

#### பாரத் ஹெவி இலெக்ட்ரிகல்ஸ் லிமிடெட் भारत हेवी इलेक्ट्रिकल्स लिमिटेड Bharat Heavy Electricals Limited

(A Government of India Enterprise) High Pressure Boiler Plant Tiruchirappalli - 620 014

#### MATERIALS MANAGEMENT

Phone: 0431 - 257 8109, 7446; E-mail: kevin@bhel.in, mohann@bhel.in; www.bhel.com

#### **NOTICE INVITING e-TENDER**

Ref: BHEL/1702100041 08.03.2021

Dear Sir/ Ma'am,

Ref : Tender No. 1702100041 dt 08.03.2021

Subject: Two-part e-Tender inviting techno-commercial and price bids for supply of Solenoid Operated Valves for Coal Fired Power Plants for DVC Lot-2 projects.

Kindly submit your competitive offer as per the tender terms and conditions given in the tender document through e-procurement portal https://eprocurebhel.co.in only.

Last date/ time for receipt of tender	15:00 Hrs on dt. 18.03.2021
Date/ time of opening of Techno- commercial bids	15:30 Hrs on dt. 18.03.2021 Change in opening date, if any, will be intimated later.
Date of price bid opening	The date/ time of price bid opening will be intimated to the techno-commercial qualified tenderer separately.

This two-part e-tender consists of the following documents:

- 1. Annexure A -Techno PQR, Commercial terms and conditions
- 2. Technical Specification
- 3. QP
- 4. Packing Procedure
- 5. CA certificate format for MSE vendors
- 6. No Deviation Format

#### **General Instructions**

- The tender documents shall be deemed to form an integral part of the purchase order.
- Tender can be cancelled at any stage due to unavoidable circumstances.
- Bidders are advised not to wait till the last minutes w.r.t tender closing time to submit their offer to avoid complications related with internet connectivity / network problem/ power failure etc.
- Bidders are advised take due care while quoting the technical and price bids (BoQ) forms in the e-procurement system. Bidders, those who tampers with tendering procedure affecting ordering process or misusing the technical information of the tender document or withdrawing their offer after price bid opening, will be penalized as per BHEL guidelines on suspension of business dealings with suppliers/ contractors. Abridged version of the guideline is available in www.bhel.com.

Ref: BHEL/1702100041 08.03.2021

• Bidders who have been suspended or black listed or issued with "Show Cause Notice" by BHEL, Tiruchirappalli or any

other unit or GOI should declare the same in the tender. Even during the course of evaluation/finalization of tender, if

it is found that some of the parties are black listed/ barred from business transaction/ under business hold, BHEL will

not consider them for further participation in the tender.

• It is advised that all the documents to be submitted are kept scanned or converted to PDF format in a separate folder

on your computer before starting online submission.

• Prequalification of vendors as per the PQR mentioned in the Annexure A is compulsory. It is mandatory to submit the

PQR related documents; else the offer will not be evaluated.

• DISCLAIMER CLAUSE: Neither the Organization (Bharat Heavy Electricals Ltd.) nor the service provider for e-tendering is

responsible for any failure of submission of bids, due to failure of internet or other connectivity problems or reasons

thereof.

Any pre-bid query, kindly contact: Mr. Kevin Ark Kumar, Manager/Materials Management/BOI Tel: 0431-2578109,

email: kevin@bhel.in; Mr. N Mohan, Asst./Engineer/Materials Management/BOI Tel: 0431-2577446, email:

mohann@bhel.in and get your queries cleared before submitting the offer in EPS. Rates once quoted in the BoQ Excel

format/online in the E-tendering Portal cannot be changed after due date and shall remain final.

