INDICES AS PER RBI BULLETIN TABLE 19 (CONSUMER PRICE INDEX FOR INDUSTRIAL WORKERS) FOR 1 MONTH PRIOR TO DESPATCH

**Total PVC shall be limited to ± 10% of Ex-Works Value.**





**Note:** RBI Indices considered for refractory, Fuel &Power, Mild steel are as per base year 2011-12 and for Industrial worker as per base year 2016 of RBI Bulletin. The above PV Clause is subject to change based on latest RBI Bulletin.

	<b>Vendor Name &amp; Address</b>		<b>QUALITY PLAN</b>					SPEC. NO: PE-TS-417-169-M032		DATE: 11.07.2023	
			CUSTOMER: TELENGANA STATE POWER GENERATION CORPORATION LTD.					QP NO.: PE-QP-417-169-M031A		DATE: 11.07.2023	
			PROJECT: 5x800MW YADADRI TPS – STAGE II					PO NO.:		DATE:	
			ITEM: THERMAL INSULATION – RESIN BONDED MINERAL (ROCK) WOOL MATTRESSES					SECTION: II		SHEET 1 OF 3	
SL NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD		AGENCY	REMARKS
1	2	3	4	5	6		7	8	9	*	10
					M	C/N				D	


1.0 MATERIAL														
1.1	CHEMICAL COMPOSITION (RAW MATERIAL)	CHEMICAL PROPERTIES	MA	CHEMICAL	ONE SAMPLE PER LOT	ONE SAMPLE PER LOT	MANUFACTURER STANDARD	MANUFACTURER STANDARD	TC	√	P	V	V	
1.2	GS WIRE	1.DIMENSIONS	MA	MEASUREMEN T	IS 3150 Appendix A	IS 3150 Appendix A	IS 3150	IS 3150/ BHEL/CUSTOMER APPROVED DATA SHEET	IR	√	P	W #	V	#Witness shall be carried out at the stage of Clause 3.1.
		2.GAUGE DIAMETER	MA	MEASUREMEN T			IS 280	IS 280/ BHEL/CUSTOMER APPROVED DATA SHEET	IR	√	P	W #	V	
		3. CHEMICAL	MA	LAB. TEST			IS 280	IS 7887	TC	√	P	V	V	
		4. COATING TEST	MA	LAB. TEST			IS 280	IS 4826	TC	√	P	V	V	
		5. TENSILE TEST	MA	LAB. TEST			IS 280	IS 280	TC	√	P	V	V	
		6. WRAPPING TEST	MA	LAB. TEST			IS 280	IS 280	TC	√	P	V	V	
		7. BEND TEST	MA	LAB. TEST			IS 280	IS 280	TC	√	P	V	V	
1.3	SS WIRE	1.DIMENSIONS	MA	MEASUREMEN T	IS 6528	IS6528	IS 3150	IS 3150/ BHEL/CUSTOMER APPROVED DATA SHEET	IR	√	P	W #	V	#Witness shall be carried out at the stage of Clause 3.1.
		2.GAUGE DIAMETER	MA	MEASUREMEN T	IS 3150	IS 3150	IS 6528	IS 6528/ BHEL/CUSTOMER APPROVED DATA SHEET	IR	√	P	W #	V	
		3.CHEMICAL ANALYSIS	MA	LAB. TEST	IS 6528	IS 6528	IS 6528	IS 6528	TC	√	P	V	V	
		4.TENSILE TEST	MA	LAB. TEST	IS 6528	IS6528	IS 6528	IS 6528	TC	√	P	V	V	
		5. REVERSE BEND TEST	MA	LAB. TEST	IS 6528	IS6528	IS 6528	IS 6528	TC	√	P	V	V	
		6. WRAPPING TEST	MA	LAB. TEST	IS 6528	IS6528	IS 6528	IS 6528	TC	√	P	V	V	
		7. TORSION TEST	MA	LAB. TEST	IS 6528	IS6528	IS 6528	IS 6528	TC	√	P	V	V	

2.0 IN-PROCESS INSPECTION														
2.1	FINISHED MATTRESS	DIMENSION & TOLERANCE	MA	MEASUREMEN T	IS 8183	IS 8183	IS 3144	IS 8183/ BHEL/CUSTOMER APPROVED DATA SHEET	TC	√	P	V	V	

