

EPS notice:

Tender Notice – All and **only indigenous** bidders/vendors/manufacturers (providing local content 20% or more) are invited to quote for this enquiry.

(A) BHEL, BAP – Ranipet requires mist eliminator set ("Supply, E&C, Performance testing of mist eliminators along with Spares ") for BHEL Power Site, NTPC – Bongaigaon. The following documents are attached:

1. Technical specification of Mist eliminator - Common
2. Technical data sheet for mist eliminator-NTPC – Bongaigaon
3. Quality plan – Sample MQP (Detailed and finalised to be discussed during technical bid clarifications)
4. Annexure B ver 20 : General terms and condition
5. Annex F : Format for new supplier/vendor registration
6. Online supplier registration procedure (SRP) for new vendor
7. CEBG format
8. PBG format
9. Annexure 1 – List of consortium bank
10. Make in India content declaration

(B) Vendor who qualifies part-1 (TECHNOCOMMERCIAL bid) alone shall be eligible for part-II (Price bid opening)

(C) Date of opening of part-II will be intimated to techno-commercially qualified bidders through EPS. Price part are to be in EPS only, not in techno-commercial bid.

(D). Pointwise confirmation to specification, Quality term and commercial terms are required. Deviation if any, shall be brought up clearly through separate annexures.

(E). All the document submitted by the vendors/bidders shall be signed with date and stamped.

(F). Overall cost will be considered for comparison and ordering. All the items are treated as single package.

(G). **Reverse auction** methodology shall be followed for techno-commercially qualified bidders.

For NIT:

	BHARAT HEAVY ELECTRICALS LIMITED (A GOVT OF INDIA UNDERTAKING)	Flue Gas Desulphurization Group-FGD, Boiler Auxiliary Plant (BAP), Ranipet
---	---	---

TECHNICAL SPECIFICATION FOR MIST ELIMINATORS

SPECIFICATION NO : FGD:ME:R00
BUYER (EPC) : BHEL, BAP Ranipet
APPLICATION : WET LIMESTONE FGD



00	15-06-2020	Fresh issue	<i>Jyotish Kumar Patel</i> Jyotish Kumar Patel	<i>S. Shanmuga Sundaram S</i> Shanmuga Sundaram S	<i>V. Kesavan</i> V. Kesavan
REV	Date	Description	Prepared	Checked	Approved

This document is meant for the exclusive purpose of bidding against this specification and shall not be transferred, reproduced or otherwise used for purposes other than that for which it is specifically issued.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

CONTENTS

1	APPLICABLE CODES & REGULATIONS
2	INTENT OF SPECIFICATION
3	PROVENNESS CRITERIA
4	SCOPE OF SUPPLY
5	GENERAL REQUIREMENTS
6	PACKING & FORWARDING
7	SUPERVISION OF ERECTION, TESTING & COMMISSIONING
8	DROPLET MEASUREMENT AT SITE
9	EXCLUSION
10	INSPECTION AND TESTING
11	SPARES, TOOLS & TACKLES
12	PERFORMANCE GUARANTEE
13	WARRANTY
14	TRAINING
15	CONFLICT
16	DOCUMENTATION
17	ANNEXURES
18	GA DRAWING OF THE MIST ELIMINATOR



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

DOCUMENTS TO BE SUBMITTED ALONG WITH THE BID

Sl. No.	Description	No of copies With proposal
1.	Documents for meeting the Qualification Requirement	1
2.	Reference plant list (as per Annexure-I)	1
3.	Compliance to Specification – Duly signed and stamped by the bidder	1
4.	Data Sheet for Mist Eliminator(as per Annexure-II)	1
5.	General arrangement and the cross-sectional drawing of the Mist Eliminator & its accessories.	1
6.	Schedule of Guarantee (as per Annexure-III)	1
7.	Deviation list (as per Annexure-IV)	
8.	Performance characteristic curves of Mist Eliminator	1
9.	Washing System data calculation sheet and Washing sequence	1
10.	Utility List & Required Pump Capacity	1
11.	Mandatory spares list.	1
12.	Start-up, Erection and commissioning spares list.	1
13.	Recommended Spares List for 3 Year's Normal Operation	1
14.	Proforma Packing List	1
15.	Approximate weight of each skid	1
16.	Support beam details and loading data	1
17.	Sub-Vendor List	1
18.	Scope of Supply	1
19.	Quality Plan	1
20.	List of Special Tools	1
21.	Delivery Schedule	1
22.	Droplet Measurement procedure	1
23.	WPS & PQR arrangement	1
24.	Man-holes, Viewing Ports, Sampling ports & Wash Pipe flange location & details	1
25.	Catalogue	1
26.	Terminal Point details	1
27.	Bill of Materials along with material and codes	1



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

DOCUMENTS TO BE SUBMITTED AFTER AWARD OF CONTRACT:

Sl. No.	Description	No of copies After award of contract	Delivery Time
1.	General arrangement and the cross-sectional drawing of the Mist Eliminator & its accessories.	1	2 weeks after contract
2.	Isometric (3D) Drawing of the Mist Eliminator & it accessories	1	1 month after award
3.	Data Sheet for Mist Eliminator	1	2 weeks after contract
4.	Performance characteristic curves of Mist Eliminator	1	2 weeks after contract
5.	Washing system data calculation sheet , Washing sequence.	1	2 weeks after contract
6.	Utility List & Required Pump Capacity	1	2 weeks after contract
7.	Support beam drawing & loading data	2	2 weeks after contract
8.	Strength & performance Calculation	1	2 weeks after contract
9.	Mandatory spares list.	1	2 weeks after contract
10.	Erection and commissioning spares list.	1	2 weeks after contract
11.	Recommended Spares List for 3 Year's Normal Operation	1	2 weeks after contract
12.	Special tools list	1	2 months after contract
13.	Inspection and Test Procedure	1	1 month after contract
14.	Installation and assembly procedure	1	4 months after contract
15.	Inspection and Test Procedure	1	1 month after contract
16.	Quality Plan	4	1 month after contract
17.	Inspection & Test record	1	In 2 weeks after test
18.	Inspection Certificate	1	In 2 weeks after test
19.	Material Test Certificates	2	In 2 weeks after test
20.	Sub vendors List	1	2 weeks after contract
21.	Manufacturing Schedule	1	2 weeks after contract
22.	Progress report	1	Every month
23.	Proforma Packing List	1	2 months prior to shipping



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

Sl. No.	Description	No of copies After award of contract	Delivery Time
24.	Approximate weight of each skid	1	2 months after contract
25.	Material Test Certificates	2	In 2 weeks after test
26.	Pre Commissioning Check List	2	4 months after contract
27.	Droplet Measurement procedure	2	1 month after contract
28.	WPS & PQR	2	2 weeks after contract
29.	Catalogue	2	2 weeks after contract
30.	Operation and Maintenance Manual Cleaning and repair procedure	• 10 hardcopies and 5 electronic copies in English	4 months after contract



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

1.0 APPLICABLE CODES & REGULATIONS

The design and materials shall conform to the requirements of applicable codes and regulations of the latest edition. The design, manufacture, installation and testing of the Mist Eliminator shall follow the latest applicable Indian/International (AISI / ASME/EN/Japanese) Standards.

2.0 INTENT OF SPECIFICATION

This specification covers the minimum requirements for the complete design, material, manufacturing, shop inspection, testing at the manufacturer's works, supervision of erection & commissioning and performance testing of Mist Eliminators along with accessories which is to be furnished in the Flue Gas Desulphurization plant of Coal fired Power Plants. The following points may be noted.

- a. Bidder shall assume full unit responsibility for the entire equipment assembly and make all possible efforts to comply strictly with the requirements of this specification and other specifications/attachments to inquiry/order.
- b. In case, deviations are considered essential by the Bidder (after exhausting all possible efforts), the same shall be separately listed in the Bidder's proposal under separate section, titled as "List of Deviations/Exceptions to the Enquiry Document (**Annexure-IV**)". In case of NIL deviation, bidder has to specify "NIL Deviation" in Annexure-IV.
- c. Any deviation, not listed under the above section, even if reflected in any other portion of the proposal, shall not be considered applicable.
- d. No deviation or exception shall be permitted without the written approval of the purchaser.
- e. Compliance to this specification shall not relieve the Bidder of the responsibility of furnishing equipment and accessories/auxiliaries of proper design, materials and workmanship to meet the specified start up and operating conditions.
- f. In case, the Bidder considers requirement of additional instrumentation, controls, safety devices and any other accessories/auxiliaries essential for safe and satisfactory operation of the equipment, the same shall be recommended along with reasons in a separate section and include the same in scope of supply.
- g. All accessories, items of work, though not indicated but required to make the system complete for its safe, efficient, reliable and trouble free operation and maintenance shall also be in supplier's scope unless specifically excluded.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

3.0 PROVENNESS CRITERIA:

“Bidder should have previous experience of design, manufacture, supply, erection and commissioning / supervised erection & commissioning of the Mist Eliminators for Wet Limestone based FGD system for at least one (1) no. 500/ MW or higher capacity pulverized coal fired power plant such that respective equipment(s) should have been in successful operation for a period not less than One (1) year prior to Part-I (Techno-commercial) bid opening date”

The Bidder shall offer only proven design which meets the Provenness criteria indicated above. Necessary document evidences (PO copy/ GAD or Datasheet for the reference plant/Performance certificate from end user for the reference plant) for qualification shall be submitted along with the bid. If bidder doesn't meet the specified provenness criteria, their offer is liable for rejection.

4.0 SCOPE OF SUPPLY

Scope for the bidders shall include Design, Supply, Testing and Supervision of Erection & Commissioning.

Design: Includes basic engineering, detail engineering, preparation and submission of engineering drawings/calculations/datasheets/quality assurance documents/field quality plans, storage instructions commissioning procedures, operation & maintenance manuals, performance guarantee test procedures and assisting BHEL in obtaining time bound approval from END CUSTOMER.

The following items shall be Bidder's scope of design

- Performance Calculation
- Basic Design
- Detail Fabrication Drawings
- Support Beam Drawing and Loading data for Absorber Design
- Strength Calculation
- Documents for Fabrication, Inspection, Installation, Shipment and Erection & Maintenance works at site.

Supply: Includes manufacturing/fabrication, shop floor testing, stage inspections, final inspections, painting & packing.

Supervision of Erection & commissioning: Includes supervision of erection& Commissioning at site.

Performance testing: Includes outlet Mist Concentration measurement at site as per VDI Norm

Supplier's scope shall cover complete Mist Eliminator unit including sub-systems, start-up spares and special tools (typically) as given below. The scope of supply for Mist Eliminators shall include but not limited to the following:



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

Sl. No	Scope
1.	Mist Eliminator complete with
	i. Mist Eliminator modules/panels with end stopper plate for all the stages.
	ii. Flushing pipes with spray nozzles and flange for the front and back wash for all the stages.
	iii. Horizontal member for pipe support with mounting clamps for pipe.
	iv. Vertical member (Leg support- L angle) from the main beam to horizontal pipe support
	v. Inverted U-Clamp (Hanger type) for mounting bottom wash pipe support.
	vi. Pad Plate at the end of the leg support
	vii. All fasteners required for pipe support members , Mist Eliminator panels, etc.
	viii. Fasteners (made of Galvanised steel) and gaskets for the flanges outside absorber as per the drawing
	ix. Any blanking plate, if required, shall be provided by bidder.
	x. 3% of Hardware and gaskets supplied shall be provided as erection spares. Any other erection/commissioning spares deemed necessary by the vendor shall be supplied
	xi. Startup Spares as applicable
	xii. Special tools & tackles as applicable
	xiii. Mandatory spares as per requirement
	xiv. Painting and Rust Prevention during shipment and construction
	xv. Export packing and Inland Transportation
	xvi. Supervision of Erection & commissioning at site
	xvii. Residual droplet content measurement at site using VDI Norm 3679.
	xviii. Installation, operation and maintenance manuals
	xix. Any other items required for completeness of the equipment except the items covered in the exclusions.

Bidder shall refer to the drawing enclosed with this specification. Buyer will provide the details of the structures inside/outside absorber after placement of order and Mist Eliminator system shall be designed suitably considering the structures.

4.1	DESIGN AND CONSTRUCTION FEATURES
1.	To separate the entrained droplets, mist eliminators are installed above the absorber spraying zone. Mist Eliminators offered shall be designed, installed, tested and operated so that high availability and high droplet removal efficiency is guaranteed.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

2.	The residual droplet content shall be measured according to applicable clauses in VDI Norm 3679.
3.	Material grade for Mist Eliminator chosen by the bidder shall be field proven in previous installation for the corrosive and erosive condition prevailing inside FGD absorber. The No of stages of ME shall be as per Annexure" Selection parameter for Mist Eliminator"
4.	Provision shall be made for continuous washing of both ends all the stages except the back wash of the last stage. Wash water arrangement shall also be provided at the back end of the last stage of Mist Eliminators and it is meant for maintenance or during shutdown condition(i.e. back wash of the last stage is designed for intermittent washing).
5.	The Mist Eliminator washing system shall be designed for cyclic washing of different sections. Pneumatically operated valves required for cyclic washing will be provided by the buyer. Platforms for accessing the automatic valves for the spray system will be provided by BHEL.
6.	Entrained Slurry shall be collected by Mist Eliminators downstream of the slurry spray system to avoid carryover of slurry to the Stack.
7.	The ME system shall be equipped with washing and drain provisions, where drains are directed into the absorber. Washing provisions shall include external and internal piping systems with replaceable nozzles, complete with all piping.
8.	The Material of construction for the Mist Eliminator Wash Pipe header shall be as per "Annexure- Selection parameters for Mist Eliminator". The material chosen by the bidder shall be proven and Mist Eliminator vendor shall have experience for the same
9.	Ease of replace-ability and placement of the mist eliminator on maintenance platforms is an important requirement.
10	The ME shall be designed to allow for efficient cleaning in process.
11	Test ports will be provided by the buyer in the downstream of the mist eliminator to enable performance testing. Test ports location shall be recommended by the Mist Eliminator vendor and shall be as per ASME PTC-40.
12	The mist eliminator system shall be capable of withstanding high velocity spray water jets typically employed during manual cleanings. The ME shall be constructed in individual cells. The design shall safely avoid ME vibration and/or humming. The individual cells shall be sized so that no more than two maintenance personnel are needed to handle them manually when they are fully scaled or plugged, and the cells shall be capable of passing through the access doors for the mist elimination section.
13	Easy access for placement and replacement of the mist eliminator shall be incorporated in the design of the mist eliminator arrangement and the absorber vessel. Vendor shall provide recommendations for the same.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

14	Walkways will be provided by the Buyer. However, Size and location of Manholes which are required for installation and replacement of each segment of the Mist Eliminator shall be recommended by the Mist Eliminator vendor.
15	The headroom shall have a height of more than 2200 mm.
16	The mist eliminator support beams shall be designed to act as maintenance walkways approximately 300 mm wide and shall allow for a minimum 500 Kg/m ² load. The support beam/walkways shall provide personnel access to all mist eliminator modules, wash headers and wash nozzles. The support beam will be provided by the buyer. However, bidder shall ensure the design of ME system in such a way that there is place to walk on the beam.
17	Adequate number of viewing ports with flushing devices connected to automatically operating washing system will be provided by the buyer at following locations: (i) Upstream of 1st stage (ii) Between 1st and 2nd stage (iii) Downstream of 2nd stage. (iv) Downstream of 3rd stage (in case of Three stage ME) Regular flushing will be done in a defined time sequence. Viewing ports locations shall be recommended by the ME vendor.
18	Internal supports for mist eliminator sections, etc. shall be designed to withstand the flooded weight of the supported section.
19	All internal piping support members for mist eliminator and flushing system shall be provided as per Annexure" Selection parameter for Mist Eliminator".
20	The material used for washing nozzles shall be field proven in previous installations.
21	All fasteners provided for the ME and wash pipe supports shall be as per Annexure" Selection parameter for Mist Eliminator".
22	The Mist eliminators and its supporting structure shall be designed to carry sufficient load during maintenance.
23	The formation of agglomeration, deposition & caking shall be avoided. For mist eliminators the bidder shall submit a cleaning procedure including the required safety measures as part of the inspection concept.
24	Detailed washing procedure for the mist eliminator shall be submitted such as • Minimum washing water pressure (MPa) • Minimum Flow rate (m³/hr) • Washing time schedule and sequence • Nozzle type • No of spray nozzles • Size of header pipes • Valve list
25	Mist Eliminator Panel's support shall be designed in consideration of dirty condition of the Mist Eliminator. Design Load of the Mist Eliminator shall be as follows, Mist Eliminator's weight including eliminated liquid weight plus max. allowable pressure



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

	drop of the mist eliminator.
26	The thickness of the Mist Eliminator shall be as per vendor's proven practice. Vendor shall specify the thickness in their offer.
27	The spacers to link each panel for restricting the gap between the panels shall be supplied.
28	Blade surface shall be capable of supporting 225 kg of concentrated load, as might be experienced during inspection, while fully plugged with solids. Provide anchors, Fasteners, spacers and supports shall be provided by bidder to securely hold Mist Eliminator and prevent shifting during operation
29	The beam and the outer ring for supporting the Mist Eliminator will be provided by the buyer. All other supports for Wash Pipes shall be taken from the main beam or outer ring supports. Pipe support shall not be taken from Absorber Casing and such arrangements involving support from the casing will not be accepted.

