



BHARAT HEAVY ELECTRICALS LIMITED

(A Government of India Undertaking)
HIGH PRESSURE BOILER PLANT
PURCHASE DEPARTMENT - FOSSIL BOILERS
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TAMILNADU (INDIA)

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Enquiry No	Enquiry Date	Due Date for Quotation
1802200033 - 14	09.03.2022	21.03.2022
Please quote Enquiry No, Date and due date in all correspondences. This is only a request for quotation and not an order. Bid should be submitted in two parts. 1.Techno-commercial bid (Part-I) and 2.Price bid(Part-II) in a separate sealed cover and both covers must be placed in a third cover and sealed. Our Enquiry No., Enq. date & Enq. Due date must be written on all three covers.		

Item	Description	Unit	Quantity	Delivery Quantity	Schedule Date
10	L17271SR20017001 BALL TYPE ISOLATION VALVE MANUALLY OPERATED BALL VALVE SIZE NB100 FOR SCR ANHYDROUS AMMONIA FARMYARD AREA SHALL BE AS PER TECHNICAL SPECIFICATION TSR:016A. VALVE TAG NO:AT02Q, AT02R, AT02S, AT02T. ENCLOSURES: 1.TECHNICAL SPECIFICATION FOR BALL VALVES FOR ANHYDROUS AMMONIA -TSR:016A. REMARKS: 1.VENDOR SHALL FURNISH UNIT WEIGHT AND DIMENSIONAL DRAWINGS OF THE VALVES DURING THE OFFER STAGE ITSELF. 2.VENDOR SHALL FOLLOW APPLICABLE PAINTING SCHEDULE FOR THIS PROJECT. 3.VENDOR SHALL OFFER GUARANTEE FOR THE PRODUCTS SUPPLIED FOR A PERIOD OF 12 MONTHS FROM THE DATE OF COMMISSIONING (OR) 18 MONTHS FROM THE DATE OF SUPPLY WHICH EVER IS EARLIER.	NO	4.000	4.00	30.07.22

General Note:

The offers should reach us 30 minutes before the time of opening of tenders.
The offers will be opened at 14.30 hrs on the due date of tender in the presence of tenderers who have submitted their offer and who may like to be present for the tender opening.Late and delayed offers are liable to be rejected.

Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**

MANAGER / PURCHASE
(FOSSIL BOILERS)
Yours faithfully,
For **BHARAT HEAVY ELECTRICALS LIMITED**

Technical Pre-Qualification Requirement (PQR) for Ball Valves

for Anhydrous Ammonia applications

1. The Vendor shall be an established manufacturer of Ball Valves – manual, ~~manual(with limit switch), manual(cryogenic), manual(3-way), pneumatic & motor operated~~ type, suitable for Anhydrous Ammonia Liquid & Vapor applications as per enquiry specification and having adequate Engineering, Manufacturing, Testing & Servicing facilities. Vendor shall furnish technical backup documents in proof for above requirements.
 2. The Supplier shall have experience of having supplied Ball Valves of size minimum **NB 15 of class rating #300/#800 and maximum of size NB400 of class rating #150 / #300** for manual, ~~manual(with limit switch), manual(cryogenic), manual(3-way), pneumatic & motor operated~~ type for Anhydrous Ammonia Liquid & Vapor applications in Power plants / SCR (or) process applications of similar severity as specified in the enquiry. Supplier shall submit documents in proof of the same.
 3. The Ball valves offered shall be from the existing regular manufacturing range of the supplier. Vendor shall provide the product catalogue and general reference list for the ball valves along with offer. The general reference list with details of Customer name, size, type & class rating of the ball valve, P.O no & date wherein the vendor has supplied ball valves meeting the technical requirements as stated above.
 4. As proof of above pre-qualifying requirement points, vendor should submit :
 - a. Minimum ONE end user certificate for the satisfactory operational performance of their supplied ball valves meeting the requirements as per the enquiry specification.
- (OR)**
- b. Minimum TWO purchase orders meeting the requirements as per the enquiry specification.
- Vendor to attach the corresponding data sheets/ technical documents of ball valves supplied as per P.O / End user certificate.
5. Zinc, copper and alloys containing the said elements shall not be used as the materials for any parts of the ball valves.
 6. In case of ordering, the Vendor shall have the responsibility for the followings and same to be confirmed point wise.
 - a. Vendor should have the component replacement responsibility in case of defect / failure.
 - b. Experts from Vendor's side shall associate in commissioning activities at site, if required.
 - c. Vendor should ensure the product performance during erection & commissioning.
 7. Backup document checklist to meet PQR:

S. No	Document description	Check list
1	Documents to meet Clause(1)	<input type="checkbox"/>
2	Reference POs with details meeting Clause(2)	<input type="checkbox"/>
3	General supply reference list meeting clause (3)	<input type="checkbox"/>
4	Product Catalogues	<input type="checkbox"/>
5	Minimum one end user certificate / Two Purchase Order copies and respective technical back up documents	<input type="checkbox"/>
6	Confirmation to clause (5)	<input type="checkbox"/>
7	Confirmation to clause (6)	<input type="checkbox"/>

BHARAT HEAVY ELECTRICALS LIMITED

TIRUCHIRAPPALLI-620 014

Fuel Systems/PE(FB)



SPECIFICATION FOR BALL VALVES

FOR ANHYDROUS AMMONIA

Specification No.: TSR:016A

Revision No.: 00

	Name	Signature	Date
Prepared	Preetam	-sd-	04-12-2020
Checked	Shankar naik	-sd-	04-12-2020
Approved	G Saravana kumar	-sd-	04-12-2020



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1. General

The specification Contains 2 parts:

Part I – Standard Requirement for Ball Valves

Technical specification for Electrical actuator (open/close duty & inching duty applications) TCI:318

In the event of a conflict between these documents and the specification, the Vendor shall submit a written request for an interpretation by BHEL. In general, the most stringent requirement shall govern.

