



BHARAT HEAVY ELECTRICALS LIMITED

BAP – Ranipet, 632406

M M – PURCHASE Department (FGD)

NIT

BHEL Ranipet Enq for.: NMEJ-NPGCL

Date: 04-12-2021

Sub: Requirement for “Supply and Supervision for installation of Non-Metallic Expansion Joint as per Scope” for NPGCL-Nabi Nagar by BHEL-Ranipet.

Scope of supply: As subjected above in confirmation with Quality plan. The package consists of:

| Enq sl no | BHEL Material code | Description | Unit | Qty | Delivery by |
|-----------|--------------------|---|------|-----|--|
| 1 | RFW112410001 | Supply of Non-Metallic Expansion Joint along with FRP Pipe & Acc for Horizontal Duct Size 5800mm x 11600 mm, FRP Pipe Length 5800 mm, Design Temp 90 deg C continuous | Set | 3 | Apr 2022-1 set Jul 2022-1 set Dec 2022-1 set |
| 2 | RFW112410002 | Supervision for installation & Commissioning of non metallic exp joint of S 1 NPGCL Nabi Nagarsite. | Set | 3 | Within 8 months after supply |

Destination: BHEL Site, NPGCL Nabi Nagar

Delivery required date: As per above scope of supply or within 3 months from the date of manufacturing clearance, whichever is later. Bidder to quote the best possible delivery from the date of manufacturing clearance. Abnormal quoted delivery, liable for rejection of offer. Supervision of E&C shall be within 12 months after the receipt and acceptance of material at site.

Pre-Qualification requirement (PQR):

1. Technical -

| SL | Pre-Qualification Requirement (PQR) | Bidder's Reply with Supportive documents |
|----|--|--|
| 1 | Vendor should be a manufacturer of Non Metallic expansion joints for Thermal power plant / FGD outlet duct in a flue gas path. Vendor to submit the relevant documentary evidence, as PO copy from the customer for previously supplied for experience and ISO/UDYAM certificate for manufacturer. | |
| 2 | Vendor should have successfully supplied the expansion joint of similar design in thermal power plant/ FGD duct/ similar application in flue gas path. Unpriced PO copies shall be submitted by vendor as a proof of experience | |

2. Financial soundness: Bidder should have minimum annual turnover of INR 7 lakhs (INR Seven Lakhs only). Bidder to submit the Audited balance sheet or/ and CA certified Profit and Loss account or ITR copy for previous three continuous years (Any one of: FY 2018-2021 or 2017-2020).

Technical requirement

- (a). **Manufacturing: Document Submission**-Drawing, Data sheet and quality plan shall be submitted upon ordering for approval by BHEL. **Manufacturing clearance** will be provided upon approval of drawing with data sheet and QAP. Manufacturing shall be as per attached technical specification in the bid, Approved drawing, Quality plan and Data sheet. **Inspection:** as per CI (b) below stated. **Dispatch Clearance:** Upon submission of inspection reports along with test certificates in original and Packing list dispatch clearance will be provided by BHEL.



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- (b). **Inspection:** Inspection (call to be raised by supplier at BHEL CQIR portal) before despatch at supplier's works (as per Quality terms and Quality plan) by BHEL/ authorised agency (TPI-Third Party Inspection) for indigenous supplies at BHEL cost. Inspection includes for painting and packing also, as applicable. All the Test and inspection reports shall be sent to BHEL-Ranipet for review and dispatch clearance. Packing list and weightment details shall be sent for release of GMS by Engineering-BAP. Based on release of GMS, CoC No shall be issued by QC-BHEL. On receipt of CoC, and packing list, request letter from commercial-BAP to be submitted to QC-BHEL for issue of MDCC.
- (c). **Packing requirement:** Packing shall be waterproof. All item shall be packed in steel container as per technical spec. and the material code with description & Supplier name shall be marked on the packing.
- (d). **Documents:** Accepted IR copy along with relevant test certificates (in original) before despatch to be given to BHEL. This is required for Dispatch clearance.
- (e). **Reverse Auction** shall be conducted, overall package wise L1 shall be taken for Ordering.
- (f). **Delivery Location:** FOR destination (BHEL Site, NTPC-Barh 1)

Note:

1. Quote shall be in INR only
2. Relevant documents/formats are attached in Additional scope of GeM bid.
3. Quoted rate shall be inclusive of GST, as per GeM terms and condition.
4. Non Submission of any of required documents as listed below, attracts for offer rejection.
5. Package wise evaluation methodology shall be adopted
6. Participation shall be treated as participant has accepted all the terms and conditions (technical and commercial) of tender.
7. Bidder shall not be enlisted in Suspension of business dealing with BHEL or Govt of India.

List of documents to be attached (signed stamped copy):

1. NIT and GeM bid copy
2. Tech spec filled in along with all annexures. Make sure to submit the required documents against the cl 15 of technical specification.
3. Filled in QAP (Sample attached) along with CQR/annexure Q
4. Filled-in Make in India declaration on Letter head (format attached)
5. Udyam portal registration copy if MSE bidder
6. PQR-Technical documents
7. PQR-Financial documents

For any query: Kindly provide the "NMEJ-NPGCL" in the subject of mail.

mail: ckbharti@bhel.in; vjm@bhel.in

Ph: 9488 58 9287 / 7010 75 1675

You may raise the query through GeM also.