5.0 GENERAL REQUIREMENTS:

S.No	Description
1.	Descriptions in the drawings, in the documents, and in the displays shall be in English
2.	The equipment shall be designed to withstand the corrosive and moist environment in which these are proposed to operate.
3.	Suitable drain connections shall be provided.
4.	The equipment shall be suitable for stable continuous operation.
5.	Limit of connection: The buyer (BHEL) has an intention to minimize interface for utilities as much as possible. The bidder shall consider this requirement in the planning stage of layout for the equipment. The bidder shall provide the header piping for utilities and branch piping to each nozzle. Terminal points for all utilities shall be located at Absorber wall edge at Mist Eliminator elevation. The bidder shall specify all terminal points with tie-in number in the P&ID and submit it in the proposal to confirm the scope of supply.
6.	Service life: Entire equipment except wearing parts shall be designed and fabricated for a minimum service life of 30 years of operation or 200,000 full load operating hours whichever is longer.
7.	Corrosion allowance: Corrosion allowance for entire equipment shall be in accordance



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
	with latest applicable international standard.
8.	Unless otherwise specified , flanges shall be in accordance with ANSI B16.5 Class 150
9.	Name plate: Nameplate shall be provided indicating the item number and service name. Name plates shall be of 304 Stainless steel plate and placed at a readily visible location. Nameplate of main equipment shall have enough information, which will be confirmed during engineering phase.
10.	Unless otherwise specified, all equipment items where the weight exceeds 15 kg shall be provided with suitable lifting lugs, ears or ring bolts or tapped holes for lifting rings. Minimum shock factor for lifting lugs shall be minimum 2.0. The position of lifting lugs and reference dimension shall be shown on GA and/or outline drawings. NDT shall be conducted for lifting lugs. When any spreader bars are required for lifting and laydown, the bidder shall provide spreader bar with equipment.
11.	Equipment shall be fabricated as much as practical to minimize erection at the site.
12.	Washing headers support and its clamping arrangement along with fasteners shall be provided by the bidder.
13.	If the Mist eliminator is in the resonance condition or any vibration problems occur, the bidder shall solve the problems in a timely manner.
14.	Bidder shall provide the mating flanges with the necessary gaskets.
15.	All the surfaces of the carbon steel (if any) should be rust prevented before shipment for the period of at least 12 months for storage and construction.
16.	The list of all Bought out items with makes and country of origin to be mentioned along with offer to be submitted.
17.	Quality Plan to be submitted along with the offer.
18.	During entire period of the project, the bidders shall strictly follow and adhere to the guidelines for effective Health & Safety Management. Supply of safety gears/PPE for bidder's/bidder's sub vendor personnel deputed at site for Supervision of E&C, etc. shall be in bidder's scope.
19.	Cost towards the participation in discussions/meetings, providing technical assistance during technical discussions/meetings with customer for approval of drawing/documents etc. TA/DA, boarding and lodging to attend these meetings shall be borne by the bidder and shall be inclusive in supply portion.
20.	Material of construction for all equipment/components shall be subject to BHEL/END CUSTOMER/END CUSTOMER's consultant approval during detail engineering. Accordingly bidder shall consider MOC for all equipment/component as per best engineering practice, global standard and global references.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
21.	Bidder to provide sub vendor list and Bidder shall strictly adhere to BHEL/END CUSTOMER approved vendor list.
22.	The modalities of inspection (Stage, Final, In-process) shall be finalized during detail engineering after submission of quality assurance plan (QAP). It shall be reviewed by the END CUSTOMER/END CUSTOMER's consultant and BHEL. Bidder shall follow the procedures of inspection as per the approved QAP. Bidder has to submit the following documents along with inspection call and if any other documents required as per approved QAP. - Raw material inspection certificate - Internal test reports - Statutory certificates as required. - All inspection & testing shall be carried out based on the following documents: a. Relevant Standards b. Specifications c. Approved drawings d. Data Sheets e. Calibration certificate for all the measuring instruments f. Bidder should also coordinate in getting the MDCC's (Material Dispatch clearance certificate) and all types of IC's (Inspection Certificates) from the customer/customer's consultant along with BHEL.
23.	Any shim plates for erection of equipment / item at site shall be in the scope of bidder.
24.	During detail engineering, bidder to strictly adhere to BHEL/END CUSTOMER/END CUSTOMER's consultant drawing formats, document numbering, quality plan & FQP formats
25.	The identification and numbering of equipment, systems, items, etc. of supply, as well as of all documents and drawings shall be in accordance with the VGB guideline RDS-PP (Reference Designation System for Power Plants - KKS system).
26.	Complete detail engineering drawings, calculations, selection of components etc. shall be reviewed & subject to approval of BHEL/END CUSTOMER/END CUSTOMER's consultant during detail engineering
27.	Bidder shall furnish necessary inputs & drawings of all equipment in editable Auto CAD/ MS-Word /Excel format.
28.	During detail engineering, successful bidder shall ensure flow of drawings/documents as per schedule. Any comments from BHEL/END CUSTOMER/END CUSTOMER's consultant should be addressed timely by the bidder.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
29.	Bidder to note that list above is not exhaustive and any work /items required for completing the smooth operation and ensuring satisfactory running of the machines till final hand over to the end user shall also be in the scope of the bidder.
30.	Bidder shall submit the signed and stamped copy of all the pages which constitutes this technical enquiry specification signed by authorized signatory and clearly mentioning each clause under following two categories to avoid any ambiguity in scope understanding & the scope division along with technical offer. a. "Accepted without deviation and considered in scope of work" b. "Not considered in scope of work".
6.0	PACKING AND FORWARDING
1.	Proper packing to be ensured. Indigenous Supply: The equipment shall be wrapped in polythene bags & packed in a strong rigid wooden crate. Rain water should not enter into the equipment during storage in the outer yard of power plant. Imported Supply: All imported supply (supplies from outside India) should be packed as per Sea worthy packing specification no. PE-TS-888-100-A001. All imported items should have Sea worthy packing. Liberal packing materials and struts shall be provided to arrest rolling and to protect from transit damages
2.	Cardboard containers shall be enclosed in a solid wooden container
3.	Equipment and process materials shall be packed and semi-knocked down, to the extent possible, to facilitate handling and storage and to protect bearings and other machine surfaces from oxidation. Each container, box, crate or bundle shall be reinforced with steel strapping in such a manner that breaking of one strap will not cause complete failure of packaging. The packing shall be of best standard to withstand rough handling and to provide suitable protection from tropical weather while in transit and while awaiting erection at the site.
4.	Equipment and materials in wooden cases or crates shall be properly cushioned to withstand the abuse of handling, transportation and storage. Packing shall include preservatives suitable to tropical conditions. All machine surfaces and bearings shall be coated with oxidation preventive compounds. All parts subject to damage when in contact with water shall be coated with suitable grease and wrapped in heavy asphalt or tar impregnated paper.
5.	Crates and packing material used for shipping will become the property of owner.(END CUSTOMER)
6.	Packing (tare) shall be part of the equipment cost and shall not be subject to return. The packing should ensure integrity and cohesiveness of each delivery batch of equipment during transportation. In case of equipment assemblies and unit's delivery in the



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
	packing of glass, plastics or paper the specification of packing with the material and weight characteristics are to be indicated.
7.	Each package should have the following inscriptions and signs stenciled with an indelible ink legibly and clearly: a. Destination b. Package Number c. Gross and Net Weight d. Dimensions e. Lifting places f. Handling marks and the following delivery marking
8.	Each package or shipping units shall be clearly marked or stenciled on at least two sides as follows. BHEL SITE OFFICE, <i>"ADDRESS OF THE PROJECT SITE AS PER ENQUIRY/ PO "</i> INDIA In addition, each package or shipping unit shall have the symbol painted in red on at least two sides of the package, covering one fourth of the area of the side.
9.	Each part of the equipment which is to be shipped as a separate piece or smaller parts packed within the same case shall be legibly marked to show the unit of which it is part, and match marked to show its relative position in the unit, to facilitate assembly in the field. Unit marks and match marks shall be made with steel stamps and with paint.
10.	Each case shall contain a packing list showing the detailed contents of the package. When any technical documents are supplied together with the shipment of materials no single package shall contain more than one set of such documents. Shipping papers shall clearly indicate in which packages the technical documents are contained.
11.	The case number shall be written in the form of a fraction, the numerator of which is the serial number of the case and the denominator the total number of case in which a complete unit of equipment is packed.
12.	Wherever necessary besides usual inscriptions the cases shall bear special indication such as "Top", "Do not turn over", "Care" , "Keep Dry" etc. as well as indication of the center of gravity (with red vertical lines) and places for attaching slings (with chain marks)
13.	Marking for Safe handling: To ensure safe handling, packing case shall be marked to show the following: a. Upright position



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
	b. Sling position and center of Gravity position c. Storage category d. Fragile components (to be marked properly with a clear warning for safe handling
14.	Each crate or package is to contain a packing list in a waterproof envelope. All items are to be clearly marked for easy identification against the packing List. All cases, packages etc. are to be clearly marked on the outside to indicate the total weight where the weight is bearing and the correct position of the slings are to bear an identification mark relating them to the appropriate shipping documents. All stencil marks on the outside of cases are either to be made in waterproof material or protected by shellac or varnish to prevent obliteration in transit.
15.	The packing slip shall contain the following information: - Customer name, Name of the equipment, Purchase Order number with Date, Address of the delivery site, Name and Address of the Sender, Serial Number of Mist Eliminator & accessories, BHEL item Code, Gross Weight and Net weight of Supplied items.
16.	Prior to transport from manufacturer's work to destination, components of the unit shall be completely cleaned to remove any foreign particles. Flange faces and other machined surfaces shall be protected by an easily removable rust preventive coating followed by suitable wrapping.
17.	All necessary painting, corrosion protection & preservation measures shall be taken as specified in painting schedule. Supplier shall consider the coastal environment zone which is defined as "very severe" during final finishing/shipping.
18.	Successful bidder shall furnish the detail packing /shipment box details with information like packing box size, type of packing, weight of each consignment, sequence no. of dispatch, no. of consignment for each deliverable item against each billing break up units/ billable blocks. Without these details the BBU shall not be approved during detail engineering. Also, complete billing break-up with above mentioned details shall be submitted within 10days of LOI.
19.	All items/equipment shall be dispatched in properly packed condition (i.e. no item shall be dispatched in loose condition such that it becomes difficult to store/identify its location at site at a later stage).
20.	Cases which cannot be marked as above shall have metal tags with the necessary markings on them. The metal tags shall be securely attached to the packages with strong steel binding wire. Each piece, Skid, Case or package shipped separately shall be labelled or tagged properly.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
7.0	SUPERVISION OF ERECTION AND COMMISSIONING
	ERECTION
1.	The erection of Mist Eliminator and washing system will be done by buyer as per Erection Manual and check List provided by the bidder. However, the bidder shall make one visit per Mist Eliminator System/Absorber for the supervision of erection and commissioning.
2.	There will be one visit for each Mist Eliminator system or Absorber. Total No of Visit shall be as per Enquiry/PO. The bidder will be informed well in advance for the visit. No of days required supervision shall be as per enquiry/PO.
3.	TA/DA, Travel expenses, boarding and lodging shall be borne by the bidder and shall be inclusive in supervision portion.
8.0	DROPLET MEASUREMENT/PERFORMANCE TESTING AT SITE
1.	Bidder has to measure residual droplet at Mist eliminator outlet as per approved procedure for all the Mist Eliminators at site . The bidder will be informed well in advance for conducting the performance test (droplet measurement).
2.	Bidder has to complete the test for all the units as per enquiry/PO. TA/DA, travel expense, boarding and lodging, cost for bringing the testing kit to site shall be borne by the bidder and shall be included in the performance testing charges.
9.0	EXCLUSION
	The following work associated with the Mist Eliminator will be by BHEL: a. Mist Eliminator Wash Pumps b. Piping from ME Wash pumps to Absorber wall at Mist eliminator elevation. c. Pneumatic operated valves d. Support beams and outer ring inside the casing to support the ME e. Absorber casing and Nozzles.
10.0	INSPECTION AND TESTING
	The General inspection requirements to be considered are as below:
1.	Bidder shall furnish written copies of shop production, fabrication and quality test procedures and drawings for review by BHEL/END CUSTOMER prior to manufacture. Inspection of above mentioned tests by BHEL representative at bidder's works is



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
	envisaged.
2.	The Bidder shall furnish performance test procedure along with measurement standard. The procedure will be reviewed and approved by the BHEL/END CUSTOMER.
3.	Final inspection and release by the BHEL/END CUSTOMER is a mandatory requirement unless specially waived.
4.	Acceptance tolerance of actual versus guaranteed performance for Droplet removal efficiency and Pressure drop shall be as per applicable standard.
5.	Mist Eliminator shall not be released for shipment, until shop tests data have been approved by Owner.
6.	Bidder should furnish performance guarantee as per applicable standard guarantee for the design, manufacture, material and safe operation of the equipments.
7.	BHEL/END CUSTOMER shall witness the test at Bidder's works and a notice of minimum three (3) weeks shall be given for attending the inspection.
8.	Bidder to arrange all calibrated gauges, Instruments during inspection.
9.	Bidder to arrange Instruments and all accessories for the measurement at site as per applicable clauses VDI Norm 3679.
10.	The performance test & droplet measurement may be carried out at site for Guarantee conditions and shall be converted to the design condition.
11.0	SPARES, TOOLS & TACKLES
11.1	START UP & COMMISSIONING SPARES
	Start-up & Commissioning Spares shall be part of the main supply of the Mist Eliminator & sub system. Start-up & commissioning spares are those spares which may be required during the start- up and commissioning of the equipment/system. The following startup/erection & commissioning spares shall be supplied by bidder along with main supply free of cost: All hardware's and gasket – 3% In addition to the above, any other spares required for Start-up and commissioning deemed necessary by the bidder shall be supplied. The spares must be available at site before the equipments are energized.
11.2	RECOMMENDED SPARES
	Bidders shall also furnish the Recommended spares list along with the offer required for 3 years of normal operation of the plant and should be independent of the list of the mandatory spares. Prices of recommended spares will not be used for evaluation of the bids. The price of these spares will remain valid up to 6 months after placement of Notification of Award for the main equipment.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
11.3	MANDATORY SPARES:
	Bidder to quote for the mandatory spares as per enquiry/PO. Bidder shall quote for the "Mandatory spares", and it will be considered for L1 evaluation. Mandatory spare items shall be handed over separately and shall not be mixed with the supply of the main equipment parts. Spares shall not be dispatched before dispatch of corresponding main equipments. The mandatory spares shall be clearly identifiable and suitable tagging shall be made by the bidder. All spares supplied under this contract shall be strictly inter-changeable with the parts for which they are intended for replacements. All the mandatory spares shall be manufactured as per same specification and quality plan of the main supply. Mandatory spares will be in percentage of main supply. However while quoting, vendor to indicate quantity in numbers against percentage for each type. If derived quantity of mandatory spares is in fraction, then next higher side whole number has to be considered. In the event of ordering, PO will be released on rate per number basis, for the above firm quantity only. However, the price of Mandatory spare prices shall be kept valid for minimum 2 years from the date of dispatch of the of mandatory spares, to enable BHEL to place order further orders, if any, in case of additional requirement. The quantity of additional order may be less than or equal to the mandatory spares quantity indicated in the tender.
11.4	SPECIAL TOOLS & TACKLES:
	Any special tools & tackles required for the entire equipment to disassemble, assemble or maintain the units, they shall be included in the quotation and furnished as part of the initial supply. List of special tools & tackles shall be decided by bidder as per his proven practice. When special tools are provided, they shall be packaged in separate, boxes with lugs and marked as "Special Tools for (tag / item number)." Each tool shall be stamped or tagged to indicate its intended usage. Levers and eye bolts for the removal of parts to be serviced shall be submitted with special tools.
12.0	PERFORMANCE GUARANTEE
	All performance tests for Mist Eliminators shall be carried out in accordance with any latest international codes/standards. 1) The mist eliminator outlet droplet content shall be guaranteed as follows at absorber outlet measured over a period of 24 hrs continuous operation. a) $\leq 20 \text{ mg/Nm}^3$ at 6% O₂ dry (in case of 3 stage) b) $\leq 50 \text{ mg/Nm}^3$ at 6% O₂ dry (in case of 2 stage) 2) Mist outlet-droplet content shall be measured as per applicable clauses in VDI Norm 3679 and the Contractor shall carry out the tests as per the test procedure approved by the Employer. 3) Bidder shall furnish Performance guarantee for the design, manufacture, material,



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
	safe and trouble-free operation of the Mist Eliminator and its accessories 4) Maximum Pressure drop across M/E at Design Point condition (as per “Selection parameter for Mist Eliminator”) is to be guaranteed. It shall be measured at Guarantee point conditions in site and shall be converted to the design condition. 5) The Bidder shall ensure a design of the equipment to achieve an average target availability of 98% for 120 days and average target availability of 95% for 1 year 6) In the event that the performance test is unsuccessful in meeting performance guarantees, bidder shall take necessary remedial action at his cost and the performance test shall be repeated.
13.0	WARRANTY:
1.	The Bidder shall warrant that the equipments/items shall be free from defects in the design, engineering, materials and workmanship of the Plant and Equipment supplied and of the work executed. The Warranty period shall be 24 months from the date of supply or 18 months from the date of commissioning, whichever first occurs. If during the Defect Liability Period any defect should be found in the design, engineering, materials and workmanship of the Plant and Equipment supplied or of the work executed by the Bidder, the Bidder shall promptly, in consultation and agreement with BHEL regarding appropriate remedying of the defects, and at its cost, repair, replace or otherwise make good (as the Bidder shall, at its discretion, determine) such defect as well as any damage to the Facilities caused by such defect.
2.	In case of failure of the equipment to meet the guarantee, END CUSTOMER/BHEL reserves the right to reject the equipment. However, END CUSTOMER/BHEL reserves the right to use the equipment until new equipment supplied by bidder meets the guaranteed requirement .
14.0	TRAINING
	Successful bidder shall provide comprehensive training for END CUSTOMER/BHEL Engineering, O&M, Erection & Commissioning staffs at site covering all aspects of the ME system - Operation & Maintenance, Troubleshooting, cleaning procedure etc.
15.0	CONFLICT
	Bidder’s equipment shall be designed for and shall meet the service, performance and minimum level of quality requirements specified. Bidder shall be solely responsible for advising End customer in writing of any conflicts between the specifications and Bidder’s design, including performance and levels of quality. Bidder agrees that its obligations, liabilities and warranties shall not be diminished or extinguished due to its meeting the requirements of the Specification.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

S.No	Description
16.0	DOCUMENTATION
	DOCUMENTS TO BE SUBMITTED AFTER AWARD OF CONTRACT
	List of Drawings or documents to be submitted after award of contract is enlisted. Drawings that are reviewed by the END CUSTOMER/ BHEL will be returned to bidder with a transmittal letter with any comments and / or questions marked on the drawings or noted in the letter. All comments and questions must be resolved before a resubmission of drawings / documents. If the design has not developed enough to resolve some of the comments or questions, bidder shall place a “hold” on those items or areas of design. END CUSTOMER/ BHEL reserves the right to return drawings unprocessed to bidder if there exists any evidence that bidder has not acknowledged all comments and questions. All necessary GA drawings, sections, sub-assembly drawings, specifications of main and sub components and necessary set of operation & maintenance manual as asked by END CUSTOMER must be furnished by bidder in soft and hard copy forms. For all documents softcopy format shall be searchable pdf, however in addition all drawings, diagrams like P&IDS shall be supplied in ACAD or other editable format and all lists in Excel format. Further break up of technical documents will be discussed during finalization of the purchase contract. Unless agreed otherwise, Ten (10) hard copies and five (05) sets of electronic copies of all documents are to be submitted in the English language. Electronic Copies shall be submitted in primary original data format (e.g. DOC, XLS, DWG) as well as in a printable non-proprietary document format (e.g. PDF). Especially P&IDs shall be submitted as DWG files and PDF files. Bidder to ensure submission of hard copies as per END CUSTOMER requirement for all engineering drg/doc and for all subsequent revisions along with a soft copy through email to concerned project team. However all the engineering related information shall be furnished in soft form to BHEL.