Vendor shall furnish point-wise compliance to this technical Specification.

Vendor shall make all possible efforts to comply strictly with the requirements of the specification. In case deviations are considered essential by the vendor (after exhausting all efforts), these shall be separately listed in the vendor`s proposal under separate section titled “List of deviations/exceptions to the enquiry document”. Deviation shall be listed separately for each document with cross reference to Page No. / Section/ Clause No. etc. of the respective document, supported with proper reasons for deviation for our consideration. Any deviation not listed under the above section, even if reflected in any other portion of the proposal shall not be considered applicable. No deviation or exception will be permitted without the written approval of BHEL

2. PART I – STANDARD REQUIREMENT FOR BALL VALVE

2.1. SCOPE

The scope covers the design, supply, manufacture, testing, certification, marking & identification and packing for shipment of manual operated Ball Valve assembly for the specified duty conditions as per this specification.

The accessories those are to be supplied with the valve (if any), are tabulated in this document. This list is to be considered as non-exhaustive. The supplier is requested to state the items that he has to supply to meet the intent of the requirements, which will be used during the evaluation of all potential suppliers.

The use of Supplier references, catalogue numbers shall not be deemed to supersede the performance requirements of the purchase order.

The above extent of supply given is not necessarily exhaustive and shall not relieve the contractor of his responsibility to provide plant, equipment and services necessary to satisfy the performance criteria and guarantees specified.



2.2. GENERAL REQUIREMENT:

Manual operated ball valves shall be easy to operate by hands and for sizes of NB 150 mm & above, valves shall be provided with gears for easy operation.

A valve manufacturer with whom an order has been placed shall not suborder assembled valves from other sources without Company approval.

Substitution of specified valves may only be made with the approval of the Company.

All valves shall operate smoothly over the entire range from 0% to 100% stroke without binding.

All ball valves should be lever operated with ability to be locked in the open and closed position. The operating levers on the ball valves shall indicate, by their position,

whether the valve is open or closed. The open position shall be indicated when the lever points in a direction parallel to the flow of the valve. It shall be impossible to reverse the indicating position inadvertently during reassembly of the valve.

Ball valves shall be **of fire safe design**. Fire safe valves with soft, non-metal seats shall meet the requirements of API Standard 607, "Fire Test for Soft Seated Quarter Turn Valves".

Socket weld valves shall not require disassembly for installation. Instructions for the welding of socket weld valves shall be provided to ensure that valve internals are not damaged during installation.

For shipping, valves shall be dry, clean, and free from moisture, dirt, and loose foreign material. Valves shall be protected from rust, corrosion, and any mechanical damage during transport, shipment, and storage. Valve ends shall be protected from damage or debris entering the valve by a cover attached to the valve ends. Rust preservative on machined surfaces to be welded shall be easily removable.

Supplier must provide Material Safety Data Sheets (MSDS) for all coatings, paints, lubricants, preservatives, or chemicals that will be brought onto the jobsite by the Supplier for whatever reason. The MSDS's must be delivered before equipment is delivered on the jobsite.

Supplier shall provide a detailed description of any special lifting and/or installation requirements.

Valves shall be field repairable. Balls, seals, and seats shall be replaceable without welding or cutting. Threaded bonnets are not acceptable.

Valves shall be capable of sealing with design pressure applied from either end of valve.

All valves shall have blowout proof stems.

2.3. Special Requirements

All valves are in anhydrous ammonia and service shall comply with CGA- G-2.1 2014.

BHEL categorizes anhydrous ammonia as category "M" service (ASME B 31.3).



Valves shall comply with ANSI/ASME B16.5, B16.34, B31.3, API 598, and API 607.

Valves shall be made of steel or other material suitable for anhydrous ammonia service.

Zinc, copper, or alloys containing these elements shall not be used.

Provisions shall be made to vent ammonia trapped between valve body cavity and ball by relief port or flexible lip.

2.4. Valve Testing Requirements

Low pressure closure testing on 7 kg/cm² (g) dry nitrogen for a minimum of one minute is required. Low pressure closure test shall be successively carried out from both sides.

Zero bubbles for specified test period.

Applied force to close valves shall be determined from appropriate figures of MSS SP-91. Closure force shall not exceed 36 Kg force pounds.

Test certificates required for all valves. Valves shall be issued with a copy of hydrostatic test certificates, conformity certificates, fire safe certificates, Low pressure closure certificates, high pressure closure certificates, and mill certificates. Mill certificates shall detail heat numbers, chemical, and mechanical properties.