Bharat Heavy Electricals Ltd
Boiler Auxiliaries Plant
Ranipet-632 406

FLUE GAS DESULPHURISATION DEPT
TECHNICAL SPECIFICATION

SPECIFICATION NO. ABR:DUCT:NMEJ

REV NO:02

PAGE NO 01 OF 03

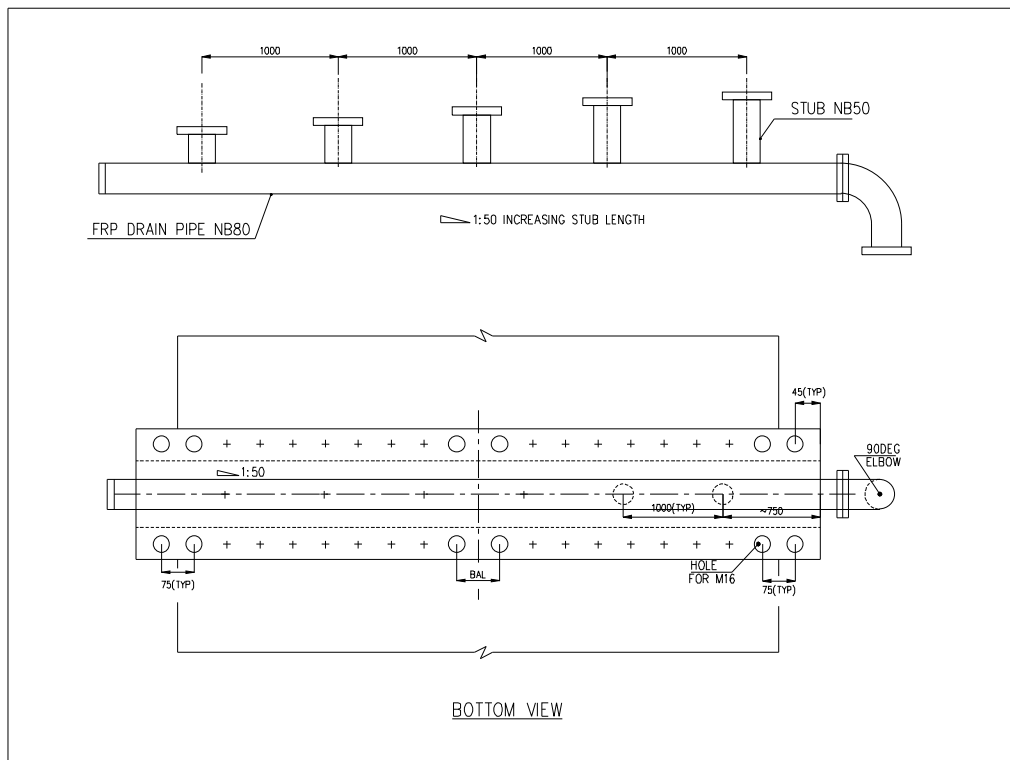
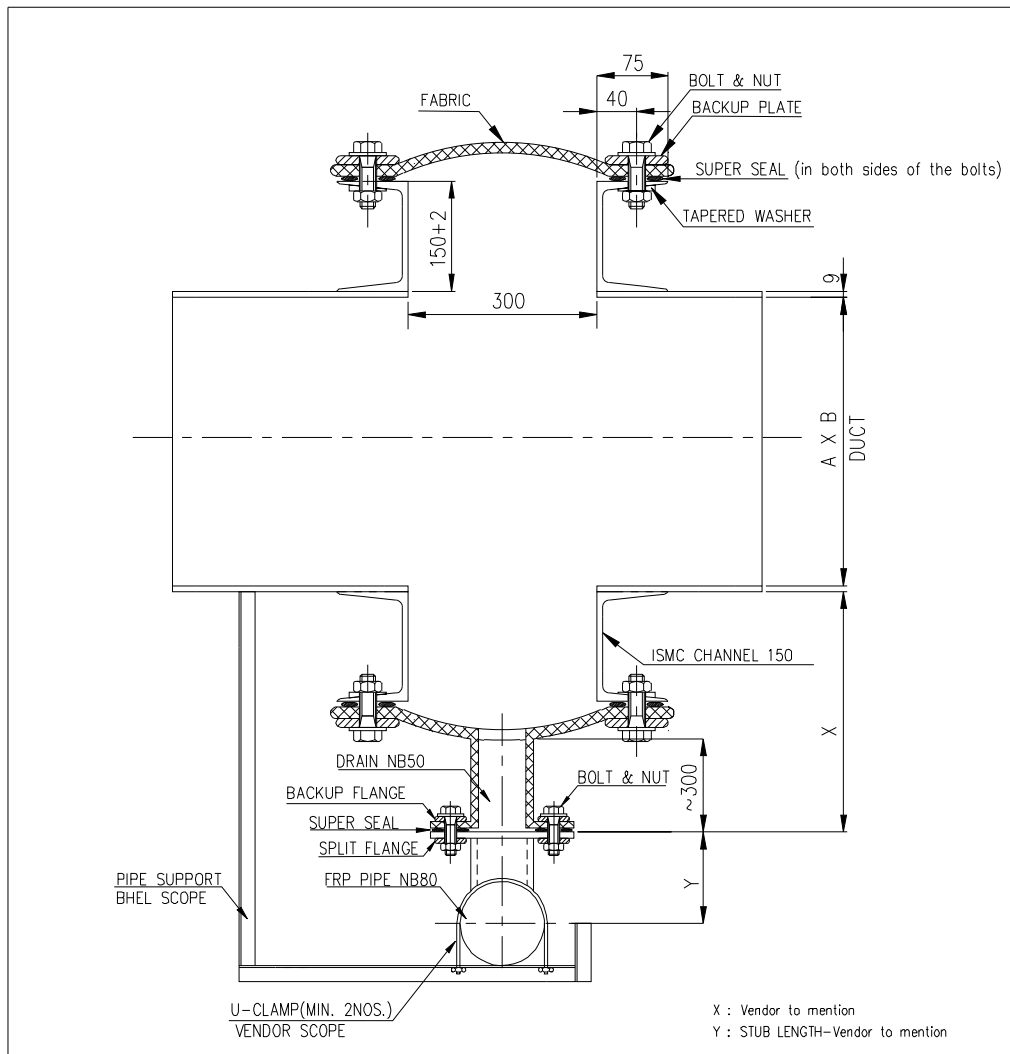
| S.no | Item | Neck Flange type Non-Metallic Expansion Joints | Vendor Acceptance/ Comments |
|------|---|---|-----------------------------|
| 1 | Scope of supply | (1) Fabric cloth, super seal gasket, back up plate & fasteners. (2) FRP pipe for horizontal ducts, super seal gasket, backup flange on the cloth side and split type backup flange on the FRP flange & fasteners with elbow and dummy flange. (3) Supervision of Installation of above two in the duct at site. | |
| 2 | Qualification Criteria | (i) Supplier should be a manufacturer of Non-Metallic Expansion Joints and relevant documents like ISO certificates/ MSME certificates/ Articles of Association/Factory registration certificate etc. shall be submitted by the vendor with offer. (ii) The vendor should have successfully supplied the expansion joints of similar design in thermal power plant/FGD outlet duct/similar application in a flue gas path. Unpriced PO copies shall be submitted by the vendor as proof of experience. | |
| 3 | Mounting type | Neck design as per enclosed sketch | |
| 4 | Location | Absorber to Chimney Duct (for carrying Flue Gas) | |
| 5 | Design Temperature | Refer enquiry/indent. Material of Fabric cloth & FRP drain pipe (as applicable) shall be suitable for the design temperature. | |
| 6 | Design/ working pressure | Design (-200, + 660)/ 200 mm water column | |
| 7 | Expansion | (i) Axial = ± 50 mm ; (ii) Lateral = ± 30 ; (iii) Angular = ± 2 deg | |
| 8 | Fabric | (a) PTFE coated glass fabric. (b) Minimum Tensile strength of fabric (in N/50mm) : 6000 (warp) & 6000 (weft). | |
| 9 | Backup – plate / Ring (GI) | a) On the back of Cloth- GI Backup Flat - Vendor scope. b) On the back of drain flange (cloth):- GI Back-up Flange - Vendor scope. c) On the Back of FRP Flange:- GI Split Flange – Vendor scope. | |
| 10 | Super seal (specification as per vendor's design) | a) In between cloth and duct flange. b) In between cloth and FRP pipe flange. | |
| 11 | FRP pipe (NB 80) details (Note: Applicable for Horz. Ducts only) | a) Length equal to width of duct (if supplied in two lengths/pieces- mounting flange, gasket and fasteners also to be provided for connection). One end with dummy flange other end with 90 deg elbow shall be provided. b) Stub length to be gradually increased to maintain 1:50 gradient for free flow of condensate. c) At the bottom of non-metallic expansion joints for every one meter drain hole shall be provided as per enclosed sketch. | |