Thanking you,

For Bharat Heavy Electricals Limited

Kevin Ark Kumar

Manager / Materials Management

Fourth floor, 24 Building

B.H.E.L., Tiruchirappalli – 620 014, Tamil Nadu

Phone: 0431-2578109 / Email: kevin@bhel.in

#### **ANNEXURE - A**

#### **TECHNO - COMMERCIAL TERMS AND CONDITIONS**

Des	Description of the Material:				SOLENOID VALVES FOR COAL FIRED THERMAL POWER PLANT				
ВНЕ	BHEL Tender No. & Date				11 dt 08.	03.2021			
	GENERAL INFORMATION								
htt	IMPORTANT INSTRUCTION: Interested bidders / Suppliers shall submit their offer through e-Procurement mode at <a href="https://eprocurebhel.co.in">https://eprocurebhel.co.in</a> . Offers in any other mode will not be accepted.  The bidder has to keep track of any changes by viewing the Corrigendum's Issued by BHEL on time-to- time basis in the								
							sible for any claims/proble		
SI. No.			Tei	rms and co	onditio	ns			Vendor's confirmation
	i. Vendor s thermal po bid openin ii. Vendor	should have so wer plants for g. Vendor to should have	confirm and submit	ns in the pas the purchase ty & capabilit	ot 5 years to order co ty for the l	from the opies.	alves to coal fired date of techno-commercial ng, Design and supply	PO Con	firmed/ Not Confirmed Copies submitted firmed/ Not Confirmed of machineries & lities submitted
1	SI No.	MATLCD	DESCRIPTI	ION	UNIT	QTY	QUOTED / NOT QUOTED		
1	10	1001	Normally Closed Sol	enoid Valve	NO	26.00			
	20	1002	Normally Open Sole	noid Valve	NO	26.00			
	Quality Pla Packing Pro Deviations All the abo	n Ref.: QA:CI: ocedure Ref.: in any of the a ve documents	Ref.: TCI:DVC-LOT2/Si STD:QP:11/05 QA:CI:STD:PR:04/03 above, if any, may be should be submitted	indicated in th	Seal of cor	mpany.			
2	Firm Price: The quoted / finalised rates shall be Firm till execution of the supplies. Vendor has to quote price according to the requirement as detailed in the attached technical documents. Unless there is a change in technical specification from BHEL side, impact price will not be allowed.  > BHEL will finalize the rates through price bid opening. Hence, Tenderers are requested to give their best prices at the first instant itself.  > In the event of the final L1 prices are not reasonable / acceptable to BHEL; BHEL also may resort to short closure of this Tender.  > In case of more than one L1 bidders, BHEL will get fresh revised reduced price bids from all such L1 bidders & ranking will be decided based on these revised bids. The new rates quoted should be lower than their previous L1 rates. If L1 could not be decided by this process, ranking will be decided by draw of lots in the presence of all such L1 bidders  Any pre-bid query, kindly contact: Mr. Kevin Ark Kumar, Manager/Materials Management/BOI Tel: 0431-2578109, email: kevin@bhel.in and get your queries cleared before submitting the offer in EPS. Rates once quoted in the online in the Enterprise Procurement System (EPS) cannot be changed after due date shall remain final.								
3	The tender is floated as a Single Package. Vendor has to quote for all the items						Quoted / Not Quoted		
4	Insurance v Delivery De	vill in BHEL So estination: : Site, Damoda	vijects Site Basis inclus cope ar Valley Corporation ar Valley Corporation	, Mejia TPS, E	Bankura Di	ist, WB (3	2 No.s) &		Accepted / Not Accepted