3. TECHNICAL SPECIFICATIONS:

Vendor to confirm each of the following points, bring out clearly the deviation, if any, and give full particulars or clarifications wherever necessary or asked for. Ball valves shall be as per

- ANSI CGA G-2.1
- ANSI/ASME B 31.3
- ANSI B 16.34
- ANSI B 16.10
- IS / ISO 17292
- IS-662 Anhydrous Ammonia
- IS-4544 Ammonia code of safety
- IS-11132 Specification for Ammonia Valves
- American National Standard Institute (ANSI)
- American Society of Testing and Materials (ASTM)
- American Society of Mechanical Engineers (ASME)
- American Petroleum Institute (API)
- Environmental Protection Agency (EPA)
- International Organization for Standardization (ISO)
- National Electrical Manufacturer's Association (NEMA)
- National Fire Protection Agency (NFPA)
- American Welding Society (AWS)
- Occupational Safety and Health Administration (OSHA)



**SPECIFICATION FOR BALL VALVES
IN SCR AMMONIA SYSTEM**

**TSR: 016A
Revision No.: 00**

- Instrument Society of America (ISA)

1	Service	Safety on / off application
2	Fluid to be handled	Anhydrous, aqueous Ammonia (liquid & vapour)
3	Temperature	13°C -50°C
4	Fluid Pressure	Max 28 kg/cm ² (g) for Class #300
5	Valve Type	Full bore fire safe, three piece Teflon seated ball valve up to 2". Above that 2", 2- piece bolted., 3- piece design is acceptable.
6	Material of construction	Valve body of ASTM A-216 Gr WCB for 65 NB and above and ASTM A-181 Gr II for 50 NB and below. Ball (SS316); Gland & Stem of stainless steel equivalent or higher; Seats – 35% Carbon filled PTFE; Stem seals – Teflon , Body seal - Grafoil.
7	End connections	Socket Welded for NB<= 50 with 100mm extended pipe on both sides (pipe sizes table 3.1 sheet 7 of 22). Flanged end ANSI C300 as per enquiry for >NB50 ASME B16.5.
9	Fire Safe test	API 607-5th edition
10	Valve leakage test	Leakage test as per API 598 for resilient seated ball valves
11	Noise level	Shall be less than 85 dBA@ 1 m distance

Pipe schedule and corresponding pipe sizes are given in the following table:

TABLE 3.1

Sl. No	Pipe Schedule	Outside Diameter x thickness in mm
01	NB15	21.34 x 2.77
02	NB20	26.67 x 2.87
03	NB 25	33.4 x 3.38
04	NB 40	48.26 X 3.68
05	NB 50	60.32 X 3.91
06	NB 80	88.9 X 5.49
07	NB 100	114.3 X 6.02
08	NB 150	168.27 X 7.11
09	NB 200	219.07 X 6.35
10	NB 250	273 X 9.53
11	NB 300	323.9 X 8.8
12	NB 350	355.6 X 6.40
13	NB 400	406.4 X 9.53



4. DOCUMENTS TO BE SUBMITTED

4.1. The documents shall be submitted for all variants

- a) Filled in datasheets
- b) Cv. Values and Confirmation / deviation for all points of data sheet and specification.
- c) Noise level.
- d) Cross sectional details and spares identifier drawings.
- e) Catalogues / drawings for all accessories.
- f) Type test for fire safety for each size.
- g) Quality plan.
- h) Material test reports
- i) Operating torque and shear torque values required for each valves
- j) Field installation Procedures

4.2. After Placement of Order.

This shall be furnished along with the items during inspection.

- a) Body hydro test for 1.5 times the body rating.
- b) Seat leak test as per as per API 598.
- c) 100% Radiography of body.
- d) UT for stem over 50mm diameter.

4.3. Drawings and O & M Manuals:

- a) PDF soft version operation and maintenance manuals shall be provided with details for storage, installation, erection procedures, drawings, data sheet, operating and troubleshooting, lubrication schedule, spares data, spares identification drawings, spares replacement procedure and special requirements if any. All copies are to be sent to BHEL / Tiruchirappalli.
- b) 3 sets of CDs for the above manual.
- c) The hard copies of the Manuals should be in printed form in the copy sent along with equipment for site usage.
- d) The size of manuals should be in correct A4 size with drawings in A3 size. Large size drawings (greater than A3 size) should be reduced in A3 size and inserted.
- e) Drawings shall be of printed or laser printed form only.
- f) O & M manuals in soft version shall be submitted to BHEL / Tiruchirappalli prior to dispatch of the equipment.
- g) Manual, generally should contain the following:
 - i. Data sheet with makes of components supplied.
 - ii. Maintenance (including, storage, installation, Erection and lubrication wherever necessary) and service
 - iii. Recommended spares for 2 years trouble free service.
 - iv. Trouble shooting
 - v. Assembly drawings with part list, dimensional drawings & other applicable drawings.



- vi. Manuals should pertain only to the types or model supplied for the particular contract.

5. TESTING, INSPECTION AND PACKING

5.1. Testing:

Purchaser's and End user's representative shall have access to the works of vendor at all reasonable times for the purpose of witnessing the purchased equipment being tested.

5.2. Marking:

S.S. Name plate should be provided with details of Maker's name, Production serial number, and service, Tag number of valve, Valve size, Type and BHEL material code.

5.3. Packing:

All openings shall be firmly capped. Valves shall be packed in wooden boxes with waterproof under cover. Land / Sea worthy with liberal packing material & struts shall be used to arrest rolling to protect from transit damages as per data sheet.

5.4. Painting:

Surface preparation shall be as per relevant standard and painting shall be per the manufacturer's standard method of treating and protecting surfaces in the environment specified in the requisition and shall be documented and submitted for acceptance by the Company. Acceptance will be based on the following criteria.