| | | | | |
|-----|------------|--------------------|-------------|-----------------------|
| | | | | |
| 02 | 01-12-2021 | Clause #18 updated | Arun Kumar | V. Kesavan |
| 01 | 26-11-2021 | Revised Generally | Arun Kumar | V. Kesavan |
| 00 | 25-07-2021 | Fresh Release | Arun Kumar | V. Kesavan |
| REV | DATE | DESCRIPTION | Prepared by | Checked & Approved by |

Bidder's sign & seal

| | | | |
|----|--------------------------------------|---|--|
| 12 | Fasteners Bolts, nuts & Washers (GI) | a)M16x60 – (i) for mounting cloth with Duct frame - vendor scope. (ii)for mounting Drain flange(cloth) with FRP stub flange – vendor scope. b)M16x80 - For mounting two pieces of FRP pipe (if applicable), and at the end for mounting dummy and elbow – vendor scope. c)M12 U-clamps with nuts & washers – for fastening FRP pipe with support (minimum 2nos for each FRP drain pipe)- vendor scope. | |
| 13 | Galvanizing | All galvanized items should have minimum 40 micron coating thickness | |
| 14 | Guarantee | Vendor shall guarantee 20,000 hours of operation from the date of commissioning | |
| 15 | Documents to be submitted | a) Vendor to submit duly filled, sealed & signed all pages of the specification with confirmation to each point. b) Relevant documents for manufacturer & Unpriced PO copies of previously supplied Non-Metallic Expansion Joints shall be submitted by the vendor as proof of experience. c) Vendor to furnish fabric cloth data sheet with physical and mechanical property along with the offer. d) Deviations (if any) shall be submitted at enquiry stage itself. e) Vendor to provided Quality plan with the offer. | |
| 16 | Drawing Approval | Detailed GA drawing of Non-metallic expansion joints including mounting holes arrangement & bill of materials shall be submitted by vendor after placement of PO. Drawing approval from BHEL Ranipet to be obtained for Non-Metallic Expansion Joints after award of contract before manufacturing. | |
| 17 | Inspection at vendor works | a) Inspection by BHEL or its authorized agency b) Material Test Certificates shall be submitted during inspection. | |
| 18 | Tools required at site | During installation of expansion joints at site, vendor has to arrange all special tools (returnable) for mounting fabric into the duct and FRP connection (like punching tool and Hot sealing tool etc.). | |
| 19 | Installation | a) For installation of Non Metallic Expansion Joints & its accessories, vendor has to quote supervision charges on per set basis of Non-Metallic Expansion Joint. Cloth cutting, hot sealing & hole punching in cloth (if anywhere special skill is required) shall be performed by vendor and shall be considered in supervision itself. b) TA/DA, boarding and lodging shall be borne by the bidder and shall be inclusive in the offer. c) Payment of supervision charges shall be made on the basis of set of Non Metallic Expansion Joints installed at site based on site certification. d) After the erection of duct at the respective site, fixing of Expansion Joint into the duct shall be in BHEL scope under the supervision of Vendor's expert. | |
| 20 | Packing | Items shall be wrapped in a polythene hessian and the package shall be kept in a wooden box. FRP pipe shall be packed in rigid crates in such a way that during transportation / stacking at site, no external load should contact/damage the pipes. Drawing approval for packing shall be taken from BHEL before dispatch. | |
| 21 | Outside the box | PO number , vendor name, item, Site address, Quantity inside the box to be mentioned. | |
| 22 | General | a)FRP drain pipe not applicable for Expansion Joints in Vertical Duct. b)FRP drain pipe along with elbow & dummy flange are applicable for joint in horizontal Duct only. c) Duct Flange details/drawings will be provided during detail engineering. | |
| 23 | Drawing | Drawing attached (refer next page). Vendor to seal & sign as compliance. | |

Bidder's sign & seal



Bharat Heavy Electricals Limited
Ranipet-632406, India.
Quality Assurance(Mech)

NAB: FGD: NMEJ: 223

Dt. 05-08-2021


| PROJECT | INDENT NO | PGMA | TECHNICAL SPECIFICATION |
|----------------------|-----------|-------|----------------------------------|
| NABINAGAR (3X660 MW) | RFW11241 | FW252 | ABR:DUCT:NMEJ:R00, DT:25.07.2021 |

| |
|---|
| Item Name: NON METALLIC EXPANSION JOINT |
|---|


In continuation to Engineering clarification on repeat indents following are Quality recommendations.