5	Payment term: 100% NEFT after 60 days of receipt & acceptance at Stores	Accepted / Not Accepted
6	Deviation in Payment Terms: Any deviation in the above Payment Terms (SI No. 5), any other conditions in payment terms or any other payment term will not be accepted and offers are liable to be commercially rejected.	Noted
7	<b>Liquidated damages:</b> Delivery of the goods specified in the purchase order should be made within the time prescribed. Failure to dispatch the materials in time as per the delivery quoted in our Purchase Order would make the supplier liable to an un-conditional 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 the total order value.	Accepted / Not Accepted
8	<b>Loading Criteria LD / Penalty:</b> Any deviation on BHEL LD / Penalty clause, loading (Basic material Value) will be applied to the extent to which it is not agreed by the bidder. LD is for Total Order Value and not for undelivered goods. If LD for undelivered portion is only acceptable then a loading of 10% on Basic Material Value will be applied.	Noted
9	Guarantee / Warranty Period : Guarantee clause 18 months from the date of supply or 12 months from the date of actual put in use, whichever is earlier.	Accepted / Not Accepted
10	<b>Deviation in Guarantee / Warranty Period:</b> No Deviation is permitted. If still vendor offered any deviation on the Guarantee / warranty period. Their offer will be rejected.	Noted
11	Delivery Period: BHEL standard delivery is <u>Eight weeks from document approval</u> . Vendor quoted delivery period shall include all activities i.e. manufacturing / production, Inspection, Packing, Forwarding, dispatch.	Accepted / Not Accepted
12	Validity: 90 days from techno commercial bid opening date	Accepted / Not Accepted
13	RISK PURCHASE: In case of abnormal delays (beyond the maximum late delivery period as per LD clause) or non- fulfilment of any other terms and conditions given in work order, BHEL may cancel the work order in full or part thereof, and may also make a contract of such work/service from elsewhere / alternative source at the risk and cost of the original contractor. BHEL will take all reasonable steps to complete the contract obligations from alternate source at optimum cost. If bidder does not agree to the above Risk Purchase Clause, BHEL reserves the right to reject the offer. In case for compelling reasons BHEL accepts the offer without acceptance of this clause by the bidder and in the eventuality of Risk Purchase, appropriate action will be taken as per BHEL extant rules. This will be without prejudice to any other right of BHEL under the contract. Risk & cost clause, in line with conditions of contract may be invoked in any of the following cases:  1. Contractor's poor progress of the work vis-à-vis execution timeline as stipulated in the contract, backlog attributable to contractor/ supplier including unexecuted portion of work/ supply does not appear to be executable within balance available period (by considering its performance of execution.  2. Withdrawal from or abandonment of the work by contractor before completion of the work as per contract.  3. Non completion of work / Non-supply by the contractor within scheduled completion/delivery period as per contract or as extended from time to time, for the reason attributable to the contractor.  4. Termination of contract on account of any other reason (s) attributable to contractor.  5. Assignment, transfer, subletting of contract without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.  6. Non-compliance to any contractual condition or any other default attributable to contractor.  Risk & Cost Amount = [(A-B) + (A x H/100)] Where,  A Value of Balance scope of Work/ Supply (*) as per rates of new contract  B - Value	Accepted / Not Accepted
14	GST DETAILS, BHEL TRICHY GST No. 33AAACB4146P2ZL	Noted
15	Please mention your GSTIN Number	
		l