BIDDER/SUPPLIER	
Sign & Date	
Seal	

BHEL					
ENGINEERING			QUALITY		
	Sign & Date	Name		Sign & Date	Name
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Reviewed by:	 KULDEEP KUMAR	Kuldeep Kumar	Reviewed by:	 HARISH KUMAR	Harish Kumar


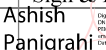


FOR CUSTOMER REVIEW & APPROVAL			
Doc No:			
	Sign & Date	Name	Seal
Reviewed by:			
Approved by:			

	<b>Vendor Name &amp; Address</b>		<b>QUALITY PLAN</b>					SPEC. NO: PE-TS-417-169-M032	DATE: 11.07.2023				
			CUSTOMER: TELENGANA STATE POWER GENERATION CORPORATION LTD.					QP NO.: PE-QP-417-169-M031A		DATE: 11.07.2023			
			PROJECT: 5x800MW YADADRI TPS – STAGE II					PO NO.:		DATE:			
			ITEM: THERMAL INSULATION – RESIN BONDED MINERAL (ROCK) WOOL MATTRESSES					SECTION: II		SHEET 2 OF 3			
SL NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS	
1	2	3	4	5	6		7	8	9	*	**		10
					M	C/N			D		M	C	N


**3.0 FINAL INSPECTION**

3.1	BONDED MINERAL (ROCK) WOOL MATTRESSES (FINISHED PRODUCT)	1. DIMENSIONS	MA	MEASUREMENT	IS 8183	IS 8183	IS 3144	IS 8183/ BHEL/CUSTOMER APPROVED DATA SHEET	IR	√	P	W	V	
		2. APPEARANCE	MA	VISUAL	IS 8183	IS 8183	IS 3144	SHALL BE FREE FROM VOIDS, CRACKS	IR					
		3. BULK DENSITY	MA	LAB. TEST	IS 8183	IS 8183	IS 3144	IS 8183/ BHEL/CUSTOMER APPROVED DATA SHEET	TC	√	P	W	V	Routine tests
		4. SHOT CONTENT	MA	LAB. TEST	IS 8183	IS 8183	IS 3144		TC	√	P	W	V	
		5. SULPHUR CONTENT	MA	LAB. TEST	IS 8183	IS 8183	IS 3144		TC	√	P	W	V	
		6. ALKALINITY	MA	LAB. TEST	IS 8183	IS 8183	IS 8183		TC	√	P	W	V	
		7. CHLORIDE CONTENT	MA	LAB. TEST	IS 8183	IS 8183	IS 3144		TC	√	P	W	V	
		8. MOISTURE CONTENT	MA	LAB. TEST	IS 8183	IS 8183	IS 3144	TC	√	P	W	V		
		9. THERMAL CONDUCTIVITY (K VALUE)	CR	LAB. TEST	IS 8183	IS 8183	IS 3346	IS 8183/ BHEL/CUSTOMER APPROVED DATA SHEET	TC	√	P	W	V	Type test REFER NOTES 4 & 5
		10. HEAT RESISTANCE	MA	LAB. TEST	IS 8183	IS 8183	IS 3144	IS 8183/ BHEL/CUSTOMER APPROVED DATA SHEET	TC	√	P	W	V	Type tests REFER NOTE 6
		11. MOISTURE ABSORPTION	MA	LAB. TEST	IS 8183	IS 8183	IS 3144		TC	√	P	W	V	
		12. RECOVERY AFTER COMPRESSION	MA	LAB. TEST	IS 8183	IS 8183	IS 8183		TC	√	P	W	V	
		13. INCOMBUSTIBILITY	MA	LAB. TEST	IS 8183	IS 8183	IS 3144		TC	√	P	W	V	
		14. RESISTANCE TO VIBRATION	MA	LAB. TEST	IS 8183	IS 8183	IS 3144		TC	√	P	W	V	
		15. RESISTANCE TO JOLTING	MA	LAB. TEST	IS 8183	IS 8183	IS 3144		TC	√	P	W	V	
		16. FIBRE DIAMETER	MA	LAB. TEST	One for each density	One for each density	IS 3144	TC	√	P	W	V		
3.2	PACKING & MARKING	PACKING TYPE AND IDENTIFICATION MARKING	MA	VISUAL	RANDOM	RANDOM	BHEL/CUSTOMER APPROVED DATA SHEET/PACKING PROCEDURE	BHEL/CUSTOMER APPROVED DATA SHEET/ PACKING PROCEDURE	SOFT COPY OF PHOTO GRAPH	√	P	W	-	REFER NOTE 2