1. All the items shall be inspected at Manufacturer works as per BHEL SQP/ Approved Drawing/Approved datasheet and Technical Specification.
2. Physical Inspection shall be done by BHEL/BHEL ATA at Manufacturer works.
3. BHEL Approved source is acceptable.
4. Arrange Vendor acceptance for BHEL SQP (QP NO. NMEJ: 739/01, DT: 13.02.2021) with their duly sign and seal.
5. NTPC latest approved QP if any for similar application available with vendor may be shared for faster approval of MQP on Vendor specific.
6. Packing of items shall be as per BHEL Engg Approved Packing Drawing/Technical Specifications.
7. BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO. The supplier shall inform BHEL in advance about the readiness of the goods for inspection and testing. Inspection / Inspection wavier / approval by BHEL does not absolve Supplier's responsibility for conformity of the specification as per the terms of PO. Material Test Certificates shall be submitted to BHEL.
8. Annexure 'Q' shall be part of enquiry File and shall be filled by Supplier with their duly sign and seal.
9. **General Inspection Notes:**
 - a. Latest version of standards & Specification shall be applied.
 - b. Materials shall be procured in compliance to Functional Technical specification.
 - c. Gauges and measuring instruments with valid calibration only shall be used.
 - d. Inspection / Inspection wavier / approval by BHEL does not absolve Supplier's responsibility for conformity of the specification as per the terms of PO.
 - e. BHEL /BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO.
 - f. In case of Vendor Drawing & Datasheet, it needs approval by BHEL Engineering.
 - g. This QP shall be read along with relevant PO, BHEL Specification / Approved Drawing/Datasheet.

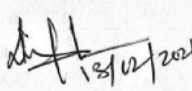
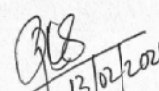
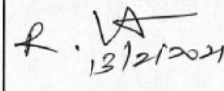
This is for your information and further necessary action at your end please.



Prepared by.
Rakesh Kr Madhu (Dy.Mgr/QA)


Reviewed & Approved by.
K Renjith(Mgr/QA)

|  | | MANUFACTURER'S NAME & ADDRESS | | STANDARD QUALITY PLAN | | | | PROJECT: AS PER PO. | | | | |
|---|-----------------------|--|----------------|---|------------------|--|---------------------|---------------------|------------------|--------|---------|----|
| | | CUSTOMER BHEL/ BHEL APPROVED SOURCE (AS PER PROJECT REQUIREMENT) | | ITEM: NON-METALLIC (Fabric) EXPANSION JOINT for FGD Applications. | | QP. NO.: NMEJ:739 Rev No.:01 Date: 13.02.2021 Page 1 of 2 | | | | | | |
| SL NO | COMPONENT & OPERATION | CHARACTERISTICS | CLASS OF CHECK | TYPE OF CHECK | QUANTUM OF CHECK | | REFERENCE DOCUMENTS | ACCEPTANCE NORMS | FORMAT OF RECORD | Agency | REMARKS | |
| 1 | 2 | 3 | 4 | 5 | M | C/N | 7 | 8 | 9 | D | 10 | 11 |

| 1.0 RAW MATERIAL | | | | | | | | | | | | | |
|--------------------------|---|---|-------|-----------------------------|---|---|------------------------------|--------------|---|---|---|---|---|
| 1.1 | Clamping Bar | Chemical Composition & Mech. Properties, Galvanizing | Major | Review of MTC Visual | Each Heat | Each Heat | Approved Drawing / Datasheet | MTC/ Lab. TC | √ | V | V | V | All galvanized item shall be minimum 40 micron thickness. |
| 2.0 INPROCESS INSPECTION | | | | | | | | | | | | | |
| 2.1 | Fabric Material: | Weight | Minor | Measure | One sample per Lot (Lot means item offered for inspection at a time) | Approved Drawing / Datasheet | Report | √ | P | V | V | Individual Layers | |
| 2.2 | | Thickness | Major | Measure | | Approved Drawing / Datasheet | Report | √ | P | V | V | | |
| 2.3 | Fabric(Glass) PTFE Foil | Tensile test (wrap & weft) | Major | Mechanical Test | | Approved Drawing / Datasheet | Report | √ | P | V | V | | |
| 2.4 | Silicon Coated glass Fabric | Pin Hole test | Major | Measure | | Approved Drawing / Datasheet | Report | √ | P | V | V | | For PTFE Foil |
| 2.5 | Texlam 1500 | Air Permeability | Major | Measure | | Approved Drawing / Datasheet | Report | √ | P | V | V | For coated & laminated fabrics | |
| 2.6 | | Joint efficiency test – Applicable in case of any joint | Major | Measure | | NTPC Approved Drawing / Datasheet/Manufacturer Standard | Report | √ | P | W | V | | |
| 3.0 FINAL INSPECTION | | | | | | | | | | | | | |
| 3.1 | Temp withstandability test for composite fabric for surge temp. | Test | Major | Measure | One sample per Lot | NTPC Approved Drawing / Datasheet/Manufacturer Standard | Report | √ | P | W | W | (Lot means item offered for inspection at a time) | |
| 3.2 | Flexibility test | Test | Major | Measure | One sample per Lot | NTPC Approved Drawing / Datasheet/Manufacturer Standard | Report | √ | P | W | W | | |