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

17.0 ANNEXURES

ANNEXURE – I

a) REFERENCE LIST as per format shown below. (at least One (1) reference plant details)

S. No.	Project Name , Customer & Plant capacity	Coal fired Yes/No	Wet Limestone Based FGD Yes/No	Model	Flue gas flow Nm ³ /hr	Size	Outlet Mist Concentration mg/Nm ³	Year of Commg	Qty

NOTE: Performance certificate (End user feedback) or Unpriced PO or contract copy is required for 1 No Reference plant meeting the qualification requirement

SIGNATURE OF BIDDER -----

NAME -----

DESIGNATION -----



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

ANNEXURE – II- TECHNICAL DATA SHEET

Enquiry No: _____

Project: _____

Sl. No	Description	Data
1.0	GENERAL	
	a. Buyer	: BHEL-Ranipet
	b. Project	:
	c. End Customer	:
	d. Location	:
	e. Service	: Continuous
	f. Installation	: In-door
	g. Total number of Mist Eliminators and Accessories (No of sets)	: -Bidder to Provide-
2.0	MANUFACTURER DETAILS	
	a. Model	: -Bidder to Provide-
	b. Type	: -Bidder to Provide-
	c. No of stages	: -Bidder to Provide-
	d. Vane type for Coarse & Fine separators	: -Bidder to Provide-
	e. Pitch details for Coarse & Fine separators	: -Bidder to Provide-
	f. Weight data	: -Bidder to Provide-
	g. Flushing system details	: -Bidder to Provide-
	(i) Nozzle Details:	1 st stage 2 nd stage 3 rd stage (if applicable)
	Type of Nozzle	
	Spray angle	
	Size	
	Thread	
	Flow rate	
	Nominal size	
	(ii) No of nozzles for upstream wash	
	(iii) No of nozzles for downstream wash	
3.0	OPERATING CONDITION	: "Refer Selection parameters for Mist Eliminator"
4.0	PERFORMANCE DATA	
	a. Face Velocity m/s	: Bidder to Provide
	b. Pressure Drop hPa(G)	: Bidder to Provide
	c. Limit Drop Size Micron	: Bidder to Provide
	d. Temperature resistance of ME System Deg C	: "Shall be as per Selection parameter for Mist Eliminator)



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

	e. Performance curves (i) Pressure Drop Vs Gas Velocity (ii) Outlet Mist Load vs Gas Velocity (iii) Limit Drop Size vs Gas Velocity (iv) Collection Efficiency vs Drop Size	:	Bidder to Provide
	f. Washing sequence & Valve List	:	Bidder shall submit the washing sequence with detailed write up
	g. Utility list & required Pump Capacity	:	Bidder to Provide
5.0	MATERIALS		
	a. ME Panel	:	Bidder to Provide
	b. Washing Pipe	:	Bidder to Provide
	c. Wash Pipe Supports	:	Bidder to Provide
	d. Washing Nozzles	:	Bidder to Provide
	e. Hardwares	:	Bidder to Provide

7.0 WASHING ARRANGEMENT

7.1	Washing water condition	
a.	Flow rate - Average	Bidder to provide
b.	Flow rate – Instantaneous Allowable Max	“Shall be as per Mist Eliminator Selection Parameters for the project”
c.	Feed Pressure (at inlet flange of ME Wash header)	“As per tender specification”
d.	Spray pipe level from ME Panel	< 700 mm

7.2	Washing Method						
		First Stage		Second Stage		Third stage (if applicable)	
		Front Surface	Back Surface	Front Surface	Back Surface	Front Surface	Back Surface
a.	Total Washing Area m ²						
b.	No of divided sections						
c.	Washing Water Source						
d.	Washing Water Average Flow rate m ³ /h	*	*	*	*	*	*
e.	Instantaneous Max Water Flow rate m ³ /h	*	*	*	*	*	*



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

f.	Duration of One washing for One Divided Section Sec	*	*	*	*	*	*
g.	Time of One washing Cycle (min)	*	*	*	*	*	*
h.	* Bidder to fill the value						
i.	Note: Last/Final stage back surface washing - only for Maintenance						

SIGNATURE OF BIDDER -----

NAME -----

DESIGNATION -----



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

ANNEXURE III- SCHEDULE OF GUARANTEES

Enquiry No: _____

Project: _____

Sl. No	Description	Data
1.	Mist eliminator outlet droplet content mg/Nm ³ at absorber outlet measured over a period of 24 hrs continuous operation. (in case of three stage ME)	: ≤ 20 mg/Nm ³ at 6% O ₂ dry
	Mist eliminator outlet droplet content at absorber outlet measured over a period of 24 hrs continuous operation. (in case of two stage ME)	≤ 50 mg/Nm ³ at 6% O ₂ dry
2.	Total Pressure drop across M/E at mmwc(G) design point condition (in case of three stage ME)	: < 20 mm WC
	Total Pressure drop across M/E at mmwc(G) design point condition (in case of two stage ME)	< 15 mm WC
3.	Equipment Availability (%)	
	Equipment Availability for 120 days %	: Bidder to Provide
	Equipment Availability for 1 year %	: Bidder to Provide

SIGNATURE OF BIDDER _____

NAME _____

DESIGNATION _____



TECHNICAL SPECIFICATION OF MIST ELIMINATORS

FGD:ME:R00

ANNEXURE – IV- LIST OF DEVIATIONS/EXCEPTIONS TO THE ENQUIRY DOCUMENT

Enquiry No: _____

Project: _____

Sl No	Clause No	Page No	Description of Deviation

Note: Enlarge the table to incorporate items. In case of NIL deviation, bidder has to specify “NIL Deviation”.

SIGNATURE OF BIDDER _____

NAME _____

DESIGNATION _____

NTPC BONGAIGAON 3x250 MW FGD – MIST ELIMINATOR SELECTION PARAMETERS

REF: BNGN:ME

1.0 TECHNICAL INFORMATION

Sl. No.	Description	Requirement
1.	End Customer	NTPC Limited
2.	Project Name and location	Bongaigaon 3X250 MW Kokrajhar Dist, Assam, India.
3.	Type	Two stage chevron type (FLAT or ROOF)
4.	Quantity	
i.	Quantity of Mist Eliminators for Unit-1,2,3	3 sets (1 set for each unit) 1 set means Complete Mist Eliminators, Washing systems with supports and accessories.
ii.	Mandatory Spares	1) Mist Eliminator Washing Nozzles - 10% of each type and size 2) Mist Eliminator - 5% of each type and size
3.	MOC	
i.	ME Panel	Polypropylene or FRP
ii.	Washing Pipe	Polypropylene or FRP
iii.	Wash Pipe Supports	Polypropylene or FRP or SMO254 or AL6XN
iv.	Washing Nozzles	PVDF or PP as per bidder's proven practice
v.	Hardware inside absorber	a) Alloy 59/ C276/ SMO 254/AL6XN for metallic fasteners b) For pipe clamps, Bolt, Nut washer and spring washer shall be made of Alloy 59/ C276/ SMO 254 (or) FRP or PP material is also acceptable if it is form and part of Mist Eliminator
vi.	Blanking Plate (if required)	SMO 254 . (or) FRP/Polypropylene is also acceptable if it is form and part of mist eliminator
5.	Parameters	
i.	Gas flow	Vertical
ii.	Casing Dimension	Length : 6900 mm Width : 12900 mm

[Type here]

Customer / Plant: NTPC BONGAIGAON								
Cont. No. : G305,G306,G307	Rev. 00		Rev. 01		Rev. 02		Rev. 03	
	Sign	Date	Sign	Date	Sign	Date	Sign	Date
Engineer : MKT	-sd-	18.04.20						
Reviewer : PNR/ACR	-sd-	18.04.20						
Approver : RSB	-sd-	18.04.20						

NTPC BONGAIGAON 3x250 MW FGD – MIST ELIMINATOR SELECTION PARAMETERS

REF: BNGN:ME

iii.	Design Pressure of Mist Eliminator Panel	660 mmH ₂ O (G)	
iv.	Max Allowable Pressure drop across Mist Eliminator element	15 mmH ₂ O (G) at Design point 11 mmH ₂ O (G) at Guarantee point	
v.	Design Temperature	• 70 Deg C (Continuous) • 80 – 90 Deg C (30 minutes) • 90 – 110 Deg C (5 min)	
6.	Gas condition at ME Inlet	Guarantee Point	Design Point
i.	Gas Flow Rate (Nm ³ /s-wet)	280.888	324.015
ii.	Gas Flow Rate (m ³ /s-wet)	337.192	394.261
iii.	Gas Temperature (Deg C)	54.8	59.2
iv.	Density (kg/m ³)	1.05636	1.02588
v.	Operating Pressure at Mist Eliminator inlet (mm H ₂ O (G))	87	115
	Gas Flow Distribution	+ or - 20%	
7.	Gas Composition at ME Inlet		
i.	SO ₂ (Vol%-wet)	0.0009	0.0008
ii.	H ₂ O (Vol%-wet)	15.062	18.599
iii.	O ₂ (Vol%-wet)	5.73	5.48
iv.	CO ₂ (Vol%-wet)	10.433	9.92
v.	N ₂ (Vol%-wet)	68.77	65.99
vi.	HCl (ppm-Dry)	<2	<2
vii.	HF (ppm-Dry)	<1	<1
viii.	Dust (mg/Nm ³ -wet)	<50	<200
8.	Entrained Mist Condition:		
i.	Mist Concentration at Inlet –at Guarantee & Design Point	200 g/Nm ³ -dry	
ii.	Mist Concentration at Outlet –at Guarantee & Design Point	≤50 mg/Nm ³	
9.	Mist Composition		
i.	Solid	30 wt.%	
ii.	Cl ⁻	8299.67 ppm	
iii.	Mg ²⁺	8012.15 ppm	
iv.	Ca ²⁺	501.02 ppm	
v.	Na ⁺	119.407 ppm	
vi.	SO ₄ ²⁻	19787.84 ppm	

[Type here]

Customer / Plant: NTPC BONGAIGAON								
Cont. No. : G305,G306,G307	Rev. 00		Rev. 01		Rev. 02		Rev. 03	
	Sign	Date	Sign	Date	Sign	Date	Sign	Date
Engineer : MKT	-sd-	18.04.20						
Reviewer : PNR/ACR	-sd-	18.04.20						
Approver : RSB	-sd-	18.04.20						

1.1 WASHING ARRANGEMENT

I.	Washing water condition	
a.	Flow rate - Average	11.5 m ³ /hr *1)
b.	Flow rate at M/E Inlet – Instantaneous Allowable Max	100 m ³ /hr
c.	Flow rate at M/E Inlet – Instantaneous Min	80 m ³ /hr
d.	Feed Pressure (at inlet flange of ME Wash header)	0.2 MPa (Max)
e.	Spray Nozzle –Top washing	90 ° , Full Cone
f.	Spray Nozzle –Bottom washing	120 ° , Full Cone
g.	Spray pipe level from ME Panel	< 700 mm

1.2 WATER ANALYSIS

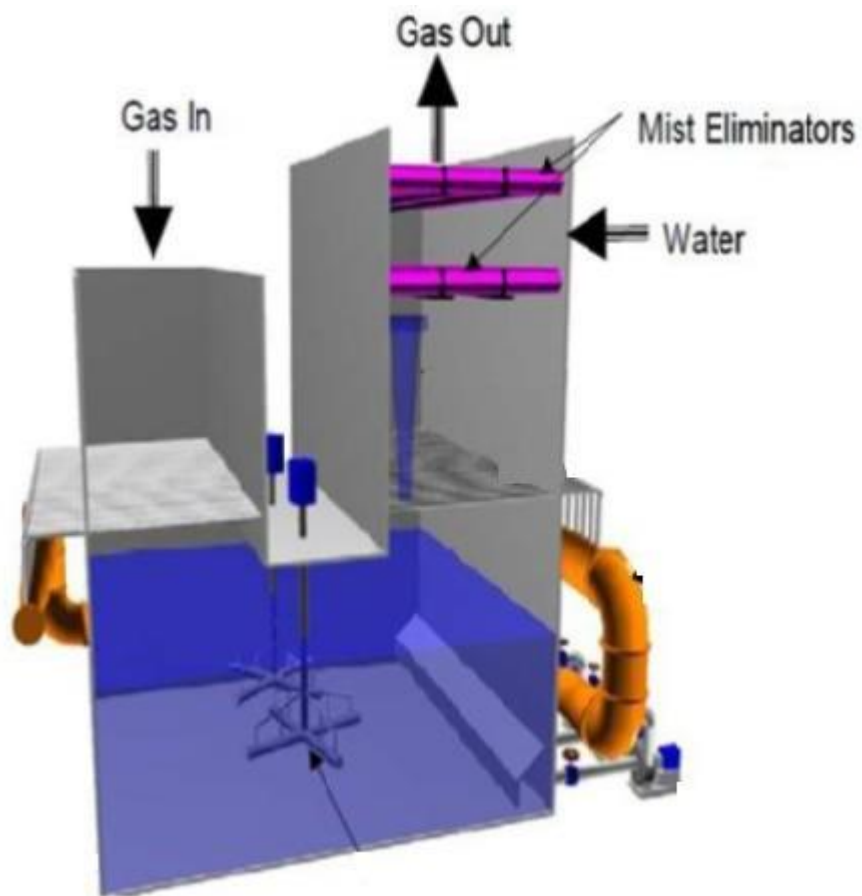
Process water is envisaged for Mist Eliminator washing. Process water analysis is provided below.

	CLARIFIED WATER ANALYSIS		
1.	Calcium	CaCO ₃	75.2
2.	Magnesium	CaCO ₃	30
3.	Sodium	CaCO ₃	15
4.	Potassium	CaCO ₃	0
5.	Total Cations	CaCO ₃	120.2
6.	Chloride	CaCO ₃	22
7.	Sulphate	CaCO ₃	32.5
8.	Bicarbonates	CaCO ₃	65.7
9.	Carbonates	CaCO ₃	0
10.	Nitrates	CaCO ₃	0
11.	Total Anions	CaCO ₃	120.2
12.	Iron	Fe	0
13.	Silica	SiO ₂	14
14.	PH		7.6-8.0
15.	Turbidity (Max)	NTU	10
16.	Organic Matter (Oxygen absorbed from acid Permanganate in 4 hrs)	Mg/l	0.3

Note: Clarified water is used from Condenser Cooling (CW) Water system as make and flushing requirement. The CW system is expected to operate at about 2.0-2.5 cycles of concentration(COC) with suitable chemical treatment program using acid, scale & corrosion inhibitor dosing. As CW blow down water is tapped from CW system, the water quality of CW blow down shall accordingly be arrived by the bidder.

- Water Quality shall be arrived by the bidder considering the COC – 2.5

1.3 MIST ELIMINATOR ARRANGEMENT AND MIST PARTICLE SIZE DISTRIBUTION:



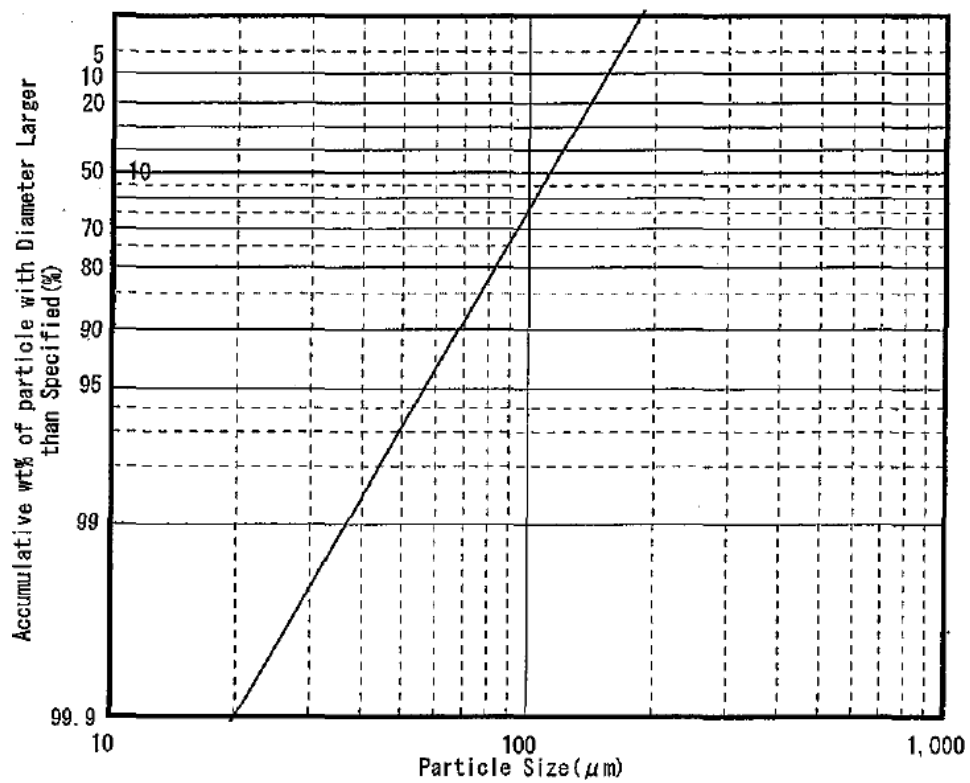
Typical sketch

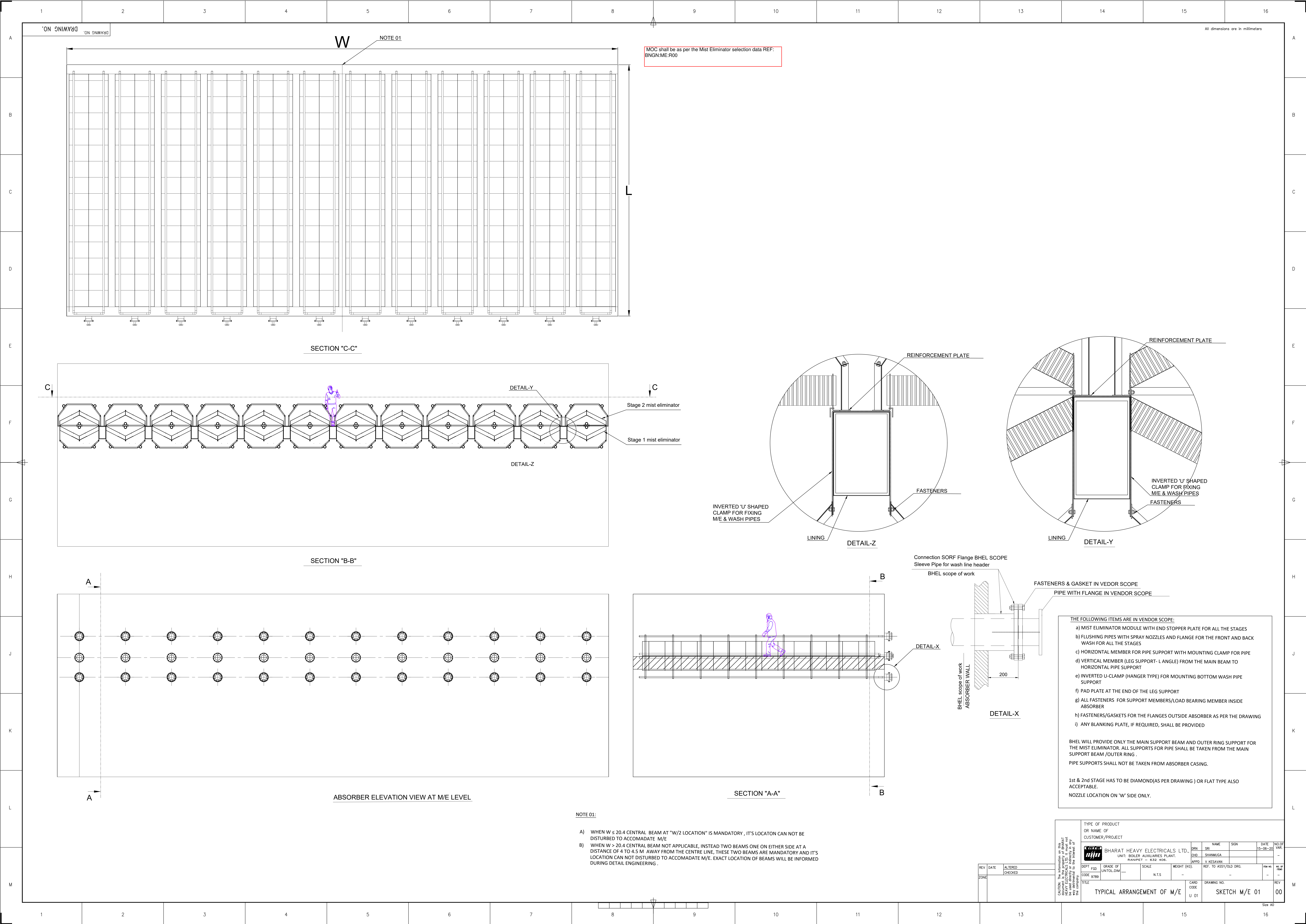
L-Length-6900 mm, W-Width-12900 mm

Note:

Bidder can offer either Flat or Roof type (diamond shape is also acceptable) for the Mist Eliminator. Washing and Pipe supports shall also be offered by the bidder as per specification.