16	HSN Codes for Quoted Material:	
17	Applicable GST Rate:	
18	Implementation of GST For supplies after implementation of New GST Return System i.e. from 01/10/2019, the following conditions will apply and supplier shalt fully comply to the below points.  Indigenous suppliers:  1. Response to Tenders for Indigenous supplier will be entertained only if the vendor has a valid GST registration No (GSTIN) which should be clearly mentioned in the offer. If the dealer is exempted from GST registration No (GSTIN) which should be clearly mentioned in the offer. If the dealer is exempted from GST registration a declaration with due supporting documents need to be furnished for considering the offer. Dealers under composition scheme should declare that he is a composition dealer supported by the screen shot taken from GST portal. The dealer has to submit necessary documents if there is any change in status under GST.  2. Supplier shall mention their GSTIN in all their invoices (incl. credit Notes, Debit Notes) 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/ploaded in GSTN network shall be clearly indicated), Billed to party (with GSTIN) is Shipped to party details, item description as per PO, Quantity, Rate, Value, applicable taxes with nomenclature (like IGST, SGST, CGST it UTGST) separately, HSN/ SAC Code, Place of Supply etc.  3. All invoices shall bear the HSN Code for each item separately (Harmonized System of Nomenclature)/ SAC code (Services Accounting Code).  4. Invoices will be processed only upon completion of statutory requirement and further subject to following:  a. Vendor declaring such invoice in Form GST ANX-1  b. Receipt of Goodso's Services and Tax invoice by BHEL  5. As the continuous uploading of tax invoices and Tax invoice by BHEL  6. As the continuous uploading of tax invoices in GSTN portal (in GST ANX-1) is available for all (i.e	Noted
19	Unregistered BHEL (Non-PMD) vendors for this item should submit the filled in supplier registration forms (SRF) available in the BHEL website https://supplier.bhel.in and the other required documents called for in the SRF as a parallel activity. The hard copy of the submitted SRF shall be submitted to SDC Dept. without fail. The same shall be scrutinized as per BHEL evaluation procedures iii. The contact details of SDC are as below:  Officer I/C, SDC / MM, 4th Floor, Building 24, BHEL, Trichy - 620014 Ph. No.: 0431-2577301, nalini.s@bhel.in Registered BHEL PMD vendors (for this item / Matl Gp) need not submit the SRF and this point is not applicable.	Accepted / Not Accepted
20	Subsequent to tender opening, the Part-2 bids (Price bid) of the Supplier will be opened subject to Customer acceptance and techno-commercial (Part-1 bid) qualification. Else, the offer will be rejected.  Acceptance required for the same	Accepted / Not Accepted
21	<ol> <li>All the technical documents which have been attached along with our enquiry i.e Specification, Drgs, QP, Packing Procedure, Data Sheet etc, signature to be endorsed on all pages with company seal Technical documents &amp; Sub-delivery enquiry deviation format.</li> <li>Filled-in/signed Annexure-A, Commercial terms and conditions. (Mandatory for Commercial evaluation)</li> <li>If MSE vendor, please attach UAM No. along with CA Certificate or Udyam Regn No.</li> </ol>	Submitted/ Not Submitted