BIDDER/SUPPLIER	
Sign & Date	
Seal	

BHEL					
ENGINEERING			QUALITY		
	Sign & Date	Name		Sign & Date	Name
Checked by:	 DEEPAK 2023.07.11 10:15:15 +05'30'	Deepak	Checked by:	 Ashish Panigrahi	Ashish Panigrahi
Reviewed by:	 KULDEEP KUMAR	Kuldeep Kumar	Reviewed by:	 HARISH KUMAR	Harish Kumar

FOR CUSTOMER REVIEW & APPROVAL			
Doc No:			
	Sign & Date	Name	Seal
Reviewed by:			
Approved by:			

	<b>Vendor Name &amp; Address</b>		<b>QUALITY PLAN</b>					SPEC. NO: PE-TS-417-169-M032		DATE: 11.07.2023	
			CUSTOMER: TELENGANA STATE POWER GENERATION CORPORATION LTD.					QP NO.: PE-QP-417-169-M031A		DATE: 11.07.2023	
			PROJECT: 5x800MW YADADRI TPS – STAGE II					PO NO.:		DATE:	
			ITEM: THERMAL INSULATION – RESIN BONDED MINERAL (ROCK) WOOL MATTRESSES					SECTION: II		SHEET 3 OF 3	
SL NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY	REMARKS	
1	2	3	4	5	6		8	9	*	10	
					M	C/N					D





**NOTES:**

- In case of foreign supplier, all test certificates shall be furnished by the supplier, duly witnessed/verified by supplier's TPI.
- Following to be noted for packing:
  - Material shall be packed suitably in order to avoid damage during transit and also during storage at site in tropical climate conditions for a period of 15-18 months.
  - Photographs of the packing (with LR No.) as per approved packing procedure (if applicable) just before dispatch.
- BHEL reserves the right for conducting repeat test, if required.
- If 'K' Value test has been conducted against any BHEL order, on samples collected within twelve (12) months prior to the date of present inspection, the related test results may be provided. Otherwise, the tests will be carried out on samples identified and sealed by Customer/BHEL authorized representative and related test results to be provided. The tests will be carried out at govt. approved labs or test houses (at CBRI - Roorkee, IIT - Chennai or PIBCO R & D Centre, N. Delhi, NIRMA University, Ahmedabad) recognized by reputed customers. 'K' Value test will be carried out for at least three mean temperatures i.e. 100 °C, 200 °C & 300 °C for each density.
- Thermal conductivity type test reports shall be submitted to BHEL Engineering for review and approval.
- Type tests (except thermal conductivity) shall be done once in 3 months in the presence of BHEL/BHEL AIA.
- The latest revisions/year of issue of all the IS indicated in the QP shall be referred.


**LEGENDS:**

- \*D: Records, identified with "Tick"(√) shall be essentially included by supplier in QA Documentation.
- \*\* M: Supplier/ Manufacturer/ Sub-Supplier
- P: Perform
- MA: Major Characteristic
- IR: Inspection Report
- C: Main Supplier/BHEL/ Third Party Inspection agency
- W: Witness
- MI: Minor Characteristic
- TC: Test Certificate
- N: Customer
- V: Verification
- CR: Critical Characteristic

BIDDER/SUPPLIER	
Sign & Date	
Seal	

BHEL					
ENGINEERING			QUALITY		
	Sign & Date	Name		Sign & Date	Name
Checked by:	 DEEPAK 2023.07.11 10:15:26 +05'30'	Deepak	Checked by:	 Ashish Panigrahi	Ashish Panigrahi
Reviewed by:	 KULDEEP KUMAR	Kuldeep Kumar	Reviewed by:	 HARISH KUMAR	Harish Kumar

FOR CUSTOMER REVIEW & APPROVAL			
Doc No:			
	Sign & Date	Name	Seal
Reviewed by:			
Approved by:			

	<b>COMPLIANCE SHEET</b> <b>BONDED MINERAL (ROCK) WOOL</b> <b>MATTRESSES</b> <b>FOR</b> <b>5x800MW YADADRI TPS</b>	SPECIFICATION NO. PE-TS-417-100-M032	
		SECTION : II	
		REV. NO.: 00	DATE: 24.07.2023
		Sheet 1 of 1	