Fig. 2 Mist Particle Size Distribution(EXPECTED VALUE)





MOC shall be as per the Mist Eliminator selection data REF:
BNGN:ME:R00

SECTION "C-C"

SECTION "B-B"

DETAIL-Z

DETAIL-Y

DETAIL-X

SECTION "A-A"

ABSORBER ELEVATION VIEW AT M/E LEVEL

NOTE 01:

- A) WHEN $W \leq 20.4$ CENTRAL BEAM AT "W/2 LOCATION" IS MANDATORY , IT'S LOCATON CAN NOT BE DISTURBED TO ACCOMADATE M/E
- B) WHEN $W > 20.4$ CENTRAL BEAM NOT APPLICABLE, INSTEAD TWO BEAMS ONE ON EITHER SIDE AT A DISTANCE OF 4 TO 4.5 M. AWAY FROM THE CENTRE LINE, THESE TWO BEAMS ARE MANDATORY AND IT'S LOCATION CAN NOT DISTURBED TO ACCOMADATE M/E. EXACT LOCATION OF BEAMS WILL BE INFORMED DURING DETAIL ENGINEERING .

THE FOLLOWING ITEMS ARE IN VENDOR SCOPE:

- MIST ELIMINATOR MODULE WITH END STOPPER PLATE FOR ALL THE STAGES
- FLUSHING PIPES WITH SPRAY NOZZLES AND FLANGE FOR THE FRONT AND BACK WASH FOR ALL THE STAGES
- HORIZONTAL MEMBER FOR PIPE SUPPORT WITH MOUNTING CLAMP FOR PIPE
- VERTICAL MEMBER (LEG SUPPORT- L ANGLE) FROM THE MAIN BEAM TO HORIZONTAL PIPE SUPPORT
- INVERTED U-CLAMP (HANGER TYPE) FOR MOUNTING BOTTOM WASH PIPE SUPPORT
- PAD PLATE AT THE END OF THE LEG SUPPORT
- ALL FASTENERS FOR SUPPORT MEMBERS/LOAD BEARING MEMBER INSIDE ABSORBER
- FASTENERS/GASKETS FOR THE FLANGES OUTSIDE ABSORBER AS PER THE DRAWING
- ANY BLANKING PLATE, IF REQUIRED, SHALL BE PROVIDED

BHEL WILL PROVIDE ONLY THE MAIN SUPPORT BEAM AND OUTER RING SUPPORT FOR THE MIST ELIMINATOR. ALL SUPPORTS FOR PIPE SHALL BE TAKEN FROM THE MAIN SUPPORT BEAM /OUTER RING .

PIPE SUPPORTS SHALL NOT BE TAKEN FROM ABSORBER CASING.

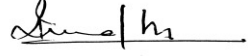
1st & 2nd STAGE HAS TO BE DIAMOND (AS PER DRAWING) OR FLAT TYPE ALSO ACCEPTABLE.

NOZZLE LOCATION ON 'W' SIDE ONLY.

TYPE OF PRODUCT OR NAME OF CUSTOMER/PROJECT		DRN	SRI	NAME	SIGN	DATE	NO. OF VAR.
BHARAT HEAVY ELECTRICALS LTD., UNIT: BOILER AUXILIARIES PLANT, RAIPUR - 832 406.		CHD	SHANMUGA			15-06-20	-
DEPT FGD		APPD	V. KESAVAN				-
GRADE OF UNITS/DIM		SCALE	WEIGHT (KG)	REF. TO ASSY/OLD DRG.		REV NO.	NO. OF REV.
CODE 9789		N.T.S	-	-		-	-
TITLE		CARD CODE	DRAWING NO.	REV		REV	
TYPICAL ARRANGEMENT OF M/E		U 01	SKETCH M/E 01	00		00	

 Ranipet		MANUFACTURER'S NAME & ADDRESS BHEL/ BHEL APPROVED SOURCE		STANDARD QUALITY PLAN				PROJECT: AS PER PO.							
				ITEM: MIST ELIMINATOR WASHING SYSTEM		QP. NO.: MIST ELIMINATOR :742 Rev No. : 00 Date: 27.04.2020 Page 1 of 2									
				SUB SYSTEM: MIST ELIMINATOR											
SL NO	COMPONENT & OPERATION	CHARACTERISTICS	CLASS OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENTS	ACCEPTANCE NORMS	FORMAT OF RECORD		Agency			REMARKS	
					6							M	B	C	
1	2	3	4	5	M	B/C	7	8	9	D	10			11	

1.0	RAW MATERIAL													
1.1	Inspection of incoming Material		Major	Verification of MTC	100%	100%	Manufacturer's Test Certificates	Test certificates.	√	P	V	-		
1.2	Inspection of semi-finished goods(plates, profiles, pipes, nozzles etc.	Visual & Dimension	Major	Visual & Dimension	Each Heat	Each Heat	Approved Drawing / P.O.	Test certificates.	√	P	V	-		
2.0	IN PROCESS INSPECTION													
2.2	Inspection of parts and profiles after cutting (profile, plates etc.)	Visual & Dimension	Critical	Visual & Dimension	Random	Random	Approved Drawing / P.O.	Inspection Report	√	P	V	-		
3.0	FINAL INSPECTION AND DOCUMENTATION													
3.1	Final Dimensional Inspection of all items	Visual & Dimension	Major	Visual & Dimension	Single module of each type	Single module of each type	Approved Drawing / P.O.	Inspection Report	√	P*	W	-		

M – Manufacturer / Subcontractor, B - BHEL /BHEL Authorized Inspection Agency, C - Customer, P - perform, V - Verification of reports W - Witness, TC - Test certificate "D" – Record, identified with tick (√) shall be essentially included by Supplier in QA documentation.	Prepared by	Reviewed by	Approved by
	 Sanjib Pandit (AE/QA)	 Rakesh Kumar Madhu (Dy Manager / QA)	 K C Gandhiparimalam (DGM/QA)

 Ranipet		MANUFACTURER'S NAME & ADDRESS BHEL/ BHEL APPROVED SOURCE		STANDARD QUALITY PLAN				PROJECT: AS PER PO.							
				ITEM: MIST ELIMINATOR WASHING SYSTEM		QP. NO.: MIST ELIMINATOR :742 Rev No. : 00 Date: 27.04.2020 Page 2 of 2									
				SUB SYSTEM: MIST ELIMINATOR											
SL NO	COMPONENT & OPERATION	CHARACTERISTICS	CLASS OF CHECK	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENTS	ACCEPTANCE NORMS	FORMAT OF RECORD		Agency			REMARKS	
					6							M	B	C	
1	2	3	4	5	M	B/C	7	8	9	D	10			11	

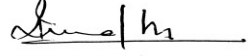
4.1	Review of Final Documentation	Inspection Reports & test certificates, Quality	Major	Visual & Verification	100%	100%	Drawing / P.O.	QC Dossier	√	P	V	-	
-----	-------------------------------	---	-------	-----------------------	------	------	----------------	------------	---	---	---	---	--

Note: * 100% by manufacturer / supplier.

- Latest version of standards & Specification shall be applied.
- Materials shall be procured in compliance to Functional Technical Specification.
- Gauges and measuring instruments with valid calibration only shall be used.
- Inspection / Inspection waiver / approval by BHEL does not absolve Supplier's responsibility for conformity of the specification as per the terms of PO.
- BHEL /BHEL Authorized representatives shall have the right to witness the necessary inspection and testing of goods mentioned in the PO.
- In case of Vendor Drawing & Datasheet, it needs approval by BHEL Engineering.
- This QP shall be read along with relevant PO, BHEL Specification/Drawing/Approved Datasheet.

Record of revision

Rev no	Date	Description
00	27.04.2020	Original Issue – First submission

M – Manufacturer / Subcontractor, B - BHEL /BHEL Authorized Inspection Agency, C - Customer, P - perform, V - Verification of reports W - Witness, TC - Test certificate "D" – Record, identified with tick (√) shall be essentially included by Supplier in QA documentation.	Prepared by	Reviewed by	Approved by
	 Sanjib Pandit (AE/QA)	 Rakesh Kumar Madhu (Dy Manager / QA)	 K C Gandhiparimalam (DGM/QA)

*(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_____

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 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 Indian Penal Code (IPC) and Prevention of Corruption 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 and exclusion from future contracts

If the Bidder(s)/ Contractor(s), before award or during execution has committed a transgression through a violation of Section 2 above, or 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.
- 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 /Subcontractors

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 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 organisation.
- 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 currency of IP, the same shall be binding and continue to be valid despite the lapse of this pact as specified above, unless it is discharged/ determined by 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)

Place-----

Date-----

Witness:_____

(Name & Address) _____

For & On behalf of the Bidder/

Contractor

(Office Seal)

Witness:_____

(Name & Address) _____

List of Consortium Banks (As on 22.02.2017)			
	Nationalised Banks		Nationalised Banks
1	Allahabad bank	19	Vijaya Bank
2	Andhra bank		Public Sector Banks
3	Bank of Baroda	20	IDBI
4	Canara Bank		Foreign banks
5	Corporation bank	21	CITI Bank N.A
6	Central bank	22	Deutsche Bank AG
7	Indian Bank	23	The Hongkong and Shanghai Banking Corporation Limited
8	Indian Oversea Bank	24	Standard Chartered Bank
9	Oriental bank of Commerce	25	J P Morgan
10	Punjab National Bank		
11	Punjab & Sindh Bank		Private banks
12	State Bank of India	26	Axis Bank
13	State Bank of Hyderabad	27	The Federal Bank Limited
14	Syndicate Bank	28	HDFC
15	State Bank of Travancore	29	Kotak Mahindra Bank
16	UCO Bank	30	ICICI
17	Union Bank of India	31	Indusind Bank
18	United Bank of India	32	Yes Bank

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.

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.

Online SRF Submission Procedure

Following are the formalities to be completed by your company for registration purpose.

NOTE: BEFORE PROCEEDING FOR ONLINE REGISTRATION “ PLS READ STEPS FOR FILLING UP ONLINE REGISTRATION FORM - HELP MENU” - DETAILS ATTACHED WITH THIS MAIL

With effect from 01.04.2015 onwards, we have migrated to online Supplier Registration Form (SRF) as per our Corporate guidelines. **Supplier Registration Form (SRF)** is to be fed in our BHEL website portal – ie., **PDF documents of SRF and its annexure as called for shall be signed by authorized signatory & uploaded in portal.**

We request to visit our Web Site : **www.bhel.com** and click under heading "Supplier Registration" and fill up the "**Supplier Registration Form**" which is available in the Online Supplier Registration Portal.

Or else, copy the following URL Link and paste in the web link address: **http://www.bhel.com/vender_registration/vender.php** and proceed with.

Or else, type directly as **http://203.129.195.108**

Click the button "search material" on the home page of supplier registration portal and search thoroughly your required material / product

After completing the material search then proceed for User Id & Password for filling up the details of registration requirements. **Note:** If you are an already registered supplier with any of our BHEL Unit - pls select "**existing permanent supplier**" or else select "**New Registration**" and then proceed accordingly.

Please note that for a foreign suppliers' there is a separate format to be filled in, which may be taken care suitably.

After successful submission of SRF along with all annexures as called for thro' online i.e., authorized signatory signed pdf documents of SRF and its annexures are to be uploaded thro' online portal and confirm the same in "**form dispatch**" area ie., registration part-4 – wherein supplier has to confirm that all the documents were submitted "online" and click the button "**confirm**". After clicking confirmation button, the same will be appearing against BHEL Ranipet for registration.

Looking for a long successful & sustaining business association with BHEL

Annexure - F**(Applicable to all New vendors)**

(Vendors registered with BHEL, Ranipet and having vendor code need not submit this document.)

Sl.No	Parameters	Supplier Comments with necessary supporting documents
1	Name and Address of the Company	
2	Contact Details of Company: Contact person / Designation / Mobile No / Email ID / Fax No / Phone No etc.,	
3	Is the company already registered with any of the BHEL units? If so details may please be given.	
4	Nature of Business and line of products with respective HSN	
5	Production Capacity per Annum with detailed Manufacturing / Testing Facilities. If required supporting documents shall be uploaded	
6	Report from third party business rating agencies like Dun & Brandstreet (D&B), Credit Reform etc. For any new supplier this document is mandatory and without which submitted offer is liable for rejection.	
7	Experience list / Performance Certificate for Offered / Similar products : Requested to attach list of present customers with name and address with contact details like email, phone and contact person etc., for offered / similar type and size of item and equipment with whom you have continuous business since last three years.	
8	Framework Confidentiality Agreement cum Undertaking to be submitted along with offer.	
9	If Foreign Company/Principal/Mill/Manufacturers refuses to deal directly with BHEL (to be put on record) and insists on availing the services of an Indian Agent, deed of agency agreement between the Foreign Company / Principal / Mill / Manufacturers and Indian agent should necessarily be submitted. If not submitted offer is liable for rejection.	
10	In cases, other than Indian Agents, valid authorisation certificates are to be submitted. If not submitted, offer is liable for rejection.	
11	For a document in language other than English, a self-attested English translated document to be attached	
12	Dealer / Trader / Distributor / Stockist / Channel Partners / Holding Company / Non-Manufacturer needs to submit an Authorization Certificate, clearly indicating the validity period as well as rights granted by respective Foreign Company / Principal / Mill / Manufacturers to them. i.e. to negotiate / quote / supply / after sales service etc.	
13	Quality - Requested to enclose copy of certificate for Quality Management System (QMS) obtained and Table of Contents of quality manual.	
14	If not certified for ISO 9001, requested to enclose copy of Company owned Quality Management System or written down procedure	
15	Banker's Certificate- Requested to enclose banker's certificate certifying credit worthiness.	
16	Copy of Audited Annual Accounts for Last 4 Years- Supporting Documents to be uploaded	

ANNEXURE –B
GENERAL TERMS & CONDITIONS
(FOR GUIDANCE TO THE SUPPLIERS)

A] Submission of Offer

a) Invitation for bid

Tenders are invited through electronic mode from eligible suppliers in case of open tenders and from suppliers to whom the enquiry is addressed in case of Limited / Single Tender.

The offers shall be posted into the system before the date and time specified in the tender.

The offer shall be sent on single part / two part / three part basis as specified in the main tender document.

Bids shall be submitted through e-Procurement portal, <https://bhel.abcprocure.com> of M/s e-Procurement Technologies, Ahmedabad who is our solution provider.

b) Hardware and Software requirements for participating in e-tender

Requirement for participating in e-Procurement is as under:

- i) A Computer with internet connectivity (Internet Explorer 9.0 (32.bit Browser only) & above)
- ii) Digital Signature Certificate (Class 3- SHA2-2048 BIT- with both Signing and Encryption component separately).
- iii) JAVA (Version 1.8 Update 45).
- iv) Steps for Hardware and software configuration is detailed at <https://bhel.abcprocure.com/EPROC/> under title “Minimum system requirements and Settings Document for BHEL User and Bidders”. **c) Instructions for Registered Suppliers**

For all types of tenders (Single / Limited / Open) an automated email alert regarding issue of the Tender will be sent by the e-procurement portal to all Suppliers registered with BHEL, Ranipet for the item/s for which the tender is issued.

In case of open tenders, Registered suppliers with registered DSC will have to login with their user id/password & DSC and search for the Open Tender. To participate in event and to submit bid, a bidder needs to agree the terms and conditions.

Registered suppliers without DSC will have get their profiles approved by mapping DSC after login.

To know the procedure for obtaining Digital Signature Certificate (DSC), suppliers who are not having the DSC are advised to visit our website www.bhel.com →Tender Notifications →Sample Checklist. **d) Instructions for new suppliers wishing to bid against open tenders**

New, unregistered suppliers wanting to bid against open tender/s will have to first register themselves in <https://bhel.abcprocure.com> as new supplier by clicking the “Register” button.

After entering the Income Tax Permanent Account Number (PAN) details and pressing “Enter”, they have to select the respective BHEL Unit for which they want to participate in the Open Tender and also fill up other relevant Company information as a one-time activity. On successful registration, your profile will be approved by the authorized officer and you can login to portal and can participate in the procurement event.

To participate in a tender, you need to login to the portal. You must be an approved registered user. If you are not a registered user, you can register yourself by clicking upon the “Register” link. You need to have a valid vendor code and password to login to the portal. Enter your Vendor code, password and click on Login button after Login, you need to select your digital signing and encryption certificates certificate. The DSC will be approved by M/s e-Procurement Technologies/ Authorised officer of BHEL.

As required by the tender, the necessary documents have to be filled-in online, in the provided template. Additional documents required are to be scanned and uploaded as .pdf file. Suppliers are advised to take note that the maximum space that is provided for uploading the documents that are to be attached is 300 MB. However the size of an individual document cannot exceed 10 MB. For any clarification on submission of offer on line, attention of the Supplier/s is invited to our document “Bidder Manual for BHEL Bidders” hosted in the home-page of the e-procurement portal. During normal business hours, helpline maintained by the service provider M/s e-Procurement Technologies is available for clarifying any doubts of supplier/s. The helpline numbers are +91-79-40270599/508/560/590/513 and email id is: Bhel.Support@abcProcure.com . Bidder can also refer to “Bidder Manual for BHEL Bidders” hosted in the home-page of the e-procurement portal <https://bhel.abcprocure.com>.

Typical documents that would be required as part of tender submission would be a)

Complete technical Offer with details, catalogues, as applicable.

- b) **Un-priced bid** (i.e. Bid without the Price) as per given format, if any.
- c) **Filled-in BHEL’s Standard Terms & Conditions** as per Annexure enclosed with the Tender Document,
- d) **Deviation summary** submitted in two parts – giving the summary of technical deviations separately and the commercial deviations separately, if any and
- e) **Supporting documents** to substantiate equivalent material specifications / sections, where quoted for.
- f) Where asked for, **Client list** with their full address including detail of contact person with phone no., fax no. & e-mail ID (if any) to whom the same / similar items are supplied in the past two years. The date of supply may also be indicated, against each client.
- g) Suppliers can also upload their credentials by way of submission of Performance certificate/s issued by their customer/s detailing the quantity supplied and specification along with the un-priced PO copies and proof of supply along with the offer.

Technical acceptance of offer by BHEL shall be based on the evaluation of offer and the submitted documents.

- h) **Bidders who are not already registered with BHEL Ranipet** are requested to submit the Supplier Registration Form (SRF) online (<http://supplier.bhel.in/>) for evaluating and registering as an approved vendor. The Supplier Development Cell (SDC) of BHEL, Ranipet would process the SRF for evaluation / registering the Supplier. Don’t send hardcopies of SRF to BHEL-Ranipet, **only** online submission is accepted. This registration process is a separate / parallel activity and do not mix-up with submission offers.

Note

- (i) The materials offered, shall conform to the specification and scope attached in the tender.
- (ii) In case the offered materials are not conforming to the Enquiry material Specification, such offers would not be considered for evaluation and would be rejected.

Where equivalent specifications are offered, considering such offers will be at the sole discretion of BHEL. Wherever alternative standards / specifications are offered by Bidder, the Bidder shall provide sufficient documentary evidence to ensure equivalence to the designated standards / specifications, failing which the offer would be considered as not technically acceptable and hence shall stand rejected.

- (iii) All taxes and duties payable as extra to the quoted price should be specifically stated in offers (as appearing in the online template).

Offer/s from within India shall be submitted along with the applicable HS Number and the applicable Goods & services Tax (GST) for each quoted item, failing which the purchaser will not be liable for payment of such taxes and duties. Our GST No: **33AAACB4146P2ZL**.