22	Any deviation on technical/QP/packing requirements shall specifically be indicated in the "sub-delivery enquiry deviation format" attached along with the enquiry. Deviations / clarifications declared elsewhere will not be evaluated. Also, any deviations from the commercial terms and conditions shall be clearly spelt out in this format itself. Deviations / clarifications declared elsewhere will not be evaluated. Deviations taken, if any, by vendor as per our requirement above shall be clearly got accepted by BHEL in writing during enquiry stage itself. In the event of an order no deviations, unless accepted clearly by BHEL in writing during enquiry stage will be entertained and all other techno-commercial requirements will be binding on successful bidder and failure to execute the terms will lead to disciplinary action by BHEL against the said bidder.	Accepted / Not Accepted
23	BENEFITS TO MSE VENDOR:  MSE suppliers can avail the intended benefits only if they submit along with the offer, attested/notarized copies of either  1. Valid NSIC certificate or EM II certificate along with CA certificate applicable for the year, certifying quantum of investment in plant and machinery within the permissible limits as per the act for relevant status (MICRO or SMALL) where the deemed validity of EM II is over. OR  2. Udyog Aadhaar Memorandum No. & CA Certificate applicable for the year, certifying quantum of investment in plant and machinery within the permissible limits as per the act for relevant status.  Date to be reckoned for determining the deemed validity will be the last date of technical bid submission (Part 1 in case of two part bid). 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. If the tender is to be submitted through e-procurement portal, then the above required documents are to be uploaded on the portal even if submitted earlier.  Documents should be notarized or attested by a Gazetted officer.  For Package basis (Non-Splitable);  1. If L1 vendor is an MSE vendor entire project package will be ordered on L1 vendor.  1i. 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.  1ii. 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.  1v. Finally if none of the MSE vendor in the price band is not accepting, it will be ordered on L1 non MSE vendor is coming as L1, then	Accepted / Not Accepted
24	Definitions of MSEs owned by SC/ST is under:  • In case of proprietorship firm, proprietor must be SC/ST.  • In case of partnership firm, the SC/ST partners must be holding at least 51% shares in unit.  In case of private limited companies, at least 51% share must be held by SC/ST promoters.  Authorised Offices to Issue SC/ST certificate. The caste/Tribe/Community certificate issued by the following authorities in the prescribed form for SCs/STs can be considered.  • District Magistrate / Additional District Magistrate / Collector / Deputy Commissioner / Additional Deputy Commissioner / Deputy Collector / 1st class stipendiary magistrate / Sub divisional Magistrate / Taluka Magistrate / Executive magistrate  • Chief Presidency magistrate / Additional chief presidency magistrate/Presidency magistrate.  • Revenue Officer not below the rank of Tehsildar.  • Sub-Divisional officer of the area where the individual and / or his family normally resides.  To avail the benefits of MSE under SC/ST category, the related documents as stated above should be submitted along with tender documents.	Accepted / Not Accepted
25	Vendors who have registered themselves as MSE, cannot claim the benefits unless they submit the CA Certificate & UAM Registration copy along-with the EPS offer for each tender; failing which vendor shall not claim MSE benefits. As per Gazette Notification no. S.O. 2119(E) dated 26.06.2020 issued by Ministry of MSME regarding change in definition of Micro, Small & Medium Enterprises (MSMEs) applicable w.e.f. 01.07.2020 as follows:  Udyam Registration is a new process of MSME Registration launched by the Ministry of Micro, Small and Medium Enterprises on July 1, 2020.  All existing enterprises registered under EM-Part-II or UAM or any other registration issued by any authority under the Ministry of MSME are required to register again on the Udyam Registration portal (https://udyamregistration.gov.in). Such enterprises are required to apply and obtain Udyam Registration on or after 1st July 2020.  On registration, an enterprise is assigned with a permanent identity number, known as "Udyam Registration Number". An e-certificate, namely, "Udyam Registration Certificate" will be issued on completion of the registration process.  The MSE status of existing enterprises registered prior to 30th June 2020 shall be valid only till 31st March 2021. (i.e.) Udyam Registration Certificate is mandatory for all MSME enterprises from 1st April 2021.	Noted
	The evaluation is on package basis, offers with partial quantity in a package will be rejected. L1 will be arrived	Noted