| | | | | |
|--------------------------|--|---|---|---|
| Manufacturer Sign & Seal | Legends: M – Manufacturer / Subcontractor, C – Main Contractor / BHEL /BHEL Authorized Inspection Agency, N – Customer / NTPC, P - perform, TC – Test Certificate V - Verification of reports, COC – Certificate of conformance - Witness, TC - Test certificate "D" – Record, identified with tick (√) shall be essentially included by Supplier in QA documentation. NMEJ- Non-Metallic Expansion Joint. | Prepared by  Rakesh Kr Madhu (Dy.Mgr/QA) | Reviewed by  K Renjith (Manager/QA) | Approved by  R Arunachalam (DGM/QA) |
|--------------------------|--|---|---|---|

|  MANUFACTURER'S NAME & ADDRESS Ranipet | | STANDARD QUALITY PLAN QP. NO.: NMEJ:739 Rev No.: 01 Date: 13.02.2021 Page 2 of 2 | | | | PROJECT: AS PER PO. | | | | |
|---|-----------------------|---|----------------|---------------|------------------|---------------------|------------------|------------------|--------|---------|
| CUSTOMER BHEL/ BHEL APPROVED SOURCE (AS PER PROJECT REQUIREMENT) | | ITEM: NON-METALLIC (Fabric) EXPANSION JOINT for FGD Applications. | | | | | | | | |
| SL NO | COMPONENT & OPERATION | CHARACTERISTICS | CLASS OF CHECK | TYPE OF CHECK | QUANTUM OF CHECK | REFERENCE DOCUMENTS | ACCEPTANCE NORMS | FORMAT OF RECORD | Agency | REMARKS |
| 1 | 2 | 3 | 4 | 5 | M C/N | 7 | 8 | 9 D | 10 | 11 |

| | | | | | | | | | | | | | |
|-----|-------------------|--------------------|-------|----------------------|------|------|---|--------|---|---|---|---|--|
| 3.3 | Expansion Joints. | Dimension & Finish | Major | Visual & Dimensional | 100% | 100% | As per Approved Drawing / Specification/Datasheet | Report | √ | P | W | W | |
| 3.4 | Packing. | Visual | Minor | Verification | 100% | 100% | As per P.O Drawing/Specification | COC | √ | P | V | - | |

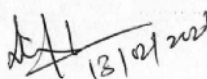
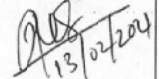
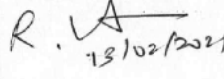
@@ In case of Project / Customer specific requirements, inspection stage / type of check / Quantum of check may change.

Notes:

1. Latest version of standards & Specification shall be applied.
2. All the critical Dimensions shall be checked for dimensional conformity.
3. Materials shall be procured in compliance to Functional Technical Specification.
4. Gauges and measuring instruments with valid calibration only shall be used.
5. Inspection / Inspection waiver / approval by BHEL does not absolve Supplier's responsibility for conformity of the specification as per the terms of PO.
6. BHEL /BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO.
7. This QP is applicable for Mandatory spare also as applicable.
8. This QP shall be read along with relevant PO, Approved drawing/Specification/Approved datasheet as applicable.
9. Loose Items/Items minor in nature, which are not covered under this QP.Manufacture COC/TC Shall, be reviewed by Inspection agency.

Record of revision

| Rev no | Date | Description |
|--------|------------|-------------------------------------|
| 00 | 07.03.2020 | Original Issue (First Submission) |
| 01 | 13.02.2021 | Based on Customer requirement |

| | | | | |
|--------------------------|---|--|---|---|
| Manufacturer Sign & Seal | Legends: M – Manufacturer / Subcontractor, C – Main Contractor / BHEL /BHEL Authorized Inspection Agency, N – Customer / NTPC, P - perform, TC – Test Certificate V - Verification of reports, COC – Certificate of conformance - Witness, TC - Test certificate "D" – Record, identified with tick (√) shall be essentially included by Supplier in QA documentation. NMEJ- Non-Metallic Expansion Joint. | Prepared by  13/02/2021 | Reviewed by  13/02/2021 | Approved by  13/02/2021 |
| | | Rakesh Kr Madhu (Dy.Mgr/QA) | K Renjith (Manager/QA) | R Arunachalam (DGM/QA) |

| Annexure Q | | |
|------------|--|--|
| | Indent No: | Enquiry no: |
| Sl.No | BHEL / Customer Requirements | ##Specific confirmations by the manufacture(Acceptable/Not acceptable) |
| 1 | Quality Plan Requirement: (If SQP is not given & Vendor QP applicable) | |
| | (i) MQP (Manufacturing Quality Plan) shall be submitted in attached format for BHEL/Customer review & approval. Our SQP/Typical MQP/ MQP Format is attached for guidance & use. | |
| | (ii) MQP shall invariably cover w.r.t Inward inspection including on Raw material Procurement, In process and Final inspection in elaborated way/details. | |
| | (iii) Bidder shall also give specific confirmation that on need basis, their competent officials shall visit to BHEL/customer for finalization of Quality plan including test procedure/methodology during preaward / post award approval / detailed engineering in the event of an order. | |
| | (iv) No deviation on BHEL/Customer approved MQP/ SQP (In case BHEL SQP is provided) is acceptable. | |
| | (v) Bidder shall agree to submit all cross referred documents other than codes/standards to BHEL/Customer/Consultant. | |
| | Important Notes shall be included in MQP : (a) Latest revision of Standards & Specification shall apply. Only International Standards are applicable. (b) Materials shall be procured in compliance to Functional Technical Specification. (c) Inspection shall be in compliance with Approved Quality Control Procedure for the Product. (d) NDT shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME Section V. (e) Gauges and measuring Instruments, with valid calibration only shall be used. (f) Cleaning and Painting of products shall be carried out as per Approved Painting Schedule. (g) Finished Products shall be packed to comply with Approved Packing Schedule. (h) Welding shall be carried out by Qualified Personnel with compliance to Approved NDT Procedures and Acceptance Norms, as per ASME Section V. | |
| 2 | Domestic / Inland Inspection will be carried out by BHEL/BHEL appointed Third Party Inspection Agency (TPIA) / Customer/Customer Appointed Inspection Agency/Consultant. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentation Diagram / Process Flow Diagram / Single Line Diagram) etc (As applicable). | |
| 3 | Inspection Agency for Foreign Bidders and also for Indian Bidder but importing from Foreign Sources: (1) Any one of the following Third Party Inspection Agency (TPIA) shall be appointed by the bidder and same shall be furnished by the bidder in techno commercial bid itself. (2) The details of TPIA with contact details like Name of the official, Phone no, Email id shall also be submitted during pre/post award. However cost for such inspection agency shall be borne by the bidder only. Inspection charges for such inspection agency shall be indicated separately so that if BHEL/Customer is undertaking the inspection by on their own, then these charges non claimable by the bidder. List of TPIA 1.M/s Bureau Veritas 2.M/s TUV-Nord 3.M/s TUV-SUD 4.M/s TUV Rheinland 5.M/s Lloyds Register 6.M/s SGS 7.M/s Germanischer Lloyd 8.M/s QUEST 9.M/s Certification Engineers International 10.M/s Intertek 11.M/s IR Class Systems and Solutions 12.M/s DNV 13. M/s Fichtner 14. M/s ABS Inspection Services | |