- Proper surface treatment by blast cleaning or power tool cleaning.
- Application of a corrosion-resistant coating, such as epoxy, vinyl, polyurethane, or chlorinated rubber to a total dry film thickness ranging from 50 to 100 micrometers.
- Colors for painting will be manufacture's standard
- Painting and corrosion protection shall be an integral part of the fabrication to prevent damage from the environment.

The following surfaces and items shall not be painted:

- Non-metallic surfaces
- Stainless steel
- Machined surface
- Internal surfaces, coatings, linings
- Nameplates
- Valve stems

The seller's standard method of treating and protecting surfaces in the environment specified in the specification shall be submitted and documented for acceptance by the buyer.



6. PROJECT RELATED INFORMATIONS

6.1. Reference documents

- a. Nil

The vendor checklist in PART IIA, shall be filled in and furnished along with offer (Refer data sheet).

Note: 1. Deviation in the above requirements shall reject the offer.
2. If required, add more sheets.



**SPECIFICATION FOR BALL VALVES
IN SCR AMMONIA SYSTEM**

**TSR: 016A
Revision No.: 00**

7. PART IIA – VENDOR CHECKLIST FOR MANUALLY OPERATED BALL VALVES

Project Name : BHUSAWAL-1x660 MW Boiler.
Enquiry No. : Later
P.O.No. : Later
BHEL Material Code : L17271SR20016001 (NB20)
Valve Tag Nos : AT02Q, AT02R, AT02S, AT02T
Quantity : 04 Nos

Sl. No	Description	BHEL Specification	Vendor confirmation
II A	Valve Data		
1.00	Valve Size	As per Enquiry	
2.00	End Connection	SW/Flanged	
3.00	Body rating	C300/C800	
4.00	Valve Cv	Vendor to furnish	
5.00	Valve Operating Torque (Kg-m)	Vendor to furnish	
	Valve Shear Torque (Kg-m)	Vendor to furnish	
	Lever Length(mm)	Vendor to furnish	
6.00	Applicable Valve TAG Nos.	AT02Q, AT02R, AT02S, AT02T	
II B	Special Contract requirement	Nil	
1.00	Limit Switch a) Make Type/No. b) Mounted for c) Contacts d) Contact Rating e) Enclosure f) Cable entry	Not applicable	



An ISO 9001
Company

Bharat Heavy Electricals Limited
(High Pressure Boiler Plant)
Tiruchirappalli-620 014, Tamil Nadu, India
Dept: MATERIALS MANAGEMENT/BOI

Annexure – T- Additional Terms and Conditions

The terms and condition mentioned in this document are applicable for this enquiry. Bidders shall furnish pointwise confirmation/details.

Description of the Equipment:	NB100 Manually operated Ball valve (Ammonia system-SCR Area)
Projects	Bhushawal Project (U6/1727)
BHEL Tender No. & Date	1802200033 dt 09.03.2022
Name of the firm (Bidder)	:
Address	:
Contact details	<u>Contact person 1</u> Name: Designation: Office Phone: Mobile: e-mail: <u>Contact person 2</u> Name: Designation: Office Phone: Mobile: e-mail:

To be filled by bidder

Sl. No.	Terms and conditions	Vendor's confirmation
1.	<p><u>Technical:</u></p> <p>Bidder shall comply the specification requirements and shall submit the duly filled in specifications along with supporting document as per BHEL Specification. Any clarifications/deviations to the specification requirements are to be clearly indicated. Hidden deviations indicated elsewhere in the offer will not be evaluated.</p> <p>Applicable Technical specifications:</p> <ul style="list-style-type: none">• MANUALLY OPERATED BALL VALVE SIZE NB100 FOR SCR ANHYDROUS AMMONIA FARMYARD AREA SHALL BE AS PER TECHNICAL SPECIFICATION TSR:016A. VALVE TAG NO:AT02Q, AT02R, AT02S, AT02T.• TECHNICAL SPECIFICATION FOR BALL VALVES FOR ANHYDROUS AMMONIA -TSR:016A.	

	<ul style="list-style-type: none"> • VENDOR SHALL FURNISH UNIT WEIGHT AND DIMENSIONAL DRAWINGS OF THE VALVES DURING THE OFFER STAGE ITSELF. • VENDOR SHALL FOLLOW APPLICABLE PAINTING SCHEDULE FOR THIS PROJECT. • Vendor Quality Plan to be followed <p>No deviation format to be submitted along with your offer.</p>	
2.	<p><u>Pre-qualification requirement:</u> Offer shall be considered only if bidder is meeting Tender Prequalification requirement. Vendor to comply with Pre-Qualification requirement of the tender and submit along with their technical bid - the credentials and other documents as indicated in the PQR in the format prescribed. Otherwise their offer will get rejected.</p>	
3.	<p><u>CUSTOMER APPROVAL</u></p> <p>Vendor offers will be considered for price bid opening subject to fulfilment of techno commercial suitability and vendor approval by end customer before price bid opening.</p> <p>Vendor firms not approved by end customer shall submit supporting documents/Credentials for taking up with end customer for their approval.</p>	
4.	<p>Inspection by BHEL/ BHEL approved TPIA/Customer.</p>	
5.	<p><u>Firm Price:</u> The quoted / finalised rates shall be Firm till execution of the supplies. Offer with PVC clause will not be considered.</p>	
6.	<p><u>Payment term</u></p> <p>“100% Direct after 60 days from Despatch on receipt of the Site Acknowledgement”</p> <p>For MSE vendors, Payment term shall be as per MSME act.</p> <p>No deviation is permitted. Any deviation in the above payment term, any other conditions in payment term or any other payment term may not be accepted and the offers of such vendors are liable for rejection.</p>	
7.	<p><u>Delivery terms:</u></p> <p>FOR Bhushawal Project site basis</p> <p>The quote shall be on respective destination basis, inclusive of Packing & forwarding and Freight charges to your account.</p> <p>Transit Insurance is under BHEL scope.</p>	
8.		