- (iv) The un-priced bid shall be used to indicate relevant commercial terms such as scope of freight and insurance, applicability of duties and taxes etc. All Commercial terms are to be indicated clearly in the offer.

- (vi) No changes shall be entertained once the bid is opened unless otherwise specifically agreed to in writing by BHEL.

- (vii) Money values other than for those items appearing in the un-priced bid template shall not be indicated anywhere in the un-priced bid.

- (viii) Time required for inspection (at Supplier's works), should be clearly given in terms of numbers of working days.

- (x) **Offers sent by FAX / E-mail:** would not be entertained.

- (xi) Bid should be free from correction, overwriting, using corrective fluid, etc. Any interlineation, cutting, erasure or overwriting shall be valid only if they are attested under full signature(s) of person(s) signing the bid else bid shall be liable for rejection.

- (xii) Registration process for items required by BHEL is always open at <https://supplier.bhel.in>. Prospective suppliers (including MSEs & owned by SCs/STs) may visit this site and apply for registration in the respective Unit.

Price Bid in conformance with the specification and terms as given in the Un-Priced bid document.

Caution on submission of price bids thru EPS:

The suppliers are severely cautioned to note that the price bid document accepts the price in figures only. It does not allow the supplier to write the value by words. Therefore all care shall be exercised by the supplier while filling in the figures. Once the price bid is opened no option is available for the supplier to retract the offer under any grounds. If a supplier, for any reason whatsoever approaches BHEL with a request for change in the price, it would be treated as going back on the offer submitted. In such cases, action would be initiated by BHEL for suspending further business dealings with such suppliers as per policy of BHEL which prevails at that point of time.



Foreign / Overseas suppliers are hereby informed that offers with differential currencies are not permitted for a given tender document.

Note

- (i) The price break-up should be in line with technical specification / scope of the tender. (Cost of material, packing charges, forwarding charges, freight and insurance charges shall be shown appropriately, as applicable).
- (ii) Unless otherwise specified as a part of the tender condition, No Price Variation Clause will be entertained and No advance payment will be made by BHEL.
- (iii) In case, there is a discrepancy in the term quoted in techno-commercial bid and price bid, the term as per the techno-commercial bid (Part I) shall hold good and the commercial term quoted in the Price Bid (Part II) shall not be considered.
- (iv) In their own interest, all Tenderers are advised to double check their prices, applicable duties and taxes.
- (v) The quotation should be valid at least for a period of 90 days from the tender opening date.
- (vi) Indian bidders should submit the prices in Indian Rupees only.
- (vii) Foreign bidders may submit their bid in foreign currency. The currency for quoting shall be selected from the drop-down menu provided.
- (x) Indian Suppliers shall quote on FOR Destination basis only. Destination is BHEL, Ranipet Stores or BHEL Project Site as specified in the tender requirement. Foreign Suppliers shall quote on CFR Chennai Seaport Delivery and Insurance will be in BHEL's scope. No other delivery terms shall be acceptable. Shipment shall be arranged by the Seller on *Liner in / Liner out basis*. As per Government of India guidelines, BHEL Ranipet being a Government of India Undertaking the Bill of Lading shall be made with the Shipper as "Government of India". This shall be specifically confirmed by the Bidder.
- (xi) Where the cargo is containerized, Container washing charges, stuffing charges and / or any other such charges would be to the account of the supplier, where the containers are to be stuffed at the works of the supplier.

B] Opening of Offers

- a) **Tenders can be submitted up to 1400 Hours on tender opening due date. Part I will be opened on the same day at 1430 Hours. Results of the tender opening will be available for viewing for upto 7 days from the date of opening.**
- b) **Requests by Bidders for extension of due date will not be entertained by BHEL.**
- c) Price Bid opening will be done through e-mode / Reverse Auction method (English method) which will be decided after techno-commercial bid evaluation is completed. All tenderers would have to specifically give their acceptance for this in their bid/s.

Note

- (i) Bids including all enclosures and supporting documents like catalogues, pamphlets, etc., shall be provided in ENGLISH language only.

(ii) In exceptional circumstances, at its option, BHEL may consider extending the due date/s for the tender openings for reasons such as (but not limited to) paucity of offers etc. However, sufficient notice would be given by BHEL for such extension.

(iii) Deviations shall be summarized and provided in a “Deviation Statement”, listing the points and the deviation against each point.

(iv) BHEL reserves the right to increase or decrease the tendered quantity and to order on more than one vendor at the lowest acceptable price to BHEL. In ordering on more than one source, the ratio of quantity split will be as specified in the tender terms.

If not explicitly specified, BHEL reserves the right to split the quantity of the enquiry as follows: 70% quantity being ordered on the original lowest bidder (L1) and balance 30% on the next higher bidder/s excluding H1, who accepts the L1 price. However, the final decision to split the order rests with BHEL only.

In the event that the other than L1 suppliers do not accept the L1 price, then the balance will be reverted to the original L1 and the original L1 shall be bound to accept the balance of the enquiry quantity kept reserved for order splitting. This decision would be given by BHEL within 60 days of the price bid opening.

Notwithstanding the quantum of split that may be indicated in the main body of the enquiry, bidders are advised to note that the splitting of the orders will be decided by BHEL after the evaluation of the techno-commercial and price bids.

(v) Offers for part quantities on item level basis are not acceptable to BHEL. While tenderers can quote for some or all the tendered items, no supplier shall quote for partial quantity of any given enquiry item. Such partial offer would not be considered in the enquiry for that item. Suppliers are to note that the evaluation unless otherwise specified will be on item level and not for the tendered items as a whole.

C] Evaluation of Offers

a) The price bids including the impact price (if any) of the technically acceptable offers alone shall be opened.

b) Offers with pre-conditions (like conditional discounts) for price are liable to be not considered / rejected. For evaluation such conditions would be removed and only the base offer would be considered for evaluation and comparison.

d) In the event of any change in scope / quantity arising out of the discussions, offerers would be given a chance to submit their revised offer / Impact bids. The option for the revised offer / impact offer will be triggered by BHEL. The Supplier then will have the facility to feed-in the revised price / impact price as per the provision given by BHEL. The impact price can be positive or negative (or nil). The impact price option shall contain only the price addition / deletion for such change in the scope / quantities, over and above the original scope and price quoted. The original price quoted would remain unchanged. The total price would then be computed by the arithmetic addition of the original price and the impact price. Where BHEL gives the option of submitting the revised offer, the impact would be computed as the arithmetic difference of the revised price and the original price.

- e) For evaluating the overseas offers, CFR Chennai Sea Port price quoted will be taken into account. The cost to BHEL will be arrived at by loading the applicable customs duty project wise, insurance charges, inland transportation charges to BHEL stores and LC charges etc., f) Deleted.
- g) BHEL reserves the right to reject without assigning any reasons / load any offer with factors other than already specified for such offers having deviations to BHEL Specifications, Standard Terms & Conditions at its discretion. The decision of BHEL in this regard shall be final.
- h) BHEL reserves the right to reject an offer due to unsatisfactory performance during tender finalisation / execution of a contract at any of BHEL projects / units in the past or if unsatisfactory performance report is received from the party/s referenced by the supplier at any time during tender finalisation.
- i) BHEL reserves the right to operate Purchase / Price preference to Government of India Undertakings, which shall be given as per the guidelines of Government of India given from time to time and / or relax the Terms and Conditions of the tender.
- j) For the purpose of comparing prices, tender prices shall be converted to Indian rupees and the conversion shall be made by using the TT Selling rate of State Bank of India (SBI) prevailing on the date of opening of Techno-Commercial / Unpriced bids. If the relevant day happens to be a bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken. This exchange rate will be followed till placement of order. Tenderers may please note that even if an impact price is taken as in (d) for purpose of price evaluation and arriving at the rank; the exchange rate will be taken as explained above.
- k) Unless otherwise specified, evaluation will be on individual line item basis only and ordering will be on respective L1 vendors.
- l) BHEL reserves the right to conduct negotiations on the “Price” and “Other Commercial Terms and Conditions” with the lowest ranked offerer at any time after the bid opening but before the release of the Purchase Order and If so required by BHEL, Supplier may have to share their costing sheet with BHEL.
- m) Bidders are required to confirm in writing in their techno-commercial document that other than themselves (the bidder) none of its group companies, concerns or affiliates etc., are participating in the tender either directly or indirectly or through any other agency under the same proprietor / common partner(s)/ common Directors. If during the evaluation of the bids it is found that the bidder has submitted the offer in violation of this condition then all the offers received from the group companies would stand rejected. If such relationship is found at a later date where the Purchase Order has been issued, then BHEL would cancel the Purchase Order and initiate suitable action/s under the contract/s including but not limited to invoking the Risk Purchase clause of the order and other applicable legal provisions / guidelines of BHEL including guidelines on suspension of business dealings. (Please see clause L sub-clause c).
- n) For this procurement, Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 28.05.2018, 29.05.2019 & 04.06.2020 and subsequent Orders issued by the respective Nodal Ministry shall be applicable even if issued after issue of this NIT but before finalization of contract/ PO/ WO against this NIT.

In the event of any Nodal Ministry prescribing higher or lower percentage of purchase preference and/ or local content in respect of this procurement, same shall be applicable.”

Preference to Make in India including counter offering will be as per the Public Procurement (Preference to Make in India), Order 2017 available in the following links <https://dipp.gov.in/public-procurements>

http://dipp.nic.in/sites/default/files/publicProcurement_MakeinIndia_15June2017.pdf

http://dipp.nic.in/sites/default/files/Revised-PPP-MII-Order-2017_28052018.pdf

https://dipp.gov.in/sites/default/files/PPP-MII%20Order%20dt%2029th%20May%2019_0.pdf

<https://dipp.gov.in/sites/default/files/PPP%20MII%20Order%20dated%204th%20June%202020.pdf>

D] Execution of the Order

a) BHEL will have the option to pre-inspect the materials at Supplier's works by BHEL's own inspector or by third party agency appointed by BHEL or BHEL's end customer/s. The mere act of the pre-dispatch inspection (PDI) does not absolve the Supplier from giving the specifications as agreed upon in the Purchase Order. In the case of inspection being carried out by a third party inspector (TPI) as per the extant practice, the TPI would forward the Inspection Report (IR) along with Test Certificates and other related documents to the Quality Assurance (QA) Department of BHEL. The QA department after scrutinising the report/s submitted by the TPI would issue the Material Dispatch Clearance Certificate (MDCC). Suppliers are hereby informed that materials should be dispatched only after getting the MDCC, failing which the materials may be rejected on receipt at BHEL Stores.

b) In the case of overseas suppliers Inspection call for carrying out the inspection shall be given 30 days before the scheduled contract delivery date. The Inspection date/s given by the Supplier shall be on firm basis. For local Suppliers the Notice period of Inspection shall be 10 working days.

c) Deviations, if any pointed out by the visiting Inspection team of BHEL shall be corrected and the items as per specification shall be dispatched on or before the contract delivery date after getting the MDCC.

d) The final inspection for acceptance will, however be carried out at BHEL's works at Ranipet.

e) The contract delivery date is the date of receipt at BHEL Stores for suppliers in India, applicable in the case of FOR Destination Contracts.

For ex-works contracts or FOR dispatching station indigenous contracts, the date of the Lorry way bill issued by the authorised transport carriers of BHEL / Railway Receipt / Courier Way bill / Airway bill or any such dispatch documents of carriage approved by BHEL would be considered as the Contract Delivery Date. In the case of CFR contracts with overseas suppliers, the B/L date shall be taken as the Contract Delivery Date

f) Travel & other local stay cost for the Inspectors sent by BHEL will be to BHEL account, but other Inspection Charges, if any shall be to the account of the Seller only.

g) The supplier shall arrange for packing suitably in all respects for normal transport by sea / rail / road and Materials shall be suitably protected against effect of tropical salt laden atmosphere in the event of shipment being delayed at ports / store yards and as per BHEL TDC.

h) Foreign suppliers shall dispatch on CFR agreed Sea-Port basis, according to the contract conditions. Indian suppliers shall dispatch on free delivery (door-delivery) at BHEL stores basis only. Unloading the materials at BHEL Stores would be to the account of BHEL only.

i) In the event of any short supply, it shall be the responsibility of the supplier to deliver such short supplied/ missing items on Free-of-Cost basis at BHEL stores, including customs clearances at Indian Ports in the case of foreign suppliers.

k) Terms of payment:

k.1) For Indigenous Suppliers: Unless otherwise agreed to by BHEL, the standard payment terms of BHEL shall be: For non-MSE suppliers 100% payment made directly through EFT within 90 days from the date of receipt and acceptance of materials at BHEL Stores, Ranipet or 90 days from the date of acknowledgement of receipt of materials at destination specified. If any supplier asks for payment terms other than the above specified, then suitable loading on cost will be considered. **Loading of any deviation in the payment terms**

w.r.t tender terms will be “Base rate of State Bank of India (SBI) (as applicable on the date of bid opening: Techno-commercial bid opening in case of two part bids) + 6%, will be considered for loading for the periods of relaxation sought by bidders.

k.2) For MSE vendors (under Micro & Small category alone) 100% payment will be made within 45 days from the date of receipt and acceptance of materials at BHEL Stores, Ranipet or 45 days from the date of acknowledgement of receipt of materials at destination specified. Vendors to get themselves registered in Udyam registration Portal. The existing Micro & Small vendors are to submit copy of CA certificate along with Udyog Adhar Registration Certificate.

l) NOTE:

Where the destination specified is other than BHEL Stores Ranipet, for claiming payment, Supplier has to submit proof of receipt of the materials at the destination by furnishing a copy of the acknowledged despatch document (LR/RR/Courier receipt etc.) .

If the Bidder is bidding for the first time and wants to be considered as an MSE then, the Bidder shall submit document evidencing that they are an MSE along with a certificate from a Chartered Accountant certifying the status of their Unit / Works clearly specifying the address of the works which is to be considered as MSE and send the same to BHEL, Ranipet either before the tender opening date or upload it as a part of the tender document in the e-procurement portal. Where the document is submitted electronically a hard copy shall invariably be sent within a reasonable period (not exceeding 30 days) from the bid opening date for the purpose of BHEL's records. If the hard copy is not received within this specified time, then the supplier would be treated as a non-MSE. BHEL will not be responsible for any postal / courier / delivery delays.

For approved vendors the status as on the date of the bid opening as available with BHEL Ranipet's records shall be used for reckoning the status of the Bidder as an MSE or otherwise.

Offer/s received without these documents will be treated as non-MSE and order finalization will be done based on this premise. Documents submitted after Bid-opening will not be considered in this tender. This provision for MSE will apply subject to the condition that the participating MSE meets the tender requirements.



For approved suppliers, in case of any change in the MSE status, it shall be the responsibility of the Bidder to notify the change as a part of the Bid document. If at a later date it comes to the knowledge of BHEL, Ranipet that the change in the status has not been intimated by the Bidder and the order is obtained under the premise of an MSE then BHEL would cancel the pending order against this tender and take necessary steps for suspension of the business dealing with the Bidder as per the procurement policy of BHEL. Similarly if a supplier claims MSE status after the Part I bid opening, then the same would not be considered in the tender.

In case after the bid opening it is seen that no MSE has become L1, then depending on the nature of the item, if it is not possible to split the tendered items / quantities on account of reasons like customer contract requirements of supplying one make for a given project or technical reasons like the tendered item being a system etc. then BHEL would not counter offer the L1 prices even though there may be MSE bidders within the +15% band of L1.

Other concessions for MSEs / Reserved sectors (Also for women owned MSEs and MSEs owned by SC/STs)

In addition to the concessions specified above, MSE suppliers will be eligible for such other concessions as per the MSME Act 2006 and any other benefits / concessions that may be announced by the Government of India from time to time.. However, such concessions as applicable at the time of tender opening alone will be applicable. Any concessions advised after tender opening will not be considered for the current tender.

Items that are reserved for MSE and for any other items for which reservations for Indian manufacturers are notified by the Govt. Of India, such concessions as prevailing on the date of tender opening shall apply as a part of this tender conditions. ii) Foreign Suppliers “100% thru’ irrevocable & unconfirmed LC at sight within 3 weeks from the PO date through any one of our Bankers listed elsewhere in the tender conditions for 100% value (less Agency

Commission, if any) valid up to the PO delivery period and 15 days thereafter for negotiation. All bank charges in India to BHEL's account and all other charges outside India to Supplier's account. **BHEL would load the price of foreign suppliers in order to bring them on common platform as per Indigenous Suppliers on the account of differential payment terms to Indigenous Suppliers. Loading of payment terms will be “Base rate of State Bank of India (SBI) (as applicable on the date of bid opening: Techno-commercial bid opening in case of two part bids) + 6%, will be considered for loading for the periods of relaxation compared to indigenous suppliers i.e. 90 days.**

m) Any incidence of tax like Income tax, Goods & Services Tax (GST) and Withholding any other similar tax / duties /levies imposed by the Government of India, or the State Government, where the BHEL Unit is located, deductible at Source, during the tenure of the Order shall be deducted by BHEL and necessary certification of the deduction (Tax deduction at Source) would be given. This is subject to the supplier fulfilling the necessary documentation as specified by the Government of India. (e.g. Tax Residency Certificate, PAN Number etc.)

n) The Guarantee period shall start from the “Date of receipt and acceptance of the materials at BHEL Stores.”

E] Liquidated Damages Clause:

BHEL will levy penalty as Liquidated Damages (LD), for delay in delivery. The damages shall be at the rate of ½% per week or part thereof subject to a maximum of 10% PLUS applicable Goods & Services Tax

(GST). The contract delivery date for purpose of L.D is the date of receipt at BHEL Stores for suppliers in India for F.O.R. Destination Contract and the date of dispatch clearance given by BHEL for overseas suppliers. For ex-works or F.O.R dispatching station contracts, the date of the dispatch document will be reckoned as the date of delivery for computing the LD. Supplier shall deduct the applicable LD from the first payment when raising the claim for the same. The applicable LD if any would be communicated by BHEL along with the dispatch clearance. It is taken by BHEL that Foreign Suppliers have confirmed their acceptance to BHEL for opening the LC for value which is the value of the order reduced by the applicable LD. The LD would apply on the undelivered portion only. In case of reasons attributable to BHEL for the delay in delivery (for e.g. delay in arranging the pre-inspection) then the delivery time would be reset to the extent of the time delay attributable to BHEL, with waiver of the LD. Delivery being the essence of BHEL's contract requirements, unless otherwise specified the LD would apply on the undelivered portion of the contracted items. **In the event that a Supplier does not accept the LD condition above, the offer would be loaded to the extent of the shortfall with respect to upper limit specified above.**

F) Miscellaneous

i) Role of Principals and Agents:

BHEL will deal directly with indigenous manufacturers only.

BHEL strongly discourages the engagement of Agents in India by foreign principals, to deal with BHEL, in BHEL's tenders.

BHEL will not enter into any correspondence with an Indian Agent.

The Indian Agent will not be extended the privilege given to the principals, such as that of attending the tender openings, attending technical discussions, commercial discussions or price negotiations and such like.

In case, in spite of the above, a foreign principal insists on engaging an Indian Agent, It is made clear by BHEL that:

It is the sole responsibility of the foreign principal to ensure the Agent does not represent any other foreign principal in a given tender.

An undertaking to this effect shall be given by the foreign principal that his / her Agent does not represent any other foreign principal in the tender. This document shall form a part of the techno-commercial offer.

A Principal shall authorise only one Agent to quote against each BHEL's tender. In the event a Principal authorises more than one agent to quote against a BHEL's tender, then all such offers will be rejected by BHEL in that tender. Principals are also advised to include BHEL's tender Number / Reference in their authorisation issued to the Agent.