| Sl.No | BHEL / Customer Requirements | ##Specific confirmations by the manufacture(Acceptable/Not acceptable) |
|------------------------|--|--|
| 4 | Stage Inspection during manufacturing Process : Stage Inspection during manufacturing shall be carried out as per approved quality plan and all necessary documents shall be provided for review, verification and clearance for further processing. This inspection call shall be given well in advance (atleast 2 weeks before for Indeginious and 45 days for foreign) to TPI/Bidder's own inspection agency to avoid delay in the manufacturing processes. | |
| 5 | Inspection before despatch for domestic supplier : Inspection before despatch at supplier's works shall be carried out by Bidder appointed Inspection agency(As in SI no.3.) Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet . | |
| 6 | Inspection at Foreign Source/Supplier: (a) As in sl no: 3. shall be ensured without fail (b) No materail / items shall be despatched without getting the written communication from BHEL / Customer inspection carried out by Bidder apointed Third Party Inspection Agency (As per SI no.3) / Customer/Customer Apointed Inspection Agency/Consulatnat. This is applicable for all Stage inspection and Final Inspection identified as "W" - Witness or "CHP" - Customer Hold Point as per customer approved Quality Plan/ Technical specification / Approved Drawing/ Approved Data sheet / Scheme / PID / PFD / SLD (Process Instrumentaion Diagram / Process Flow Diagram / Single Line Diagram) etc (As applicable). Inspection before despatch for Foreign supplier : Inspection before despatch at supplier's works shall be carried out by bidder appointed inspection agencies having international presence at vendors and or vendor's sub vendor works. Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet by TPIA mentioned in SI no: 03 at supplier's cost. | |
| 7 | Painting shall be done strictly as per BHEL/Customer approved painting schedule / scheme only. Paint Thickness / Paint shade shall be ensured as per BHEL / Customer approved painting schedule / specification / data sheet etc. No deviation is acceptable unless otherwise accepted by BHEL/Customer in writing. Any conflict if any among BHEL / Customer approved painting schedule / Spec / data sheet etc shall be brought to the notice to BHEL well in adavnce before proceding including the BOI being procured for assy / skid like motors etc | |
| 8 | Specific conformation for document package in the event of an order (2 Hard copies & soft copy in PDF file) is to be given containing the following with proper linkages (i) Index Sheet (ii) MQP/RQP/Endorsement Sheet (As applicable) (iii) TCs identified by BHEL/ Customer for record for "CHP" / "W" and Verification portion ("V") as given in approved QP. (iv) Final inspection report + TC including Chemical + Mechnaical + HT + NDT etc (v) Third party Inspection report + TC (vi) Customer CHP/ MDCC (vii) Type test / Performance Test reports conducted (viii) Type test / Performance Test approval/ clearance obtained from BHEL/Customer (ix) BOM with As Build Drgs with actual make / rating used with BHEL/customer approved drawings. | |
| 9 | Packing / Seaworthy Packing shall be as per BHEL Packing schedule / approved drg / sketch. This shall be ensured to take care tarnsit / handling / transhipment in Road / Sea / Air. Photographs are to be submitted for BHEL review before despatching the material as per contract conditions. | |
| 10 | Outsourcing of test facilities: Bidder shall ensure all the testing facilities in house. However If any of the test facilities are not available with successful bidder, then bidder shall ensure the same at NABL accreadted third party lab / Govt / Govt Lab for major testing such as NDT, Electrical & Mechanical testing. | |
| 11 | Important Note: No deviation on the above requirement 01 to 10 is acceptable w.r.t Quality Requirement and those offers not meeting these specific customer requirement is liable for rejection and hence the bidder shall submit all the required documentary evidances in the offer itself. | |
| 12 | ## Necessorily to be filled up by the bidder at the time of offer itself otherwise the offer may not be considered w.r.t Quality Requirement being customer specific requirement. | |
| 13 | If the OEM/Principal engaging the services of an agent to participate on their behalf, Then mention OEM /vendor Name & address as well as agent details with their sign and seal. | |
| VENDOR SIGN AND STAMP: | | Vendor Name & Address: |

BANK GUARANTEE FOR CONTRACT EXECUTION

Bank Guarantee No:

Date:

To

Bharat Heavy Electricals Limited,
Boiler Auxiliaries Plant,
RANIPET -632 406,
Tamil Nadu,
INDIA

Dear Sirs,

In consideration of the **Bharat Heavy Electricals Limited** ¹ (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at "**BHEL House**", **SIRI Fort, New Delhi- 110049** through its Unit at **Boiler Auxiliaries Plant located at Ranipet-632406, Tamil Nadu, INDIA** having awarded to ² having its registered office at _____ herein after referred to as the 'Contractor/Supplier', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No. / **PO No** _____ dated ^{3.} Valued at Rs _____ ⁴ (Rupees (In words) _____).
_____ ⁵ (hereinafter called the 'Contract') and the Contractor having agreed to provide a Contract Execution Guarantee equivalent to 2% (Two Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract.