	<p><u>TENDER FINALIZATION:</u></p> <p>Tender will be finalized on total package basis and on TWO part bid basis.</p> <p>Evaluation shall be on total landed cost to BHEL on FOR destination basis.</p>	
9.	<p><u>Guarantee / Warranty Period:</u></p> <p>18 months from the date of supply or 12 months from date of commissioning, whichever is earlier.</p>	
10.	<p><u>Repair & replacements:</u> Within the guarantee period vendor has to replace / rectify the defective/ damaged items on free of cost within a reasonable time of reporting from our end.</p>	
11.	<p><u>Loading Criteria:</u></p> <p>Guarantee / Warranty Period: No Deviation is permitted. If still vendor offered any deviation on the Guarantee / warranty period, it may lead to rejection of offer.</p>	
12.	<p>Kindly Indicate the HSN Code for all items</p>	
13.	<p><u>Delivery Period:</u></p> <p>Delivery shall be 120 Days from Document approval</p> <p>Manufacturing clearance will be given based on Documents approval from Customer /BHEL and site erection schedule.</p> <p>Material shall be dispatched only after obtaining dispatch clearance from BHEL.</p> <p>Vendors shall strictly adhere to the following.</p> <p>a. After material readiness and inspection completion (by TPI/ BHEL/ End Customer), vendor shall seek dispatch clearance from BHEL.</p> <p>b. After obtaining dispatch clearance from BHEL, vendor shall proceed to generate dispatch documents. After generating dispatch documents (Invoice, LR, E-waybill etc.) vendor shall immediately share these documents to BHEL (scan copy over email) for accounting the materials and securing insurance coverage.</p> <p>c. After accounting, BHEL would be issuing movement clearance to vendor immediately. Only after movement clearance is received from BHEL, actual/physical movement of goods out of vendor's premises shall commence.</p> <p>d. Non-adherence to the above may lead to GST authorities seizing the vehicle & goods and imposing penalty & interest. Any such implication would be to vendors account only.</p> <p>e. Provision of GST Act highlighted below in connection to this - Pursuant to Sec 31 of CGST Act 2017, a tax invoice has to be raised by the registered person supplying taxable goods before or at the time of removal of goods for supply to the recipient, where the supply involves movement of goods. Where a taxable person supplies any goods without issue of any invoice, the tax</p>	

	authorities has powers to detain the consignment and impose penalties equivalent to 200% of the tax payable as per Section 129 of CGST Act 2017.”	
14.	<p><u>Document Submission:</u></p> <p>In case of PO placements, required documents have to be submitted for approval within 15 days from the date of PO & reply for any further clarification has to be within 4 days. Any delay beyond the above specified period will be considered during LD calculation.</p>	
15.	<p><u>Liquidated damages:</u></p> <p>a) Time is the essence of the contract.</p> <p>b) The ordered items shall be delivered as per the delivery period mentioned in the Purchase Order.</p> <p>c) In case the supplier supplies the ordered items beyond the delivery period specified, Liquidated Damages -LD - as detailed below will be levied from the supplier without prejudice to any other relief /compensation available to BHEL, Tiruchirappalli under any other condition of the contract/applicable legal provisions.</p> <p>d) Failure to dispatch the materials in the time as per the delivery quoted in our Purchase Order(PO) would make the supplier liable to an unconditional LD at the rate of 0.5% of the total order value per week of the delay or part thereof subject to a maximum of 10% of Purchase order value.</p> <p>e) Any deviation from the above LD clause, loading will be applied to the extent to which it is not agreed by the bidder (at offered value).</p> <p>f) Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers. Hence applicable GST shall also be recoverable from suppliers on LD amount. Debit note will be issued by BHEL for this amount, indicating the respective supply invoice number.</p> <p>g) Invoice date/Bill of Lading date/Airway Bill date/Lorry way bill date/Railway Receipt date/E way bill date, whichever is later will be considered for LD calculation.</p>	
16.	<p><u>Risk purchase clause:</u></p> <p>In the event of any successful Tenderer's failure to fulfil any of the tender / Contract obligations including supply of whole or any part of the ordered items as per Contract / Agreement, BHEL has the right to terminate the contract and purchase from elsewhere, at the risk and cost of the defaulted supplier, either the whole of the goods or any part which the supplier has failed to deliver or dispatch within the time stipulated in the contract or if the same were not available, the best and nearest available substitute thereof. The supplier shall be liable for the additional expenditure/difference in Cost, if any, including consequential losses which BHEL may sustain by reason of risk purchase in addition to the applicable LD as per the Purchase order/contract.</p> <p>a) The decision of BHEL with regard to the additional expenditure / difference in cost and consequential losses incurred by BHEL shall be final and binding on the supplier.</p> <p>b) The amount recoverable under risk purchase shall be recovered from the defaulted supplier in all or any of the following manners:</p> <ul style="list-style-type: none"> • from dues available in the form of Bills payable to defaulted supplier, SD, BGs against the same contract. 	