**I hereby comply/not comply (\*) to all the requirements of this technical specification in totality.**

**\* In case the bidder does not comply to the technical specification, the deviations shall be explicitly listed in the technical deviation sheet of GCC. Deviations listed in technical deviation sheet shall only be considered.**

**Name of Bidder / Authorized Representative: -** -----

**Designation: -** -----

**Signature: -** -----

**Company Seal: -** -----

**Date :-** -----

PARTICULARS OF BIDDER / AUTHORISED REPRESENTATIVE				
NAME	DESIGNATION	SIGNATURE	DATE	COMPANY SEAL

Project: - 5 X 800 MW YADADRI TPS

Package: - THERMAL INSULATION - R-MATTRESSES/P-SECN

GeM BID No....., Dtd.....

## INTEGRITY PACT – Annexure - B

### **ANNEXURE– VIII**

### **INTEGRITY PACT**

#### **Between**

Bharat Heavy Electricals Ltd. (BHEL), a company registered under the Companies Act 1956 and having its registered office at "BHEL House", Siri Fort, New Delhi – 110049 (India) hereinafter referred to as "The Principal", which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the ONE PART

#### **and**

\_\_\_\_\_, (description of the party along with address), hereinafter referred to as "The Bidder/ Contractor" which expression unless repugnant to the context or meaning hereof shall include its successors or assigns of the OTHER PART

#### **Preamble**

The Principal intends to award, under laid-down organizational procedures, contract/s for

\_\_\_\_\_. The Principal values full compliance with all relevant laws of the land, rules and regulations, and the principles of economic use of resources, and of fairness and transparency in its relations with its Bidder(s)/ Contractor(s).

In order to achieve these goals, the Principal will appoint Independent External Monitor(s), 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**

1.1 The Principal commits itself to take all measures necessary to prevent corruption and to observe the following principles: -

1.1.1 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.

1.1.2 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.

1.1.3 The Principal will exclude from the process all known prejudiced persons.

1.2 If the Principal obtains information on the conduct of any of its employees which is a penal offence under the Indian Penal Code 1860 and Prevention of Corruption Act 1988 or any other statutory penal enactment, or if there be a substantive suspicion in this regard, the Principal will inform its Vigilance Office and in addition can initiate disciplinary actions.

#### **Section 2 – Commitments of the Bidder(s)/ Contractor(s)**

2.1 The Bidder(s)/ Contractor(s) commit himself to take all measures necessary to prevent corruption. He commits

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himself to observe the following principles during his participation in the tender process and during the contract execution.

2.1.1 The Bidder(s)/ Contractor(s) will not, directly or through any other person or firm, offer, promise or give to the Principal or 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, immaterial or any 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.

2.1.2 The Bidder(s)/ Contractor(s) will not enter with other Bidder(s) into any illegal or 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.

2.1.3 The Bidder(s)/ Contractor(s) will not commit any penal 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.

2.1.4 Foreign Bidder(s)/ Contractor(s) shall disclose the name and address of agents and representatives in India and Indian Bidder(s)/ Contractor(s) to disclose their foreign principals or associates. The Bidder(s)/ Contractor(s) will, when presenting his bid, disclose any and all payments he has made, and is committed to or intends to make to agents, brokers or any other intermediaries in connection with the award of the contract.

2.2 The Bidder(s)/ Contractor(s) will not instigate third persons to commit offences outlined above or be an accessory to such offences.

2.3 The Bidder(s)/ Contractor(s) shall not approach the Courts while representing the matters to IEMs and will await their decision in the matter.

### **Section 3 – Disqualification from tender process & 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 acts in any other manner such as to put his reliability or credibility in question, the Principal is entitled to disqualify the Bidder(s)/ Contractor(s) from the tender process or take action as per the separate "Guidelines on Banning of Business dealings with Suppliers/ Contractors". framed by the Principal.

### **Section 4 – Compensation for Damages**

4.1 If the Principal has disqualified the Bidder from the tender process prior to the award according to Section 3, the Principal is entitled to demand and recover the damages equivalent Earnest Money Deposit/Bid Security.

4.2 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 equivalent to 5% of the contract value or the amount equivalent to Security Deposit/Performance Bank Guarantee, whichever is higher.

### **Section 5 – Previous Transgression**

5.1 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.