We _____ (hereinafter referred to as the Bank), having registered/Head Office at _____ and inter alia a branch at _____ being the Guarantor under this Guarantee, hereby, irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer a maximum amount Rs _____ (**Rupees** _____) without any demur, immediately on a demand from the Employer. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding **Rs. _____ (Rupees _____)**.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Contractor/Supplier in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the contractors/supplier shall have no claim against us for making such payment.

We the _____ bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the Contract Execution of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

We _____ BANK further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of Contract Execution by the said Contractor/Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Contractor/Supplier and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor/Supplier or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Contractor/Supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall remain in force up to _____ 6 with a validity period of ____ months & claim period of 3 months and shall be extended from time to time for such period as may be desired by Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor/Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.

Unless a demand or claim under this guarantee is made on us in writing on or before the _____ 7 we shall be discharged from all liabilities under this guarantee thereafter.

We _____ BANK, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed Rs _____ (Rupees _____ Only) 8
- b) This Guarantee shall be valid up to _____ 9
- c) Unless the Bank is served a written claim or demand on or before _____ 10 all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

We _____ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

Dtd :

Place of Issue:

FOR YOUR REFERENCE TO FILL THE DETAILS ACCORDINGLY:

1. NAME AND ADDRESS OF EMPLOYER i.e., Bharat Heavy Electricals Limited.
- 2 NAME AND ADDRESS OF VENDOR/CONTRACTOR/SUPPLIER
- 3.DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE
- 4.BG AMOUNT IN FIGURES AND WORDS
- 5.PROJECT/SUPPLY DETAILS
- 6.VALIDITY DATE with a validity of 3 months claim period.
- 7.DATE OF EXPIRY OF CLAIM PERIOD
- 8.BG AMOUNT IN FIGURES AND WORDS
- 9.VALIDITY DATE
10. DATE OF EXPIRY OF CLAIM PERIOD

Ple note: The Validity period wrt our conditions applicable for the Supply / Erection & condition.



Bankers, Auditors & Share Transfer Agent

| Bankers | |
|-----------------------------|--|
| Axis Bank | |
| Bank of Baroda | |
| Canara Bank | |
| Central Bank of India | |
| CITI Bank N.A | |
| Deutsche Bank AG | |
| Export-Import Bank of India | |
| HDFC Bank Limited | |
| | |
| IDBI Bank | |
| Indian Bank | |
| Indian Overseas Bank | |
| Indusind Bank | |
| Kotak Mahindra Bank | |
| Punjab National Bank | |
| RBL Bank Ltd. | |
| Standard Chartered Bank | |
| State Bank of India | |
| The Federal Bank Limited | |
| | |
| Union Bank of India | |
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| | |
| | |

Registered Office

BHEL House, Siri Fort, New Delhi-110049 (India)

CIN: L74899DL1964GOI004281

Phone: 011-66337000, Fax: 011-66337428

www.bhel.com

shareholderquery@bhel.in

BANK GUARANTEE FOR PERFORMANCE SECURITY

Bank Guarantee No:

Date:

To

Bharat Heavy Electricals Limited,
Boiler Auxiliaries Plant,
RANIPET -632 406,
Tamil Nadu,
INDIA

Dear Sirs,

In consideration of the **Bharat Heavy Electricals Limited** ¹ (hereinafter referred to as the 'Employer' which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns) incorporated under the Companies Act, 1956 and having its registered office at "**BHEL House**", **SIRI Fort, New Delhi- 110049** through its Unit at **Boiler Auxiliaries Plant located at Ranipet-632406, Tamil Nadu, INDIA** having awarded to ² having its registered office at _____ herein after referred to as the 'Contractor/Supplier', which expression shall unless repugnant to the context or meaning thereof, include its successors and permitted assigns), a contract Ref No. / **PO No** _____ dated ^{3.} Valued at Rs _____ ⁴ (Rupees (In words) _____). for _____ ⁵ (hereinafter called the 'Contract') and the Contractor having agreed to provide a Contract Performance Guarantee equivalent to 10% (Ten Percent) of the said value of the Contract to the Employer for the faithful performance of the Contract.

We _____ (hereinafter referred to as the Bank), having registered/Head Office at _____ and inter alia a branch at _____ being the Guarantor under this Guarantee, hereby, irrevocably and unconditionally undertake to forthwith and immediately pay to the Employer a maximum amount Rs _____ (**Rupees** _____) without any demur, immediately on a demand from the Employer. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this guarantee. However, our liability under this guarantee shall be restricted to an amount not exceeding **Rs. _____ (Rupees _____)**.

We undertake to pay to the Employer any money so demanded notwithstanding any dispute or disputes raised by the Contractor/Supplier in any suit or proceeding pending before any Court or Tribunal relating thereto our liability under this present being absolute and unequivocal.

The payment so made by us under this Guarantee shall be a valid discharge of our liability for payment thereunder and the contractors/supplier shall have no claim against us for making such payment.

We the _____ bank further agree that the guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Contract and that it shall continue to be enforceable till all the dues of the Employer under or by virtue of the said Contract have been fully paid and its claims satisfied or discharged.

We _____ BANK further agree with the Employer that the Employer shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the said Contract or to extend time of performance by the said Contractor/Supplier from time to time or to postpone for any time or from time to time any of the powers exercisable by the Employer against the said Contractor/Supplier and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation, or extension being granted to the said Contractor/Supplier or for any forbearance, act or omission on the part of the Employer or any indulgence by the Employer to the said Contractor/Supplier or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.

The Bank also agrees that the Employer at its option shall be entitled to enforce this Guarantee against the Bank as a principal debtor, in the first instance without proceeding against the Contractor and notwithstanding any security or other guarantee that the Employer may have in relation to the Contractor's liabilities.

This Guarantee shall remain in force up to _____ 6 with a validity period of ____ months & claim period of 3 months and shall be extended from time to time for such period as may be desired by Employer.