	<ul style="list-style-type: none"> from the dues payable to defaulted supplier against other contracts in the same Region/Unit /any other region/unit <p>c) In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against defaulted supplier.</p> <p>d) Withdrawal of offer after price bid opening or varying the same in any manner within the validity period, but before the placement of order will be liable for suitable action for suspension of further business with the vendor as per BHEL corporate procedures.</p> <p>e) Abridged version of extant 'Guidelines for suspension of business dealings with suppliers/ contractors' has now been uploaded on www.bhel.com on "supplier registration page" at the following link: http://www.bhel.com/vender_registration/vender.php (Guidelines for suspension of business dealings with suppliers/ contractors).</p>	
17.	<p>Validity: 90 days minimum from techno commercial bid opening (Part-1). Any Deviation with respect to validity your offer will not be considered. Ensure your quoted rates will have 90 days' minimum validity from techno commercial bid opening. The delay in technical clarification beyond four days will be subsequently added to the validity period, Revised Price Bids will not be encouraged.</p>	
18.	<p>Documents are to be submitted along with technical bid (Part-1)</p> <ol style="list-style-type: none"> 01. Covering letter 02. Unpriced offer. 03. Filled technical specification and BHEL datasheets. 04. Filled BHEL Terms and condition sheet (Annexure-A) 05. Filled in PQR along with supporting documents. 06. GA Drawing 07. Self-Certification as per Make in India clause 08. MSE Certificates (if applicable) <p>Note: All the pages of documents are to be signed and sealed by authorized signatory of the company. Any query during enquiry stage shall be replied within two days failing which offer may be rejected as non-responsive.</p>	
19.	<p>Inspection and testing requirements: Inspection and testing requirements are to be carried out as per the specification and BHEL/Customer approved Drawing (All documents shall be submitted within 15 days from the date of PO for our approval), Technical spec & QP and all test certificates are to be submitted in complete set. Inspection notice period: For TPI inspector visit to vendor works, a minimum of 3 working days' notice period.</p>	
20.	<p>Supplier shall mention their GSTN registration number in all their invoices and invoices shall be in the format as specified/prescribed under GST laws. Invoices shall necessarily contain Invoice number (in case of multiple numbering system is being followed for billing like SAP invoice no, commercial invoice no etc., then the Invoice No which is linked/uploaded in GSTN network shall be clearly indicated), item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST & UTGST) separately, HSN/ SAC Code, etc.</p>	
21.	<p>All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).</p>	

22.	Invoices will be processed only upon completion of statutory requirement and further subject to following: <ul style="list-style-type: none"> • Vendor declaring such invoice in Form GST ANX-1 • Receipt of Goods or Services and Tax invoice by BHEL 	
23.	As the continuous uploading of tax invoices in GSTN portal (in GST ANX-1) is available for all (i.e. both Small & Large) tax payers under proposed new GST Return System, all invoices raised on BHEL may be uploaded immediately in GST portal on despatch of material /rendering of services. The supplier shall ensure availability of Invoice in GST portal before submission of invoice to BHEL. Invoices will be admitted by BHEL only if the invoices are available in GSTN portal (in BHEL's GST ANX-2).	
24.	In case of discrepancy in the data uploaded by the supplier in the GSTN portal or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit and will notify the supplier of the same. Supplier has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims, within the calendar month informed by BHEL.	
25.	In cases where invoice details have been uploaded by the vendor but failed to remit the GST amount to GST Department (Form PMT-08 or Form GST RET-01 to be submitted) within stipulated time, then GST paid on the invoices pertaining to the month for which GST return not filed by the vendor will be recovered from the vendor along with the applicable interest (currently 24% p.a) and all subsequent bills of the vendor will not be processed till filing of the GST return by the vendor	
26.	In case GST credit is denied to BHEL due to non-receipt or delayed receipt of goods and/ or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, GST amount claimed in the invoice shall be disallowed to the vendor.	
27.	Where any GST liability arising on BHEL under Reverse Charge (RCM), the vendor has to submit the invoices to BHEL well within the timeline prescribed in GST Law, to enable BHEL to discharge the GST liability. If there is a delay in submission of invoice by the vendor resulting in delayed payment of GST by BHEL along with Interest, then such Interest payable or paid shall be recovered from the vendor.	
28.	Under GST regime, BHEL has to discharge GST liability on LD recovered from suppliers/contracts. Hence applicable GST shall also be recoverable from suppliers/contractors on LD amount. For this Tax Invoice will be issued by BHEL indicating the respective supply invoice number.	
29.	GST TDS will be deducted as per Section 51 of CGST Act 2017 and in line with Notification 50/2018 – Central Tax dated 13.09.2018. GST TDS certificate which will be generated in GST portal subsequent to vendor accepting the TDS deduction in the GST portal, will be issued to the vendor.	
30.	A declaration to the effect that all invoice particulars are/were uploaded in the GSTN network/ portal & all tax liability as per GST rules and regulations have been and will be discharged, shall be mentioned in the invoice. If not mentioned in the invoice, a separate declaration shall be submitted as per the requirement of BHEL	