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5.2 If the Bidder makes incorrect statement on this subject, he can be disqualified from the tender process or the contract, if already awarded, can be terminated for such reason.

**Section 6 – Equal treatment of all Bidders/ Contractors/ Sub-contractors**

6.1 The Principal will enter into agreements with identical conditions as this one with all Bidders and Contractors. In case of sub-contracting, the Principal contractor shall be responsible for the adoption of IP by his sub-contractors and shall continue to remain

responsible for any default by his sub-contractors.

6.2 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 Bidders / Contractors / Sub-contractors**

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 Vigilance Office.

**Section 8 –Independent External Monitor(s)**

8.1 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.

8.2 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, BHEL.

8.3 The Bidder(s)/ Contractor(s) accepts that the Monitor has the right to access without restriction to all contract documentation of the Principal including that provided by the Bidder(s)/ Contractor(s). The Bidder(s)/ Contractor(s) will grant the monitor, upon his request and demonstration of a valid interest, unrestricted and unconditional access to his contract documentation. The same is applicable to Sub-contractor(s). The Monitor is under contractual obligation to treat the information and documents of the Bidder(s)/ Contractor(s) / Sub-contractor(s) with confidentiality in line with Non-disclosure agreement.

8.4 The Principal will provide to the Monitor sufficient information about all meetings among the parties related to the contract 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.

8.5 The role of IEMs is advisory, would not be legally binding and it is restricted to resolving issues raised by an intending bidder regarding any aspect of the tender which allegedly restricts competition or bias towards some bidders. At the same time, it must be understood that IEMs are not consultants to the Management. Their role is independent in nature and the advice once tendered would not be subject to review at the request of the organization.

8.6 For ensuring the desired transparency and objectivity in dealing with the complaints arising out of any tendering process, the matter should be examined by the full panel of IEMs jointly as far as possible, who would look into the records, conduct an investigation, and submit their joint recommendations to the Management.

8.7 The IEMs would examine all complaints received by them and give their recommendations/ views to CMD, BHEL, at the earliest. They may also send their report directly to the CVO and the Commission, in case of suspicion of serious

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irregularities requiring legal/ administrative action. IEMs will tender their advice on the complaints within 10 days as far as possible.

8.8 The CMD, BHEL shall decide the compensation to be paid to the Monitor and its terms and conditions.

8.9 IEM should examine the process integrity, they are not expected to concern themselves with fixing of responsibility of officers. Complaints alleging mala fide on the part of any officer of the organization should be looked into by the CVO of the concerned organization.

8.10 If the Monitor has reported to the CMD, BHEL, a substantiated suspicion of an offence under relevant Indian Penal Code/ Prevention of Corruption Act, and the CMD, BHEL has not, within reasonable time, taken visible action to proceed against such offence or reported it to the Vigilance Office, the Monitor may also transmit this information directly to the Central Vigilance Commissioner, Government of India.

8.11 The number of Independent External Monitor(s) shall be decided by the CMD, BHEL.

8.12 The word 'Monitor' would include both singular and plural.

**Section 9 – Pact Duration**

9.1 This Pact shall be operative from the date IP is signed by both the parties till the final completion of contract for successful bidder and for all other bidders 6 months after the contract has been awarded. Issues like warranty/ guarantee etc. should be outside the purview of IEMs.

9.2 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 as above, unless it is discharged/ determined by the CMD, BHEL.

**Section 10 – Other Provisions**

10.1 This agreement is subject to Indian Laws and jurisdiction shall be registered office of the Principal, i.e. New Delhi.

10.2 Changes and supplements as well as termination notices need to be made in writing. Side agreements have not been made.

10.3 If the Contractor is a partnership or a consortium, this agreement must be signed by all partners or consortium members.

10.4 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.

10.5 Only those bidders/ contractors who have entered into this agreement with the Principal would be competent to participate in the bidding. In other words, entering into this agreement would be a preliminary qualification.

\_\_\_\_\_  
For & On behalf of the Principal  
(Office Seal)

\_\_\_\_\_  
For & On behalf of the Bidder/ Contractor  
(Office Seal)

Place: \_\_\_\_\_

Date: \_\_\_\_\_

Witness: \_\_\_\_\_  
(Name & Address) \_\_\_\_\_

Witness: \_\_\_\_\_  
(Name & Address) \_\_\_\_\_