If at any stage of the tender, BHEL finds that an Indian Agent has represented more than one foreign principal, all such offers of and all the foreign principals would be disqualified summarily in the tender inquiry.

BHEL will only give an intimation of notice of the disqualification. No correspondence would be entertained by BHEL, on their decision. Such decision of BHEL shall be irrevocable, firm and final and shall be binding on the tenderer.



BHEL, due to business reasons would ban, would have banned Indian agents from dealing with BHEL.

Any foreign principal who engages such a banned agent, or an employee of the banned agency, or any other person connected with the banned agency, at any time during the tender proceedings, would be disqualified from the tender proceedings. The decision of BHEL in this regard shall be final and be binding on the OEM.

Hence in their own interests, prospective tenderers may check with BHEL, the status of their proposed agent vis-à-vis BHEL.

In view of the requirement of BHEL, it is strongly suggested that in their own interest, foreign principals may desist from engaging any Indian agent and deal with BHEL directly and it is stressed that any Main producer proposing to deal with BHEL by engaging and through an Indian Agent does so at their own risk.

BHEL shall in no way be responsible for any consequences that may arise to the foreign principal on account of the antecedents / actions of their Indian Agent.

In the event of the foreign principal engaging an Indian Agent:

a) The Supplier shall furnish an authenticated copy of the Agency Agreement with his agent detailing the precise relationship between them and their mutual interest in the business along with techno commercial bid.

b) The Supplier shall furnish original authorization letter for the Indian Agent. The letter shall contain name, contact person, complete postal address including phone, fax and e-mail ID. It shall also spell out the type of services to be rendered by Indian Agent.

c) Indian Agent & Agency commission: An Indian Agent can represent only one Foreign Manufacturer against a particular Tender. The CFR price quoted by the foreign bidder shall include the agency commission. However, the agency commission component payable to their Indian Agents shall be shown separately in the Offer, either as a lump-sum or as a percentage of the quoted price. This will be paid by BHEL in Indian Rupees, on satisfactory receipt & acceptance of the materials. For calculation of Rupee equivalent of Agency Commission, exchange rate as prevailing on the date of Purchase Order will be taken and

d) For all discussions, technical clarification and negotiations etc. only the principal would be authorized for interaction with BHEL. The Agent shall not be a party to the discussions / negotiations and would not be normally allowed to participate.

ii) Terms & Conditions of Letter of Credit (L/C) for overseas suppliers (indicated for acceptance).

a) Unconfirmed irrevocable Letter of Credit at Sight only will be opened by BHEL. Confirmation of L/C is not preferred by BHEL. Also L.C will be opened in Lots in line with the staggered delivery.

b) All Bank charges out side India are to the Supplier's account and within India to BHEL's account.

c) In case of L/C extension caused by delays attributable to the Supplier, the L/C extension / commitment charges are to be borne by the Supplier.

iii) Other terms & conditions for letter of credit: - Documents for negotiation

- a) Signed Commercial invoice in quadruplicate, for a value not exceeding the draft amount, quoting the import Licence No and certifying goods evidencing shipment of the merchandise are as per Applicant's Purchase Order. The amount of invoice after deducting Indian Agent's commission, if any, should not exceed the Credit amount. (The Indian agent's commission, if any, is payable in India in Indian rupees only.)
- b) Certificate of Country of Origin, from the country of manufacture, issued by the Chamber of Commerce.
- c) One set of Original and two sets of Non-negotiable copies of 'signed', 'unmarked', 'clean on board' Ocean Bill of Lading, showing Shipper as "Government of India" Account M/s. Bharat Heavy Electrical Ltd, Unit: BHEL, Ranipet as consignee (The opening bank should not be notified as consignee), marked freight payable / prepaid at destination.
- d) Packing list in 4 copies in English, indicating Size wise Number of bundles / pieces shipped and weight.
- e) Certified copy of the fax / e-mail sent by the beneficiary to the applicant giving the following particulars of shipment, as the insurance is to be arranged by the Applicant in India: (a) Purchase Order Number & date; (b) Bill of Lading Number & date (c) Name of vessel; (d) Port of Loading; (e) Number of bundles / pieces and weight; (f) Invoice Number, date and value (g) Purchase Order item number's despatched. The cable / fax is to be sent within 2 working days of shipment.
- f) Beneficiary's certificate showing the relevant airmail / courier reference no. and date that the following clauses have been complied with:
 - 1] Beneficiary to forward by Registered Airmail / Courier one complete set of original documents and one set of non-negotiable documents within 3 working days of obtaining shipping documents to Regional Manager (ROD), Bharat Heavy Electricals Ltd, 6th Floor, EVR Periyar Bldg. No 690 (Old 474), Anna Salai, Nandanam, Chennai-600035. India. (Phone: +91-24330931, 24330253; e-mail: bhpwar@bhel.in)
 - 2] Beneficiary to courier at his cost 3 copies of complete set of non-negotiable documents to the Officer who released the Purchase Order.
 - 3] Declaration by the Supplier certifying that the contents in each case are not less than those entered in the invoices / packing list and that the invoicing for the supplies effected is strictly in accordance with agreed rates as stipulated in the Purchase Order.
 - 4] Declaration to the effect that all other documents as per purchase order has been couriered to the Purchase order releasing authority
 - 5) The carrying steamer should be seaworthy, less than 25 years of age and approved by Lloyds / Classification Societies / General Insurance Corporation of India from time to time and
 - 6) Copy of Dispatch Clearance / Instruction issued by BHEL.

iv) Documents to be sent directly to the Purchaser prior to shipment

- a) Manufacturer's Original Internal Inspection / Test certificate in triplicate.
- b) Manufacturer's Original Guarantee certificate as per Purchase Order. The material shall be guaranteed for a period of 12 months from the date of acceptance of the materials at BHEL stores or 18 months from the

date of dispatch whichever is earlier. The acceptance would be evidenced by the Stores Receipt Voucher (SRV) which will be raised by BHEL.

- c) Inspection / Test Certificate issued by BHEL / Inspection agency specified in the Purchase Order. In the event that Inspection prior to dispatch is not carried out by the Engineers of BHEL, the Inspection certificate of the third party so authorized by BHEL and
- d) Any other documentation as specified in the Purchase Order.

v) Conditions for transportation:

- a) All shipping documents shall show the Purchase Order Number & Date, Import Licence Number & Date, and Letter of Credit Number & Date. b) Transhipment is to be avoided.
- c) Loading on deck is not permitted. The transport document must not contain a provision that goods may be carried on deck.
- d) A transport document which is produced or appearing to have been produced by reprographic, automated or computerized systems or as carbon copy will be accepted as an original document provided that it is marked as original and is ink-signed.
- e) The transport document must contain all the conditions of carriage on the original document.
- f) The transport document must not indicate the place of destination as being different from the port of discharge.
- g) The transport document must not contain the indication 'intended' or similar qualification in relation to the vessel or other means of transport or port of loading or port of discharge.
- h) The transport document must be issued by the carrier or his agent and not by any freight forwarder.
- i) Transport documents bearing reference by stamp or otherwise, to costs additional to the freight charges are not acceptable.
- j) The Bills of Exchange must be dated and presentation of documents for negotiation must not be later than 15 days after the date of shipment and in any case not later than the expiry date of the Credit.
- l) Indian suppliers shall dispatch the materials on freight prepaid and on door-delivery basis (FOR Destination – Destination: BHEL Stores) and
- m) In the event there is a delay by the Supplier in negotiating / submitting the document, any demurrage / wharfage arising out of the same shall be to the account of the Supplier and shall be deducted from the final payment. Also, in such cases, the Supplier shall authorize the Steamer / Shipping agent / transporter to freely release the consignment to BHEL by providing a “Surrender Bill of Lading”. Over-seas Suppliers have to give a No-Objection Certificate to BHEL, authorizing BHEL to get the Delivery Order from the Steamer Agent without producing the Original Bill of Lading. This is required to ensure avoidance of incidence of demurrage at Chennai Sea-port that may arise in case of delayed presentation of documents by the Seller.

G) Reverse auction (RA) / on-line bidding on internet:

1. Decision to go for RA would be taken before floating of the tender. In case it is decided to go for RA, same shall be declared upfront in NIT by inserting the following clause:
“BHEL shall be resorting to Reverse Auction (RA) (Guidelines as available on www.bhel.com) for this tender. RA shall be conducted among all the techno-commercially qualified bidders. Price bids of all techno-commercially qualified bidders shall be opened and same shall be considered as initial bids of bidders in RA. In case any bidder(s) do(es) not participate in online Reverse Auction, their sealed envelope price bid along with applicable loading, if any, shall be considered for ranking.”
2. Those bidders who have given their acceptance to participate in Reverse Auction will have to necessarily submit ‘Process compliance form’ (to the designated service provider) as well as ‘Online sealed bid’ in the Reverse Auction. Non-submission of ‘Process compliance form’ or ‘Online sealed bid’ by the agreed bidder(s) will be considered as tampering of the tender process and will invite action by BHEL as per extant guidelines for “Suspension of Business Dealings with Suppliers/ Contractors (as available on www.bhel.com).”
3. The philosophy followed for reverse auction shall be English Reverse (No ties).
4. For the proposed reverse auction, technically and commercially acceptable bidders only shall be eligible to participate.
5. BHEL will engage the services of a service provider who will provide all necessary training and assistance before commencement of on line bidding on internet.
6. In case of reverse auction, BHEL will inform the bidders the details of Service Provider to enable them to contact & get trained.
7. Business rules like event date, time, bid decrement, extension etc. also will be communicated through service provider for compliance.
8. Bidders have to fax the Compliance form (annexure IV) before start of Reverse auction. Without this, the bidder will not be eligible to participate in the event.
9. Reverse auction will be conducted on scheduled date & time.

Note: Decision to go for RA or not will be on case to case basis and shall be informed in the NIT conditions .

1. At the end of Reverse Auction event, the lowest bidder value will be known on auction portal.
2. The lowest bidder has to fax/e-mail the duly signed and filled-in prescribed format for price breakup including that of line items, to the Service provider within two working days of Auction without fail.
3. Bidders are be required to read the “Terms and Conditions” section of the auctions site of Service provider, using the Login IDs and passwords given to them by the service provider before reverse auction event. Bidders should acquaint themselves of the „Business Rules of Reverse Auction“, which will be communicated before the Reverse Auction.
4. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines, shall be initiated by BHEL and the results of the RA scrapped/ aborted.

5. The Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party.
 6. The bidders have to necessarily submit online sealed bid less than or equal to their envelope sealed price bid already submitted to BHEL along with their offer. The envelope sealed price bid of successful L1 bidder in RA, if conducted, would also be opened after the RA and the order will be placed on lower of the two bids (RA closing price & envelope sealed price) thus obtained. It is considered that the bidder having submitted their offer specifically agrees to this condition and undertakes to execute the contract on thus awarded rate/s.
 7. If it is found that L1 bidder has quoted higher in the online sealed bid in comparison to the envelope sealed bid for any item(s), the bidder will be issued a warning letter to this effect. However, if the same bidder again defaults on this count in any subsequent tender, it will be considered as fraud and will invite action by BHEL as per extant guidelines for suspension of business dealings with suppliers/ contractors (as available on www.bhel.com)."
 8. The calculation sheet e.g. excel sheet (which will help to arrive at 'Total Cost to BHEL') will be communicated to respective bidders of RA by BHEL. In line with the NIT terms, BHEL will provide the calculation sheet (e.g., EXCEL sheet) which will help to arrive at "Total Cost to BHEL" like Packing & forwarding charges, Taxes and Duties, Freight charges, Insurance, Goods & Services Tax (GST) and loading factors (for non-compliance to BHEL standard Commercial terms & conditions) for each of the bidder to enable them to fill-in the price and keep it ready for keying in during the Auction.]
 9. This calculation sheet will be finalized based on the evaluation criteria specified in the NIT.
 10. Suppliers are required to submit their best price bid in a separate sealed cover along with techno commercial bid. After evaluation of Techno-Commercial Bids:
 - a) In case BHEL decides not to conduct RA, the envelope (sealed electronic price bid) sealed price bids of all techno-commercially qualified bidders, along with price impact, if any, would be opened and processed as per extant the internal Purchase/ Works Policy as applicable to BHEL.
 - b) In case BHEL decides to conduct RA, business rules of RA will be sent to service provider. (See Annexure for Model General Business Rules of RA.)
 12. Generally the start price for the RA would be the lowest of
 - a) Lowest envelope (sealed electronic price bid) sealed bid and
 - b) Internal Estimate of BHEL
- Note: Wherever more than one lowest online sealed bids are identical and lower than the estimate, the start price, would be that price arrived by reducing the lowest online sealed bid by maximum of one decrement.*
21. The start price & bid decrement will be decided by RA committee of BHEL and the same would be communicated to the service provider, to start the bidding process.
 22. Only those bidders who have submitted the 'Process compliance form' duly signed and within the scheduled time would be eligible to participate further in RA process.

23. RA will be conducted if three or more bidders are techno- commercially qualified . In case of more than four techno commercially qualified bidders , H1 bidder (whose quote is highest in sealed envelope (eps) price bids) will not be allowed to participate in further RA process. However there will be no H1 removal in case , H1 bidder happens to be MSE or qualifying under PPP-MII , order 2017 irrespective of the number of bidder qualifying techno commercially.
24. In case multiple H1 bidders, all H1 bidders (excluding MSEs and bidders qualifying under PPP- M11 Order 2017) shall be removed provided three bidders remain in fray, else no H1 removal.
25. If the lowest sealed envelope (eps) price bids is the starting price, then the lowest bidder in sealed envelope (eps) price bids shall be shown as current L1 automatically by the system. System would have the provision to indicate this bid as current L1 for further bidding.
26. If the start price is lower than the lowest sealed envelope (eps) price bids , on acceptance of such start price by any bidder, this bid would be indicated as current L1 for further bidding.
27. In case of no further bidding, RA will be deemed to have been successful with current L1 bidder.
28. All bidders who had given their bids would be able to see their rank and L1 price and their ranking L1, L2 etc. on the screen. Once the RA is done, the ranking status would be based on the last quoted price irrespective of quote received in RA or sealed envelope (eps) price bid.
29. RA shall be treated as failed in the following scenarios:
- a) In cases where the start price is (a) estimate or (b) one decrement (maximum) lower than the lowest of the online sealed bids and no bidder accepts the start price.
 - b) In cases where the number of online sealed bids are less than three.
- Wherever, the evaluation is done for individual line items, RA shall be treated as failed only for those line item(s) for which any of the above a) or b) satisfies.
29. In cases of failure of RA, retendering shall be resorted to without conducting RA in the subsequent tender
30. Whenever the evaluation is done on total cost basis, after RA, prices of individual line items shall be reduced on pro-rata basis.
31. In case of splitting requirement, H1 bidder(s) who were removed from participation in RA may also be considered for counter offer if the pre-stated (NIT) number of suppliers do not accept the counter offer. However the principle of splitting to N-1 bidder shall be maintained in line with extant Purchase Policy / Work Policy
32. In case BHEL decides not to go for Reverse Auction for the tender enquiry, the Price bids and price impacts, if any, already submitted and available with BHEL would be opened as per BHEL's standard practice.
33. In case of enquiry through e-Procurement, the sealed electronic price bid (e-bid) would be treated as sealed envelope price bid.



Note: In order to bring more transparency and to address any queries of Bidders on Reverse Auction, an abridged version of BHEL's "Common Guidelines for conducting Reverse Auction (RA)" has been hosted in BHEL's web site www.bhel.com under the links "Supplier Registration Page" and "Tender Notification". All Bidders are requested to visit the link and familiarize themselves with BHEL's RA procedures and guidelines before submission of their bid/s. Submission of Bid shall mean that the Bidder has read and understood BHEL's RA procedures and the bid is in agreement with the same.

H] Force Majeure

If at any time during the currency of this contract, the performance in whole or in part, by either party of any obligations under this contract shall be prevented or delayed by reason, of any war, hostilities, acts of the public enemy, civil commotion, sabotage, fires, explosions, epidemics, quarantine, restrictions or acts of GOD (hereinafter referred to as events), then provided notice of happening of any such events is given by either party to other within ten days from the date of occurrence thereof, neither party shall reason of such events be entitled to terminate this contract nor shall either party have any such non performance and delay is resumed as soon as practicable after such events has come to an end or ceased to exist. If the performance in whole or part of any obligation under this contract is prevented or delayed by reason or any such event claims for extension of time shall be granted for period considered reasonable by the purchaser subject to prompt notification by the seller to the purchaser of the particulars of the events and supply to the purchaser if required of any supporting evidence. Any waiver of time in respect of partial installment shall not be deemed to be a waiver of time in respect of remaining deliveries.

I] Cancellation of Order:

In the event of non-performance of the contract by the Supplier, BHEL reserves the right to cancel the order with issue of a written notice. BHEL would provide a curing period of 30 days, for the Supplier to rectify the situation. If the Supplier fails to rectify the reason/s that led to the issue of cancellation notice by BHEL, then the cancellation order would be issued automatically by BHEL, without further recourse to the Seller. BHEL will not pay any cancellation charges or any other charges / damages to the Supplier, arising out such cancellation. In the event of the non-performance of the supply contract, by the Supplier, the rights of BHEL include, in addition to cancelling the order, to take alternate purchase action at the cost and risk of the supplier. The additional expenditure to be incurred by BHEL in such alternate purchase would be to the account of the supplier. (Risk Purchase). This remedy would be in addition to the invoking of the CEBG on grounds of failure of the Supplier in executing the Contract and any other legal remedies." BHEL reserves the right to initiate the alternate purchase action at the cost and risk of the erring supplier by issue of a simple notice of intention for the alternate purchase action duly sent by any electronic means and / or by a letter. The cancellation of the order would not be a pre-condition for initiation of the alternate purchase action.

J] Contract Execution Bank Guarantee:

To demonstrate the fidelity of the successful bidder, in executing the Contract, on receipt of the Letter of Intent / Purchase Order, the Supplier shall arrange to provide a contract execution bank guarantee (CEBG). The format of the CEBG is a part of this enquiry. The format may be downloaded and necessary stamping may be obtained from the Banker towards submission of the CEBG. The indigenous suppliers have to provide the CEBG from any one of the Nationalized Banks, listed in the annexure to these terms. Overseas suppliers can submit the CEBG from any of the reputed International / National Bankers. However the



CEBG is to be confirmed by any of the Bankers listed by us. In the event of failure by the Supplier to execute the contract either fully or partially, BHEL would encash the entire CEBG. The CEBG shall be valid for the period covering the agreed delivery date of the order with a further claim period of 3 months on the last specified delivery date. In the event of the failure of delivery BHEL would proceed with encashing the CEBG without reference to the Supplier. In the event of BHEL granting extension of the delivery dates, then the CEBG validity shall also be got extended by the Supplier to the extent of the extended delivery times together with the claim period as specified elsewhere. **The CEBG shall be for a value of 2% of the Purchase order.**

Suppliers who are all already registered with BHEL and having a vendor performance rating of A or A+ grade would be exempted from submission of CEBG.

Performance Bank Guarantee

Where ever so required, the Supplier shall arrange to provide a Performance bank guarantee (PBG). The indigenous suppliers have to provide the PBG from any one of the Nationalized Banks, listed in the tender terms. Overseas suppliers can submit the PBG from any of the reputed International / National Bankers. However the PBG shall be confirmed by any of the Bankers listed by us. The PBG shall guarantee the performance of the equipment / materials / items supplied and shall cover the guarantee period. The PBG shall have a claim period of 3 months in addition to the guarantee period. In the event of failure of the supplies made within the guarantee period, BHEL would encash the entire PBG. **The PBG shall be for a value of 10% of the Purchase order.**

The supplier/s have to get the PBG format (pre-printed) from BHEL and get the same stamped by the Banker. Change of PBG terms either by the supplier's Banker or by the supplier, after servicing of the order is not acceptable. Similarly PBG prepared by the supplier (typed by them) will also not be acceptable to BHEL. The pre-printed form issued by BHEL shall be used for making the PBG.