31.	<p><u>BILL PROCESSING METHOD:</u> “Supplier has to ensure the full quantity of material delivery within given PO delivery date to process the bill for payment. In case supplier fails to deliver full quantity within delivery date, bills received after PO delivery date will be processed after final despatch of the total pending supply. Further, bills will be clubbed and forwarded for payment processing as a single bunch”.</p>	
32.	<p><u>MSE VENDOR:</u> <i>i. If L1 vendor is an MSE vendor entire project package will be ordered on L1 vendor.</i></p> <p><i>ii. If a Non MSE vendor is coming as L1, then L1 prices will be counteroffered on MSE vendor who is quoting price within the price band L1+15% and if they are agreeing, purchase order will be awarded for full/complete supply of total tendered value to MSE.</i></p> <p><i>iii. If more than one MSE vendors are available in the L1+15% price band then lowest of the MSE vendor will be selected for counteroffering. If lowest MSE vendor is not accepting it will be counteroffered to the next MSE vendor in the price band and so on.</i></p> <p><i>iv. Finally if none of the MSE vendor in the price band is not accepting it will be ordered on L1 non MSE vendor.</i></p> <p>Payment for MSE Indigenous vendors will be as per MSMED Act, 2006</p> <p>MSE suppliers can avail the intended benefits only if they submit <i>Udyam Registration certificate</i>.</p> <p>Non submission of such documents will lead to consideration of their bid at par with other bidders. No benefit shall be applicable for this enquiry, in case of any deficiency in the above required documents or in case the documents are not submitted before price bid opening.</p>	
33.	<p><u>Make in India:</u> As per the clause no 4 as defined in Public Procurement (Preference to Make in India), Order 2017 dated 04.06.2020 issued by DPIIT, purchase preference is not applicable for local suppliers in this enquiry.</p>	
34.	<p><u>ARBITRATION & CONCILIATION:</u> Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the Parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or, in any manner touching upon the Contract, then, either Party may, by a notice in writing to the other Party refer such dispute or difference to the sole arbitration of an arbitrator appointed by Head of the BHEL Unit/Region/Division issuing the Contract. The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the Parties. Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory</p>	

	<p>modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause. The seat of arbitration shall be (the place from which the contract is issued). The cost of arbitration shall be borne as per the award of the Arbitrator.</p> <p>Subject to the arbitration in terms of Clause above, the Courts at TRICHY shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.</p> <p>Notwithstanding the existence or any dispute or differences and/or reference for the arbitration, the contractor shall proceed with and continue without hindrance the performance of its obligations under this contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.</p> <p>In case of contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable: In the event of any dispute or difference relating to the interpretation and application of the provisions of the Contract, such dispute or difference shall be referred by either Party for arbitration to the sole arbitrator in the Department of Public Enterprises to be nominated by the Secretary to the Government of India in-charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the Parties to the dispute, provided, however, any Party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and Justice, Government of India. Upon such reference the dispute shall be decided by the Law Secretary or the Special Secretary or Additional Secretary when so authorized by the Law Secretary, whose decision shall bind the Parties hereto finally and conclusively. The Parties to the dispute will share equally the cost of arbitration as intimated by the Arbitrator.</p>	
<p>35.</p>	<p><u>Suspension of Business Dealings with Suppliers/ Contractors</u></p> <p>The offers of the bidders who are under suspension as also the offers of the bidders, who engage the services of the banned firms, shall be rejected. The list of banned firms is available on BHEL web site www.bhel.com.</p> <p>Integrity commitment, performance of the contract and punitive action thereof:</p> <ol style="list-style-type: none"> 1. Commitment by BHEL BHEL commits to take all measures necessary to prevent corruption in connection with the tender process and execution of the contract. BHEL will during the tender process treat all Bidder(s) in a transparent and fair manner, and with equity 2. Commitment by Bidder/ Supplier/ Contractor <ol style="list-style-type: none"> a The bidder/ supplier/ contractor commit to take all measures to prevent corruption and will not directly or indirectly influence any decision or benefit which he is not legally entitled to nor will act or omit in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India. 	

	<p>b The bidder/ supplier/ contractor 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 and shall adhere to relevant guidelines issued from time to time by Govt. of India/ BHEL</p> <p>c The bidder/ supplier/ contractor will perform/ execute the contract as per the contract terms & conditions and will not default without any reasonable cause, which causes loss of business/ money/ reputation, to BHEL. If any bidder/ supplier/ contractor during pre-tendering/ tendering/ post tendering/ award/ execution/ post-execution stage indulges in mal-practices, cheating, bribery, fraud or and other misconduct or formation of cartel so as to influence the bidding process or influence the price or acts or omits in any manner which tantamount to an offence punishable under any provision of the Indian Penal Code, 1860 or any other law in force in India, then, action may be taken against such bidder/ supplier/ contractor as per extant guidelines of the company available on www. bhel.com and/or under applicable legal provisions. Guidelines for suspension of business dealings is available in the webpage: http://www.bhel.com/vender_registration/vender.php</p>	
<p>36.</p>	<p><u>Fraud Prevention Policy</u> 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.</p>	
<p>37.</p>	<p><u>Resolution of Disputes</u> The Parties agree that if at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation, effect, interpretation or breach of the contract/tender which the Parties are unable to settle mutually), arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators.</p> <p>The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof.</p> <p><u>Notes:</u></p> <ol style="list-style-type: none"> 1. No serving or a retired employee of BHEL/Administrative Ministry of BHEL shall be included in the BHEL Panel of Conciliators. 2. Any other person(s) can be appointed as Conciliator(s) who is/are mutually agreeable to both the parties from outside the BHEL Panel of Conciliators. <p>The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in Annexure X to this Enquiry Conditions.</p>	