This Guarantee shall not be determined or affected by liquidation or winding up, dissolution or change of constitution or insolvency of the Contractor/Supplier but shall in all respects and for all purposes be binding and operative until payment of all money payable to the Employer in terms thereof.

Unless a demand or claim under this guarantee is made on us in writing on or before the _____ 7 we shall be discharged from all liabilities under this guarantee thereafter.

We _____ BANK, lastly undertake not to revoke this guarantee during its currency except with the previous consent of the Employer in writing.

Notwithstanding anything to the contrary contained hereinabove:

- a) The liability of the Bank under this Guarantee shall not exceed Rs _____ (Rupees _____ Only) 8
- b) This Guarantee shall be valid up to _____ 9
- c) Unless the Bank is served a written claim or demand on or before _____ 10 all rights under this guarantee shall be forfeited and the Bank shall be relieved and discharged from all liabilities under this guarantee irrespective of whether or not the original bank guarantee is returned to the Bank.

We _____ Bank, have power to issue this Guarantee under law and the undersigned as a duly authorized person has full powers to sign this Guarantee on behalf of the Bank.

For and on behalf of
(Name of the Bank)

Dtd :

Place of Issue:

- 1.NAME AND ADDRESS OF EMPLOYER i.e., Bharat Heavy Electricals Limited.
- 2 NAME AND ADDRESS OF VENDOR/CONTRACTOR/SUPPLIER
- 3.DETAILS ABOUT THE NOTICE OF AWARD/CONTRACT REFERENCE
- 4.BG AMOUNT IN FIGURES AND WORDS
- 5.PROJECT/SUPPLY DETAILS
- 6.VALIDITY DATE with a validity of 3 months claim period.
- 7.DATE OF EXPIRY OF CLAIM PERIOD
- 8.BG AMOUNT IN FIGURES AND WORDS
- 9.VALIDITY DATE
10. DATE OF EXPIRY OF CLAIM PERIOD

Ple note: The Validity period wrt our conditions applicable for the Supply / Erection & condition.

*(To be submitted In the company letter head by supplier)

Form - 1

Subject: Public Procurement (Preference to Make In india)

References:

- 1.P-45021/2/2017-B.E-II dated. 15th June-2017,
- 2.P-45021/2/2017-PP(BE-II) dated. 28th May-2018 ,
- 3.P-45021/2/2017-PP(BE-II) dated. 29th May-2019.
- 4.P-45021/2/2017-PP(BE-II) dated. 4th June-2020

We hereby declare with reference to above subject and references that M/s --
------(Tick whichever is applicable as below)

"Class-I local supplier" meeting the requirement of minimum local content equal to 50%(fifty percent) or more defined in the above government notification for the goods and services (or)

"Class-II local Supplier" meeting the requirement of local content 20% to less than 50%(fifty percent) defined in the above government notification for the goods and services

Please mention the details against the following:

Enquiry no:----- dated. -----

Type of Supplier (Class-I/Class-II)

Product:-----

Project:.....

Details of location at which local value addition will be made is as follows:

We also understand that the false declarations will be in breach of the code of Integrity under rule 175(1)(i)(h) of the General financial rules for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Financial Rules along with such other actions as may be permissible under law.

Authorized Signature M/s _____

(Signature and seal)

Place:.....

Date:.....

From.

M/s _____

Address: _____

Form – 2

I/we are bidder from _____ (Address with country). We do not belong to any of the below category mentioned.

1. Any of entity/office/workshop of your organisation/incorporation, established in a country sharing land border with India, If yes, provide the full address of all such locations.
2. Any of subsidiary of your organisation/incorporation, established in a country sharing land border with India, If yes, provide the full address of all such locations.
3. Any of entity/office/workshop of your organisation/incorporation, controlled in a country sharing land border with India, If yes, provide the full address of all such locations.
4. Any of entity whose beneficial owner is situated in a country sharing land border with India, If yes, provide the full name, address of all such locations.
5. Any Indian Agent available, If so, Provide details of address and contacts.
6. Any employee/directors who is/are citizen of country sharing land border with India, If yes, provide the full name, employee code and address of all such locations.
7. Any of consortium/joint venture of your organisation/incorporation, established in a country sharing land border with India, If yes, provide the full address of all such locations.

Meaning of beneficial owner

- 1) In case of a company or limited liability partnership, beneficial owner is the natural person, who, whether acting alone or together, or through one or more judicial person, has a controlling ownership interest or who exercises control through other means.

Explanation

- a) Controlling ownership interest means ownership of or entitlement to more than twenty-five percent of shares or capital or profits of the company.
- b) “control” shall include the right to appoint majority of the directors or to control the management rights or shareholder’s agreement or voting agreement.
- 2) In case or a partnership firm the beneficial owner is the natural person (s) who whether acting alone or together or through one or more judicial person, has ownership of the entitlement to more than fifteen percent of capital or profits of the partnership.
- 3) In case of an unincorporated association or body of individuals, the beneficial owner is the natural person(s), who, whether acting alone or together or through one or more judicial person, has ownership of the entitlement to more than fifteen percent of the property or capital or [profits of such association or body of individual.
- 4) Where no natural person is identified under (1) or (2) or (3) above, the beneficial owner is the relevant natural person who holds the position of senior managing official.
- 5) In case of a trust, the identification of beneficial owner (s) shall include identification of the author of the trust, the trustee, the beneficiaries with fifteen percent or more interest in the trust and any other natural person exercising ultimate effective control over the trust and any other

***(To be submitted In the company letter head by supplier)**

natural person exercising the ultimate effective control over the trust through a chain of control of ownership.

- 6) An agent is a person employed to do any act for another, or to represent another in dealing with third person.

We have read the clause regarding restriction on procurement from a bidder of a country which shares a land border with India, we hereby declare that we do not belongs to any such country and are eligible to be considered.

In case, any of information is found to be false, even after bid acceptance, immediate termination may happen and action will be taken as per law.

Format is being filled without altering any of the clause mentioned in the given format**

Dated: _____

Authorised Sign and stamp_____