K] Post-order submission of documents for approval

In the event of the release of Letter of Intent (LoI) / Purchase order/s (PO) against this tender, Bidders have to submit the applicable documents as called for in the tender / LoI / PO/s, such as drawings, data sheets, design calculations etc. These documents for approval have to be submitted within the agreed timelines between BHEL and Bidder. Normally the time period for submission for approval is 15 days from the date of receipt of the LoI / PO by the supplier. The actual time period within which the documents have to be submitted for approval would be specified in the LoI / PO.

Such documents would be subjected to evaluation and approval by BHEL and / or by BHEL's customer / Consultant / Customer's Consultant. Bidders have to give their specific acceptance for this.

After approval of such documents and after getting clearance from BHEL, only the items ordered can be taken up for manufacture.

Any changes required by BHEL / Customer etc. in the documents submitted for approval shall be incorporated by the Bidder and no extra cost would be payable by BHEL for such changes.

In the event that the Bidder does not carry out the required corrections, then the LoI / PO would be liable for cancellation by BHEL and BHEL would resort to alternate purchase action at the risk and cost of the Bidder under the Risk Purchase Condition of the Purchase Order.

Note: After receiving the LoI / PO, supplier shall also forward the acknowledgement / acceptance of the LoI / PO by signing and returning the second copy of the LoI / PO as the token of acceptance.

L] Others

a) In case of any contradiction in the terms and conditions given here and elsewhere in the other documents of the tender, it shall be the responsibility of the tenderer to get it clarified from BHEL. The officer authorized to provide such clarifications is the tender issuing officer.

b) Alterations to the conditions of the Tender can be done only by the authorized officer, at any time before the date and time of tender opening and would be duly communicated through a corrigendum. c)

Suspension of Business dealings with Suppliers:

(i) Before submitting offer, prospective bidders are advised to visit our web-site www.bhel.com / supplier registration to familiarize themselves with BHEL's policy and procedures of Suspension of Business Dealings with Suppliers.

Submission of offer shall be deemed to be evidence of the Bidder to have read and understood the above said policy.

ii) Treatment of Banned / Under-performing Vendors:

Any supplier who has been put on "Hold" or "Banned" from having business dealings with BHEL, Ranipet or any other unit of BHEL shall not submit their offer against this tender. If any such offers are received they would be summarily rejected and sent back. During the processing of tender, if any unit of BHEL puts a supplier on "Ban" then further processing of the offer will not be taken up and in case an order is placed, BHEL, Ranipet may resort at their discretion to cancel the PO either fully or partially.

If any of the supplier who is supplying similar material to BHEL, Ranipet has a Vendor Performance Rating (VPR) score of 'C' or below, then offer given by such parties will not be considered for ordering in this tender.

If any of the Bidders have unexecuted order/s with BHEL and if in such orders, the deliveries have been delayed beyond a reasonable period (say 30 days of agreed delivery period), the offer of such Bidders will also be liable for rejection.

Offers of such of those bidders against whom action for suspension of business dealings has been initiated by BHEL, Ranipet or any other Units/Division of BHEL will also not be considered in this tender.

d) Fraud Prevention Policy:

The Bidder along with its associate/ collaborators/ sub-contractors/ sub-vendors/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention Policy displayed on BHEL website <http://www.bhel.com> and shall immediately bring to the notice of BHEL Management about any fraud or suspected fraud as soon as it comes to their notice.

e) Applicability of Integrity Pact:-

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. A panel of 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.



Sl.No	IEM	Email
1.	Shri Arun Chandra Verma, IPS (Retd.)	acverma1@gmail.com
2.	Shri Virendra Bahadur Singh, IPS (Retd.)	vbsinghips@gmail.com

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 the 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:

For all clarifications/ issues related to the tender, please contact:

Name: (1) (2)

Dep't: Address:

.....

.....

Phone:(Landline/Mobile) (1) (2)

Email:

Fax:

Integrity Pact are applicable for all the BHEL enquiries whose estimated value is equal to or more than Rupees 05 Crores.

Copy of Integrity Pact with applicable nominated IEM is attached along with the tender documents for ready reference of Suppliers.

f) If any Supplier attempts to bribe, or pay commission, gift or any advantage or bring in undue influence either by himself or on his behalf any one including a stranger to the tender, in addition to instituting legal proceedings as per the extant laws prevailing, will disqualify the supplier from this tender and all future tenders of BHEL. Decision of the Purchaser would be final in this matter.

g) The laws governing this transaction shall be the laws in India.

h) Wherever not specified, Inco terms 2010 shall be used to interpret the Commercial terms and conditions and

i) In the event of an order, Supplier shall agree to settlement of disputes or differences, if any, by way of arbitration, in accordance with the "Rule of Arbitration" of the Indian Council of Arbitration.

The language in the tender documents downloaded by the Bidders shall at no point of time be changed, altered or modified in any manner by the Tenderer. If such changes are made by any tenderer, it shall be considered as tampering with BHEL's terms and the offer shall be summarily rejected, whenever it is noticed by BHEL. Such Bidders would be disqualified from the Bidding Process and their offers would be forfeited / Bank Guarantees invoked. They would also not be allowed to participate in future tenders of BHEL.

M. Conditions for rejection of offers:

Following is the list of situations which would lead to rejection of offer/s.

This list is not exhaustive but only indicative.

BHEL reserve the right to reject one or all offers without assigning any reason. The decision of BHEL will be final in this regard.

1. *If the offer fails to meet the technical requirements/specifications of the tendered item/s.*
2. *If the offer does not meet the commercial terms & conditions, such as but not limited to delivery period specified in the tender, Delivery terms, payment terms, Liquidated damages, Risk Purchase, cancellation clause etc., including the load factors specified in the tender.*
3. *If the bidder fails to respond to clarification sought, within a reasonable period. In case of doubts / lack of clarity on the technical and commercial offer of the bidder, BHEL will seek clarifications. Bidders are required to respond completely to such BHEL's queries within 3 working days unless otherwise agreed to in writing by BHEL for period beyond 3 days. If supplier fails to respond within 3 working days or maximum 2 working days on a reminder thereon, the offer of such bidders will be automatically dis-qualified in the tender without further recourse to informing the bidder.*
4. *If any of the conditions listed below are applicable to the bidder, the offer is liable to be rejected:*

If any

- Debt recovery / Winding up Proceedings are initiated against the Company in Courts / Debt Recovery Tribunals (DRTs),
 - Proceedings are there against the Company in National Company Law Tribunal (NCLT) with respect to Insolvency and Bankruptcy Code (IBC) or otherwise,
 - Any proceedings are there against the Company under the "Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) Act,
 - Any restructuring proceedings are underway for the Company under Corporate Debt Restructuring (CDR), Strategic Debt Restructuring (SDR) or otherwise,
 - Divestment / demerger proceedings are underway for the Company under the Companies Act.
 - If action under guidelines of suspension of business dealings (Ref AA/MM/SB/01 Rev 02 dt 22.07.2016) and its latest revisions has been initiated against the company/bidder.
5. *Failure to sign & accept the Integrity Pact (where applicable). Bidders are hereby informed that the contents of the Integrity Pact are firm and fixed and cannot be changed.*

The above list is not exhaustive but is indicative only.

N. Special Note:

BHEL is a Government of India Undertaking. Its procurement practices are governed by the (Internal) Purchase Policy issued by the management of the company and as per Annexure B applicable at the time of finalising the order against this tender.

-O-

Record of Revisions:

Revision No.	Revision Date	Modification
01	17.08.2016	Payment terms for Foreign suppliers modified wrt loading- Clause k.ii
02	29.08.2016	Treatment of banned vendors – Para 3 added - Clause L.ii
03	14.09.2016	Opening of offers – clause B – sub clause ‘b’ included and existing clause ‘b’ renamed as ‘c’.
04	14.09.2016	Opening of offers – Note – sub clause (ii) modified
05	12.10.2016	Clause N. Special Note added
06	22.10.2016	Clause G Reverse Auction modified. Annexure on General Business Rules for Reverse Auction appended Role of Principals added under ‘Miscellaneous’
07	20.01.2017	Clause L (e) is modified. Clause L (f ,g ,h) renumbered.
08	24.02.2017	Clause F(c) modified.
09	08.07.2017	Clause M, Point 4 is added – regarding the financial health of the Bidder - as a criterion for disqualification.
10	20.07.2017	Duties and Taxes replaced with GST; Applicability of GST for LD inserted in Clause E; Treatment of poor performing current vendors inserted in clause L.c.(ii)
11	25.07.2017	Clause A.Note (iii) CST etc., replaced with GST; Clause C.f Deleted;
12	15.09.2017	Clause M, Point 5 inserted regarding Integrity Pact
13	21.03.2018	Clause A, Point xi inserted regarding Overwriting in Price Bids
14	28.05.2018	Clause A, a),b),c),d) amended for M/s E-Procurement technologies, https://bhel.abcprocure.com . Clause A, (f, g, h) – modified. Clause M, Point 4, - regarding suspension of business dealings inserted.
15	23.07.2018	Clause L,(e)- Applicability of Integrity Pact – modified.
16	31.08.2018	Clause C,(n)- Preference to Make in India – added.
17	04.12.2018	Clause C,(n)- Preference to Make in India & Clause K.2 Note - MSE concessions– modified.
18	13.02.2019	Clause C,(n)- Preference to Make in India – modified. Page no 9 Clause o – Extended credit period - removed.
19	24.09.2019	Clause C,(n) - Preference to Make in India – modified. Clause L,(e) - New IEMs Updated
20	11.03.2020	Clause L,(e) – IEM’s address removed



21	11.06.2020	Clause G – Reverse Auction modified
22	22.07.2020	Clause C,(n) - Preference to Make in India – modified. Clause k (2) - MSE registration modified

ANNEXURE

Model General Business Rules for Reverse Auction

This has reference to tender no {tender number....date...}. BHEL shall finalise the Rates for the supply of {item name} through Reverse Auction mode. BHEL has made arrangement with M/s. {Service provider}, who shall be BHEL's authorized service provider for the same. Bidders should go through the instructions given below and submit acceptance of the same.

The technical & commercial terms are as per (a) BHEL Tender Enq. No. {...} dated {...}, (b) Bidders' technical & commercial bid (in case of two part bid) and (c) subsequent correspondences between BHEL and the bidders, if any.

1. Procedure of Reverse Auctioning

- i. Online Sealed Bid: This duration of online sealed bid will be {...} minutes. All bidders to submit their online sealed bids during this period.
- ii. Online Reverse Auction: The 'opening price' i.e. start price for RA and 'bid decrement' will be decided by BHEL.
- iii. If BHEL decides the lowest online sealed bid as the starting price, then the lowest bidder in online sealed bid shall be shown as current L1 automatically by the system and no acceptance of that price is required. System shall have the provision to indicate this bid as current L1.
- iv. Bidders by offering a minimum bid decrement or the multiples thereof can displace a standing lowest bid and become "L1" and this continues as an iterative process.
- v. After the completion of the online reverse auction, the Closing Price (CP) shall be available for further processing.

2. Schedule for Reverse Auction: The Reverse Auction is tentatively scheduled on {date}:

and the duration of online sealed bid will be {...} minutes. All bidders to submit their online sealed bids during this period. - **Online Sealed Bid:-**

- {Start Time:
- Close Time: }

- **Online Reverse Auction:-**

- {Start Time:
- Close Time: }

3. Auction extension time:

If a bidder places a bid in the last {...} minutes of closing of the Reverse Auction and if that bid gets accepted, then the auction's duration shall get extended automatically for another {...} minutes, for the entire auction (i.e. for all the items in the auction), from the time that bid comes in. Please note that the autoextension will take place only if a bid comes in those last {...} minutes and if that bid gets accepted as the lowest bid. If the bid does not get accepted as the lowest bid, the auto-extension will not take place even if that bid might have come in the last {...} minutes. In case, there is no bid in the last {...} minutes of closing of Reverse Auction, the auction shall get closed automatically without any extension. However, bidders are advised not to wait till the last minute or last few seconds to enter their bid during the auto-extension period to avoid complications related with internet connectivity, network problems, system crash down, power failure, etc. The above process will continue till completion of Reverse Auction.

Complaints/ Grievances, if any, regarding denial of service or any related issue should be given in writing thru e-mail/ fax to M/s. {Service provider} with a copy to BHEL within 15 minutes prior to initial closing time of Online Reverse Auction.



4. **Bid price:** The Bidder has to quote the {.....} Price inclusive of Packing & Forwarding charges, all the routine & type tests as per tender scope, GST, Freight (bidder to provide original Freight paid receipt), insurance charges, etc. including loading (if indicated by BHEL due to deviations in technical/ commercial terms) for the Items specified. Details are as shown in Excel Sheet for calculation of total cost to BHEL (To be specified by Unit as per NIT conditions).

5. Bidding currency and unit of measurement:

Bidding will be conducted in *Indian Rupees per Unit* of the material as per the specifications {...}

In case of foreign currency bids, exchange rate (TT selling rate of State Bank of India) as on scheduled date of tender opening (Part-I bid) shall be considered for conversion in Indian Rupees. If the relevant day happens to be a Bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken.

6. **Validity of bids:** Price shall be valid for {... days} from the date of reverse auction. These shall not be subjected to any change whatsoever.

7. **Lowest bid of a bidder:** In case the bidder submits more than one bid, the lowest bid at the end of Online Reverse Auction will be considered as the bidder's final offer to execute the work.

8. Bidders shall be assigned a **Unique User Name & Password** by M/s. {Service provider}. Bidders are advised to change the Password and edit the information in the Registration Page after the receipt of initial Password from M/s. {Service provider} to ensure confidentiality. All bids made from the Login ID given to the bidders will be deemed to have been made by the bidders/ bidders 'company'.

9. Post auction procedure: BHEL will proceed with the Lowest Bid in the Reverse Auction for further processing.

10. Any commercial/ technical loading shall be intimated to bidders prior to RA. The excel sheet provided in this regard shall cover all these aspects. Commercial/ technical loading if any, shall be added by the respective bidder in its price during online sealed bid & Online Reverse Auction. Modalities of loading & de-loading shall be separately intimated to the bidders. The responsibility for correctness of total cost to BHEL shall lie with the bidders.

11. Computerized reverse auction shall be conducted by BHEL (through M/s. {Service Provider}), on prespecified date, while the bidders shall be quoting from their own offices/ place of their choice. Internet connectivity shall have to be ensured by bidders themselves.

During the RA process if a bidder is not able to bid and requests for extension of time by FAX/ email/ phone then time extension of additional 15 minutes will be given by the service provider provided such requests come before 5 minutes of auction closing time. However, only one such request per bidder can be entertained. Despite this extension if bidder fails to upload his prices due to extreme case of failure of Internet connectivity, (due to any reason whatsoever may be) it is the bidders' responsibility/ decision to send fax communication immediately to M/s. {Service provider}, furnishing the price the bidder wants to bid online with a request to the service provider to upload the faxed price online so that the service provider will upload that price online on behalf of the Bidder. It shall be noted clearly that the concerned bidder communicating this price to service provider has to solely ensure that the fax message is received by the service provider in a readable/ legible form and also the Bidder should simultaneously check up with service provider about the clear receipt of the price faxed. It shall also be clearly understood that the bidder shall be at liberty to send such fax communications of prices to be uploaded by the service provider only within the closure of Bid time and under no circumstance it shall be allowed beyond the closure of Bid time /reverse auction. It shall also be noted that the service provider should be given a reasonable required time by the bidders, to upload such prices online and if such required time is not available at the disposal of the Service

provider at the time of receipt of the fax message from the bidders, the service provider will not be uploading the prices and either BHEL or the service provider are not responsible for this unforeseen circumstances. In order to ward-off such contingent situation bidders are requested to make all the necessary arrangements/alternatives whatever required so that they are able to circumvent such situation and still be able to participate in the reverse auction successfully. Failure of power or loss of connectivity at the premises of bidders during the Reverse auction cannot be the cause for not participating in the reverse auction. On account of this, the time for the auction cannot be extended and neither BHEL nor M/s. {Service provider} is responsible for such eventualities.

12. Proxy bids: Proxy bidding feature is a pro-bidder feature to safeguard the bidder's interest of any internet failure or to avoid last minute rush. The proxy feature allows bidders to place an automated bid in the system directly in an auction and bid without having to enter a new amount each time a competing bidder submits a new offer. The bid amount that a bidder enters is the minimum that the bidder is willing to offer. Here the software bids on behalf of the bidder. This obviates the need for the bidder participating in the bidding process until the proxy bid amount is decrementally reached by other bidders. When proxy bid amount is reached, the bidder (who has submitted the proxy bid) has an option to start participating in the bidding process.

The proxy amount is the minimum amount that the bidder is willing to offer. During the course of bidding, the bidder cannot delete or change the amount of a proxy bid. Bids are submitted in decrements (decreasing bid amounts). The application automates proxy bidding by processing proxy bids automatically, according to the decrement that the auction originator originally established when creating the auction, submitting offers to the next bid decrement each time a competing bidder bids, regardless of the fact whether the competing bids are submitted as proxy or standard bids. However, it may please be noted that if a manual bid and proxy bid are submitted at the same instant manual bid will be recognized as the L1 at that instant. In case of more than one proxy bid, the system shall bid till it crosses the threshold value of 'each lowest proxy bid' and thereafter allow the competition to decide the final L1 price. Proxy bids are fed into the system directly by the respective bidders. As such this information is privy only to the respective bidder(s).

13. Bidders are advised to get fully trained and clear all their doubts such as refreshing of screen, quantity being auctioned, tender value being auctioned etc. from M/s. {Service provider}.

14. M/s. {Service provider}, shall arrange to demonstrate/ train the bidder or bidder's nominated person(s), without any cost to bidders. M/s. {Service provider}, shall also explain the bidders, all the business rules related to the Reverse Auction. Bidders are required to submit their acceptance to the terms/ conditions/modalities before participating in the Reverse Auction in the process compliance form as enclosed. Without this, the bidder will not be eligible to participate in the event.

15. Successful bidder shall be required to submit the final prices (L1) in prescribed format (Annexure-VI) for price breakup including that of line items, if required, quoted during the Online Reverse Auction, duly signed and stamped as token of acceptance without any new condition (other than those already agreed to before start of auction), after the completion of auction to M/s. {Service provider} besides BHEL within two working days of Auction without fail.

16. Any variation between the final bid value and that in the confirmatory signed price breakup

Document will be considered as tampering the tender process and will invite action by BHEL as per extant guidelines for suspension of business dealings (as available on www.bhel.com).

17. Bidders' bid will be taken as an offer to execute the work/ supplies of the item as per enquiry

No. {...} dt. {...}. Bids once made by the bidder, cannot be cancelled/ withdrawn and bidder shall be bound to execute the work as mentioned above at bidder's final bid price. Should bidder back out and not execute the contract as per the rates quoted, BHEL shall take action as per extant guidelines for suspension of business dealings (as available on www.bhel.com).