	<p>The Annexure together with its appendices will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in these Enquiry Conditions</p> <p>Except as provided elsewhere in this Contract, in case amicable settlement is not reached between the parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract ; or , in any manner touching upon the Contract, then, either Party may , by a notice in writing to other Party refer such dispute or difference to sole arbitration of an arbitrator appointed as per the Arbitration and Conciliation Act, 1996 (India) or statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force .</p> <p>The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the parties. Subject as aforesaid, the provision of Arbitration & Conciliation Act 1996 (India) or statutory modification or re-enactment thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceeding under this clause.</p> <p>The seat of arbitration shall be Trichy, Tamil Nadu, India.</p> <p>The cost of arbitration shall be borne as per the award of the Arbitrator.</p> <p>Subject to arbitration in terms of clause above, the Courts at Trichy, Tamil Nadu, India shall have exclusive jurisdiction over any matter arising out of or in connection with this Contract.</p> <p>Notwithstanding the existence or any dispute or difference and/or reference for the arbitration, the vendor shall proceed with and continue without hindrance the performance of its obligation under this Contract with due diligence and expedition in a professional manner except where the Contract has been terminated by either Party in terms of this Contract.</p> <p>In Case of Contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable: In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/Port Trusts inter se and also between CPSEs and Government Departments/Organizations (Excluding disputes concerning Railways, Income Tax, Customs & Excise Departments, such dispute or difference shall be taken up by either party for resolution through AMRCD as mentioned in DPE OM No. 4(1)/2013 –DPE (GM)/FTS-1835 dated 22-05-2018.</p>	
38.	<u>PRICE IMPACT:</u>	

	All the technical / commercial details given in the enquiry shall be taken care and offer shall be quoted accordingly. No price impact / implication will be accepted within the validity period.	
39.	<u>BHEL reserve the right to inspect the item ordered at any stage at vendor's works and if found not meeting the stipulated conditions, material is liable for rejection</u>	
40.	<p><u>OTHER TERMS AND CONDITIONS:</u></p> <ul style="list-style-type: none"> • No revision of prices will be entertained at any circumstances after tenders are opened. • On the due date of tender opening, only the Techno-commercial bids will be opened. Techno-commercial bids will be evaluated by us and clarifications required, if any, will be called from the bidders on technical and commercial points. • If any difference is found in the terms in the Techno-commercial bid and price bid, the terms mentioned in the Techno-Commercial Bid will be considered. • BHEL reserves the right to negotiate or refloat the tender opened, if L1 price is not the lowest acceptable price to BHEL due to inter-alia other reasons. • The correspondence between the bidder and BHEL through Email is considered as valid document Legally though not signed. It is treated as valid confirmations made on behalf of the respective company and comes under the legal ambit of the business transaction and hence binding on both the parties. • If The Due Date Of Tender Opening Happens to be a Holiday, those tenders Will Be Opened On Next Working Day. • The quality of the supplies should strictly conform to technical specifications applicable for the item. The offer should specifically confirm this. • If any quality problem is pointed out by BHEL w.r.t. supplied material, the same shall be settled and corrected immediately by the supplier. If the material cannot be accepted by BHEL, supplier has to replace the material with no extra cost. Collection of rejected material will be sole responsibility of the supplier. • BHEL reserves the right to cancel the tender at any stage without giving any reasons. • In the event of our customer order covering this tender being cancelled /placed on hold / otherwise modified, BHEL would be constrained to accordingly cancel / hold / modify the tender at any stage of execution. • BHEL may negotiate the L1 rate, if not meeting our budget / estimated cost. BHEL may refloat the tender opened, if L1 price is not acceptable to BHEL. • BHEL reserves its right to reject an offer due to unsatisfactory past performance by the respective Vendor in the execution of any contract to any BHEL project / Unit. • Any other Techno –Commercial Terms indicated by the vendor in their offer elsewhere will be ignored. BHEL will proceed with tender evaluation as per Annexure A only. • For any clarifications, you may contact to the following Email ID : <ul style="list-style-type: none"> a) akhildas@bhel.in b) indhubannari@bhel.in 	
Note	For more details please refer to Ref. NIT of BHEL's website http://www.bhel.com (tender notification page) or from the govt. tender website http://tender.gov.in (Public Sector Units Bharat Heavy Electricals Limited page) or CPP portal https://eprocure.gov.in/eprocure/app . <i>Important: All updates, amendments, corrigendum etc., if any will be posted only on the above website as and when required. There will be no publication of the same through any other media.</i>	

Annexure-D

SUB-DELIVERY ENQUIRY DEVIATION FORMAT

	MATERIALS MANAGEMENT / BOI SUB-DELIVERY ENQUIRY DEVIATION FORMAT	
Schedule of deviation to Sub-delivery Enquiry No.	: 1802200033 dt 09.03.2022	
Description	: NB100 Manually operated Ball valve for Bhushawal project	
Technical Specifications Document	: ○ TECHNICAL SPECIFICATION FOR BALL VALVES FOR ANHYDROUS AMMONIA -TSR:016A.	
Drawing Nos.	:	
Quality Plan	: Vendor Quality Plan	
Packing Procedure	:	
Document reference	BHEL called for	Firm's
Certified that other than the above deviations, we are accepting all the other specifications and requirements in full to your Enquiry.		
Station :		
Date :	Signature of firm's representative	Firm seal
Note :	1. Deviations should be taken only in the extreme case 2. If necessary, use additional sheets with page control number	