18. Bidders shall be able to view the following on their screen along with the necessary fields during Online Reverse Auction:
- a. Leading (Running Lowest) Bid in the Auction (only total price of package).
 - b. Bid Placed by the bidder.
 - c. Start Price.
 - d. Decrement value.
 - e. Rank of their own bid during bidding as well as at the close of auction
19. BHEL's decision on award of contract shall be final and binding on all the Bidders.
20. BHEL reserves the right to extend, reschedule or cancel the Reverse Auction process at any time, before ordering, without assigning any reason, with intimation to bidders.
21. BHEL shall not have any liability to bidders for any interruption or delay in access to the site irrespective of the cause. In such cases, the decision of BHEL shall be binding on the bidders.
22. Other terms and conditions shall be as per bidder's techno-commercial offers and other correspondences, if any, till date.
23. If there is any clash between this business document and the FAQ available, if any, in the website of M/s. *{Service provider}*, the terms & conditions given in this business document will supersede the information contained in the FAQs. Any changes made by BHEL/ service provider (due to unforeseen contingencies) after the first posting shall be deemed to have been accepted if the bidder continues to access the portal after that time..
24. Bidder shall not divulge either his Bids or any other exclusive details of BHEL to any other party. If the Bidder or any of his representatives are found to be involved in Price manipulation/ cartel formation of any kind, directly or indirectly by communicating with other bidders, action as per extant BHEL guidelines for suspension of business dealings (as available on www.bhel.com), shall be initiated by BHEL.



RA price confirmation and breakup
(To be submitted by L1 bidder after completion of RA)

To

- M/s. Service provider
- Postal address

CC: M/s BHEL

BOILER AUXILIARIES PLANT
INDIRA GANDHI INDUSTRIAL COMPLEX
RANIPET – 632406
TAMILNADU
INDIA.

Sub: Final price quoted during Reverse Auction and price breakup

Dear Sir,

We confirm that we have quoted.

Rs.{ _____ in value & in words _____ } for item(s) covered under tender enquiry No. {...} dt.{...}

Total price of the items covered under above cited enquiries is inclusive of {Packing & forwarding, GST, freight and insurance charges up to {.....}
District, {.....} State and Type Test Charges etc., [exclusive of Goods & Services tax (GST)],
other as
per NIT}

as our final landed prices as quoted during the Reverse Auction conducted today {date} which will be valid for a period of { ____ in nos. & in words ____ } days.

The price break-up including that of line items is as given below.

Total

=====
- Rs.in value & in words
=====

Thanking you and looking forward to the valuable order from BHEL.

Yours sincerely, For

Name:
Company:
Date: Seal:

Vendor contacts

sales@sunstreamjdb.com	
anand.sunstreamjdb@gmail.com	
Siva.Sankar@KochGlitsch.com	
Sanjeeva.Singhai@KochGlitsch.com	
marzia.biziak@kochglitsch.com	
Amol.Gulhane@kochglitsch.com	
Kavita.Poonekar@KochGlitsch.com	
n.mohan@lechlerindia.com	
info@varunengg.com	
subrata.malakar@mmaqua.in	
hoctg@mmaqua.in	
raj.dutta@mmaqua.in	
krisanu.bhaumik@mmaqua.in	
nileshpandey@cppiping.com	
ankur.dedhe@munters.in	
sanjay.rane@munters.in	
vinay.shinde@munters.in	
kartik.savla@munters.in	
kiran.shilavat@munters.in	
samir.patil@munters.in	
manoj.vaza@munters.in	
pawan.mihani@munters.in	
irfan.khan@munters.in	
sujata.wuthoo@munters.in	
info@evergreenindia.com	
umang@evergreenindia.com	
admin@evergreenindia.com	

Enq sl no	Material code	Description	Lot no	Qty	Unit	Dely dt	Destination	Bidder Offer
1	RFW008150001	SUPPLY OF COMPLETE MIST ELIMINATOR AND ACCESSORIES	1	1	ST	24-Mar-21	NTPC Bongaigaon	
1	RFW008150001	SUPPLY OF COMPLETE MIST ELIMINATOR AND ACCESSORIES	2	1	ST	24-Sep-21	NTPC Bongaigaon	
1	RFW008150001	SUPPLY OF COMPLETE MIST ELIMINATOR AND ACCESSORIES	3	1	ST	24-Mar-22	NTPC Bongaigaon	
2	RFW008160001	SUPERVISION OF E&C OF MIST ELIMINATOR (1 SET= ONE VISIT OF 10 DAYS I NCLUDING ALL CHARGES)	1	1	ST	24-May-21	NTPC Bongaigaon	
2	RFW008160001	SUPERVISION OF E&C OF MIST ELIMINATOR (1 SET= ONE VISIT OF 10 DAYS I NCLUDING ALL CHARGES)	2	1	ST	24-Sep-21	NTPC Bongaigaon	
2	RFW008160001	SUPERVISION OF E&C OF MIST ELIMINATOR (1 SET= ONE VISIT OF 10 DAYS I NCLUDING ALL CHARGES)	3	1	ST	24-Mar-22	NTPC Bongaigaon	
3	RFW008170001	PERFORMANCE TESTING OF MIST ELIMINATOR S YSTEM	1	1	ST	24-May-21	NTPC Bongaigaon	
3	RFW008170001	PERFORMANCE TESTING OF MIST ELIMINATOR S YSTEM	2	1	ST	24-Sep-21	NTPC Bongaigaon	
3	RFW008170001	PERFORMANCE TESTING OF MIST ELIMINATOR S YSTEM	3	1	ST	24-Mar-22	NTPC Bongaigaon	
4	RFW008180001	ABSORBER MIST ELIMINATOR NOZZLES- 10% OF EACH TYPEAND SIZE FOR THE ENTIRE SUPPLY /POPULATION CONSIDERING ALL THE THREE UNITS	1	1	ST	30-Dec-21	Store BHEL Ranipet	
5	RFW008180002	MIST ELIMINATOR MODULES 5% OF EACH TYPE AND SIZE/CONFIGURATION FOR THE ENTIRE SUPPL Y/POPULATION CONSIDERIN G ALL THE THREE UNITS	1	1	ST	30-Dec-21	Store BHEL Ranipet	

SI	Commercial terms and conditions	BHEL requirement	Bidder response
1	Delivery Terms and Location - Indigenous Vendors can quote on F.O.R, Destination basis. FOR - Destination means is "FOR - BHEL Site NTPC Bongaigaon - including Packing & Forwarding, Freight & Insurance" are in Supplier's scope i.e. included in the quoted prices. If Extra, indicate in %. Unloading at BHEL Site would be to the account of BHEL only. If any deviation is taken, loading will be done suitably. Comparison will be done on FOR - BHEL Site NTPC Bongaigaon site basis only. Spares shall be sent to Stores, BHEL, BAP-Ranipet,	Please indicate the term clearly.	
2	Delivery Period: Delivery is the essence of the contract. Mention the exact delivery period as it attracts contractual penalty on delays. The contractual delivery period will be reckoned from the date of LOI / PO, which shall be binding on the contract. Before opening the Price Bid, based on the commercial bids received, if required, BHEL shall fix a reasonable delivery period, which would be generally the modal value of the deliveries quoted by the tenderers in the Bid. DELIVERY PERIOD INDICATED IS TENTATIVE ONLY. SUPPLY IS TO BE MADE AFTER READINESS OF SITE ONLY. HENCE PLS QUOTE THE MINIMUM DAYS REQUIRED FOR SUPPLY, AFTER GETTING MANUFACTURING CLEARANCE FROM BHEL. All the dates are tentative only. Actual delivery requirement will be given during ordering, as per site readiness.	Please indicate clearly	
3	Payment terms - Bidder shall opt for any of the payment terms as given below. Any deviation may lead to rejection of the offer. Indigenous vendors claiming LC payment / advance will be liable for rejection. Invoice shall be processed upon receipt of error-free GST complianced invoice. Payment shall be made after processing of invoice. Invoice processing may take 2-3 weeks from the date of receipt.	Opt any of alternates	
3.1	Terms of payment for Indigenous Suppliers : Alternate - I : 90% payment will be made directly thru' EFT within 45 days for MSME Vendors and 90 days for Non-MSME vendors from the date of receipt and acceptance of materials at BHEL Site with submission of PBG. Balance 10% and 100% of supervision of Erection and Commissioning charges will be paid within 45 days for MSME /90 days for non-MSME on completion of Erection and Commissioning, based on site certification. If the site is not ready for 2 years from the date of supply, then this 10% payment for the supply portion to be released with the equivalent value of BG, valid for another 2 years or till completion of E&C, whichever is earlier. However, 100% of supervision of E&C is to be made only after completion of E&C, based on site certification. 100% payment for the mandatory spares will be made in 45 days for MSE vendors and 90 days for Non-MSE Vendors from the date of receipt and acceptance of materials. No loading will be considered for this option.	Pls accept/confirm BHEL payment terms as stated.	
3.2	Terms of payment for Indigenous Suppliers :Alternate II : 10% progress/stage/milestone payment against approval of Drawings in Cat -2 and submission of Advance Bank Guarantee (ABG) for equal amount valid till the receipt and acceptance of materials at site and submission of 2% CEBG. This payment to be released within 90 days (45 days in case of MSME) of submission of claim. 80% payment against receipt and acceptance of materials within 90 (45 days in case of MSME) days from the date of receipt and acceptance of materials at site and submission of Performance Bank Guarantee (PBG) for 10%. 10% of supply + 100% of supervision of E&C, wherever applicable, to be made within 90days (45days for MSME) after completion of Erection & commissioning of this item. If the site is not ready for 2 years from the date of supply, then this 10% payment for the supply portion to be released with the equivalent value of BG, valid for another 2 years or till completion of E&C, whichever is earlier. However 100% of supervision of E&C is to be made only after completion of E&C. 100% payment for the mandatory spares will be made in 45 days for MSE vendors and 90days for Non-MSE Vendors from the date of receipt and acceptance of materials.	Pls accept/confirm BHEL payment terms as stated.	

SI	Commercial terms and conditions	BHEL requirement	Bidder response
3.3	Those who have opted payment terms alternate I - Loading shall not be applicable. All bank charges in India to BHEL's account and all other charges outside India to Supplier's account Loading terms for payment terms alternate-II: Those who are opting for payment terms alternate II - Loading shall be applicable (ie., "Base rate of State Bank of India (SBI), prevailing on the date of price bid + 6% for minimum 1 year on 10% of quoted value. 10% payment made prior to supply, assuming one year advance (9 months for supply+3 months for payment period).	Pls confirm	
4	Deduction of Income Tax: (i) TDS shall be deducted, as applicable, for the supervision of Erection & Commissioning Charges. (ii) TDS return shall be filed and TDS certificates shall be issued by BHEL	Pls confirm	
5	Contract Execution Bank Guarantee (CEBG): The Supplier shall submit a BG for 2% of the contract value valid for the 3 month in excess of agreed delivery period. Attached CEBG Format is to be signed and submitted along with bid as a token of acceptance. CEBG shall be submitted within two months from the date of purchase order. Please note that no deviation is allowed.	Pls confirm	
6	"PERFORMANCE BANK GUARANTEE (10% OF ORDER VALUE): The performance guarantee for 10% of Order value is to be submitted, in the event of ordering, valid for 18 months from the date of E&C or 24 month from the date of supply completion, whichever is earlier."- Pls confirm. If not agreed, offer is liable for rejection.	Pls Furnish	
7	OFFER Validity: Supplier to mention clearly the validity date of the offer. Minimum 120 days from the date of Technical Bid (Part-I) opening or 30 days from the price bid opening. The specific acceptance for this offer validity is must. -Pls confirm.	Pls confirm	
8	Price Bid Opening through Internet and Reverse Auction: Online EPS Price Bid will be opened only for the techno commercially qualified offers, after evaluation. Reverse Auction shall be conducted. Vendors to confirm acceptance for participation in RA. All the Items (Supply, Supervision, Performance testing and Mandatory spares) shall be considered as one package and evaluation will be done on package basis.	Pls confirm	
9	Taxes : GST in % (for Indigenous supplier): "Please indicate the exact percentage of GST/SGST/UTGST/IGST (whichever is applicable) is quoted as per the existing tariff on the date of the offer and all benefits as per existing laws have been considered. It is the responsibility of the seller to issue the Tax Invoice strictly as per the format prescribed under the relevant applicable GST law (CGST Act/SGST Act/UTGST Act/IGST Act). GST invoice is required for availing Input Tax Credit.	Pls indicate	
10	GSTIN of the supplier/ works - attach the GST registration copy – Vendor to provide detail	Y/N	
11	HSN CODE(s) of the items offered.- Vendor to provide detail	Pls furnish	
12	PAN No - Attach the Copy of PAN card- Vendor to provide detail	Pls furnish	
13	Test Certificate: To be submitted. With Chemical and Mechanical properties and dimensions as along with MQP as per Standards and our Technical Delivery Conditions	Pls confirm	
14	Guarantee/warranty Certificate: Guarantee/warranty Certificate shall be given to meet the performance as per clause 12.0 and 13.0 of Tender technical specification. In case of failure of the equipment to meet the guarantee, NTPC/BHEL reserves the right to reject the equipment. However, Site incharge/BHEL reserves the right to use the equipment until new equipment supplied by bidder meets the guaranteed requirement	Pls confirm	
15	Inspection before despatch: Inspection before despatch at supplier's works by BHEL/authorised agency for indigenous supplies at BHEL cost. List of inspection agencies are provided in Annexure - Q	Pls confirm	

SI	Commercial terms and conditions	BHEL requirement	Bidder response
16	Liquidated Damages (LD) : The applicable LD shall be at the rate of 0.5% per week to maximum of 10% for the entire system and for the deliveries made beyond the agreed Delivery Period. Delivery being the essence of BHEL's contract requirements, in the event that a Supplier does not accept the above LD condition, the offer would be loaded to the extent of the shortfall with respect to upper limit specified above. Date of material receipt at our stores (Day Book date) will be considered as the 'Delivery date as mentioned in purchase order. Pls confirm. Deviation, if any, shall be brought.	Pls confirm	
17	"Firm Price: Prices shall be kept firm and unchanged till completion of supplies."- Offers with firm price only will be considered.	Pls confirm	
18	Supplier Registration Form (for new bidders/vendors)- Online submission is to be done and soft copy of the same as per annex F to be uploaded along with Technical Bid by new vendors. Kindly furnish.	Reqd for new vendors/bidders	
19	"MSE Status with proof to be submitted. Udayam registration certificate and MSME certificate with date of filing and registration shall be submitted along the offer Otherwise, it will be treated as Non MSE"	Pls furnish	
20	For this procurement, public procurement (preference to make in India), order 2017 dt 15.06.2017, 28.05.2018, 29-05-2019 & 04-06-2020 and subsequent order issued by the restrictive nodal ministry shall be applicable even if issued after issue of this NIT but before finalization of Contract / PO / WO against this NIT. In the event of any nodal ministry prescribing higher or lower percentage of purchase preference and / or local content in respect of this procurement, same shall be applicable	Pls confirm	
21	Minimum Local content declaration in %. Please furnish the local content declaration format and details of location where this value addition has been done. Make sure to attach the filled in signed and stamped format (Make in India) on bidder letter head.	Pls furnish	
22	Margin of purchase preference to make in India shall be 20%	For information	
23	Acceptance to our General Terms & Conditions (Annexure B ver 22)	Pls confirm	
24	Acceptance for submission of signed MQP as per sample format enclosed, in the event of ordering	Pls confirm	
25	Annexure F - to be filled in by all New vendors and to be uploaded	Pls confirm	
26	Risk Purchase Clause (as per clause-I of Annexure-B) (Supplier Confirmation Required) - Pls accept the terms. Otherwise, liable for rejection	Pls confirm	
27	Pointwise conformation/acceptance or comments to our technical specification is must and Each page shall be signed with date BY THE BIDDER and affixed official seal/stamp.-Pls confirm	Pls furnish	
28	False declaration will be in breach of the code of integrity under Rule 175 (i)(h) of the General Finance Rule for which a bidder or its successors can be debarred for up to two years as per Rule 151(iii) of the General Finance Rules along with such other actions as may be permissible under Law	For information	
29	Contact details of bidders for technical queries – Provide details	Furnish below	
29a	Name of person	Pls furnish	
29b	Designation	Pls furnish	
29c	Mobile No / Telephone No.	Pls furnish	
29d	e-mail id	Pls furnish	

Sl.No	BHEL / Customer Requirement	##Specific confirmations by the manufacture
1	Quality Plan Requirement:	
1a	MQP (Manuafcutering Quality Plan) shall be submitted in attached format for BHEL/Customer review & approval. Typical MQP is attached for indicative purposes for guidance & use.	
1b	MQP shall invariably cover w.r.t Inward inspection including on Raw materail Procurement, In process and Final inspection in elaborated way/details.	
1c	Bidder shall also to 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.	
1d	No deviation on BHEL/Customer approved MQP is acceptable.	
1e	Bidder shall agree to submit all cross referred documents other than codes/standrads to BHEL/Customer/Consultant.	
2	Important Notes shall be included in MQP : (a) Latest revision of Standard s & Specification shall apply. Only International Standards are applicable. Indian & Chinese Standards are not 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.	
3	Domestic / Inland Inspection will be carried out by BHEL/BHEL apointed Third Party Inspection Agency (TPIA) / 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). "The inspection charges at actuals incurred by BHEL will be loaded to compare with foreign suppliers".	
4	Inspection Agency for Foreign Bidders and also for Indian Bidder but importing from Forgn Sources: (1) Any one of the flowing 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 to 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 Lloyds, (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.	
5	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 clearanace for further processing. This inspection call shall be given well in advance (atleast 2 weeks before) to TPI/Bidder's own inspection agency to avoid delay in the manufacturing processes.	
6	Inspection before despatch for domestic supplier : Inspection before despatch at supplier's works shall be carried out by BHEL/BHEL appointed Inspection agency. Inspection shall be done as per approved Quality plan/ Technical specification/ Approved Drawing/ Approved Data sheet .	

Sl.No	BHEL / Customer Requirement	##Specific confirmations by the manufacture
7	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 BHEL/BHEL apointed Third Party Inspection Agency (TPIA) / 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). (c) 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 Sl no: 03 at supplier's cost.	
8	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	
9	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.	
10	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.	Only overseas project
10	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.	India Site
11	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.	
12	Important Note: No deviation on the above requirement 01 to 11 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.	
13	## 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.	

Sl	Name of document	Bidder remark.
1	Documents for meeting the Qualification Requirement	
2	Reference plant list (as per Annexure-I)	
3	Compliance to Specification – Duly signed and stamped by the bidder	
4	Data Sheet for Mist Eliminator(as per Annexure-II)	
5	General arrangement and the cross-sectional drawing of the Mist Eliminator & its accessories.	
6	Schedule of Guarantee (as per Annexure-III)	
7	Deviation list (as per Annexure-IV)	
8	Performance characteristic curves of Mist Eliminator	
9	Washing System data calculation sheet and Washing sequence	
10	Utility List & Required Pump Capacity	
11	Mandatory spares list.	
12	Start-up, Erection and commissioning spares list.	
13	Recommended Spares List for 3 Year's Normal Operation	
14	Proforma Packing List	
15	Approximate weight of each skid	
16	Support beam details and loading data	
17	Sub-Vendor List	
18	Scope of Supply	
19	Quality Plan	
20	List of Special Tools	
21	Delivery Schedule	
22	Droplet Measurement procedure	
23	WPS & PQR arrangement	
24	Man-holes, Viewing Ports, Sampling ports & Wash Pipe flange location & details	
25	Catalogue	
26	Terminal Point details	
27	Bill of Materials along with material and codes	
28	Signed stamped Annexure B	
29	Filled in Signed stamped Annexure F	
30	Signed CEBG and PBG format	
31	Filled in signed and stamped Make in India declaration	
32	Signed Integrity Pact	