27	Any pre-bid queries / clarification / document requirement etc. shall be asked within 3-4 days of floating tender in EPS. Tender due date extension will not be given without valid reason. Tender due date extension request has to be given before due date / time along-with a valid reason.	Noted
28	PRICE IMPACT: 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.	Noted
29	All the technical documents, if attached by BHEL along with the enquiry/ RFQ (Specification / Drawing / QP / Datasheet / Packing Procedure etc.) which are part of this e-tender, should bear your conformation / confirmation and sign with seal on each page. The same shall be scanned & attached as PDF files along with the offer for technical evaluation. (In case of Spares, reference PO is mentioned in the tender general notes, then technical documents need not be submitted, however, Deviation format mentioning the reference PO needs to be submitted)	Technical Docs Submitted / Not Submitted
30	Technical / commercial clarification, if any, will be initiated through EPS / email. Vendor to respond to the clarifications within 3 working days. If the vendor fails to respond, even after three reminders, then the vendor will be considered as non-responsive and is liable to be rejected. Please note that EPS generates auto email whenever clarification / tender event is scheduled. Vendor to keep track and respond immediately.	Noted
31	PO Acknowledgement: Within 7 days from the date of receipt of scanned PO copy through email.	Accepted
32	Document Submission after PO: Complete set of valid Documents as per BHEL format viz., Datasheet, GA drawing and QAP / RQP / VQP are to be submitted within 14 days from the date of receipt of PO (e-mail copy). If there is a delay in submission of valid documents within 14 days, the delay will be accounted for the calculation of LD.	Accepted
33	Inspection notice period: Vendor shall raise inspection call to Third Party Inspection Agency / BHEL at least three working days, prior to the proposed date of inspection. Place shall be vendor Works.	Accepted
34	Vendor shall dispatch the consignment immediately after getting dispatch clearance from BHEL, subsequent delay will be accounted for calculation of LD.	Accepted
35	either party of any obligations under the Contract shall be prevented or delayed by reason of any War, Hostile acts of the public enemy Civil Commotion, Epidemics, or Acts of God (Floods, Storm/Cyclone, Hurricane, Earth Quake etc.) then provided notice of happening of any such event is given by either party to other within 7 days from the date of occurrence therefor neither party shall by reason of such event be entitled to terminate this Contract nor shall either party have any claim for damages against the other in respect of such non-performance and delay in performance under the contract shall be resumed as soon as practicable after such event has come to an end or ceased to exist. If the performance in whole or part of any obligation under the Contract is prevented or delayed by reason of any such event, claims for extension of time shall be granted for periods considered reasonable by BHEL, subject to prompt notification by the contractor.  In the event of PO, the reference date for LD calculation will be date of final inspection Agency's signed Inspection report / Test certificates for Ex-Works & FOB contracts. The reference date for F.O.R contracts will be Invoice date / Lorry way bill date LR date/ Railway Receipt date, whichever is later. In case E&C support, LD for delays	Accepted  Accepted
37	Attributable to vendor will be reckoned after two weeks from the date of readiness at Site & prior notice by BHEL.  Fraud Prevention Policy  Suppliers involving in fraudulent practices or delayed supply (or) non-Supply will be dealt with provision as indicated in "Guidelines for Suspension of Business Dealings with Suppliers / Contractors" which is hosted in website <a href="https://www.bhel.com">www.bhel.com</a> . 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 <a href="https://www.bhel.com">www.bhel.com</a> .  1.0 Integrity commitment, performance of the contract and punitive action thereof: 1.1 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 transparent and fair manner, and with equity.  1.2 Commitment by Bidder / Supplier / Contractor: 1.2.1. 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. 1.2.2. 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 issues from time to time by Govt. of India / BHEL.  1.2.3. 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	Noted
38	<b>Inspection &amp; testing requirements:</b> Inspection and testing requirements are to be carried out as per the specification and BHEL/customer approved QAP and all test certificates are to be submitted in complete set as indicated in our specification /QAP. In case of Vendor QP the same shall be submitted for approval along with the offer.	Noted

39	Repair & replacements: 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. All incidental charges like freight, insurance and customs duty / GST are to vendor account only. The defective parts and components shall be collected by your Indian agent or / authorized person, only after completing the replacement / repairs. The defective parts / components will not be returned back to vendor works by us due to procedural problems.	Accepted
40	BHEL reserves the right to cancel / modify the tender, if the need so arises, without assigning any further notice or reason therefore.	Accepted
41	ARBITRATION & CONCILIATION: 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 modifications or reenactments 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.  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. 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. 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 arbi	Noted
42	<b>JURISDICTION:</b> In case of any suit or other legal proceedings arising under or relating to this Contract, the courts at Trichy, Tamil Nadu only shall have the Jurisdiction and is only after exhausting the aforesaid arbitration clause.	Noted
43	SUSPENSION OF BUSINESS DEALINGS WITH SUPPLIERS / CONTRACTORS: Penal action can be initiated on the suppliers / Contractors in line with extant 'Guidelines for Suspension of Business Dealings with Suppliers/ Contractors'. The abridged version of extant 'Guidelines for suspension of business dealings with suppliers/ contractors' has been uploaded on http://www.bhel.com on "supplier registration page".  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.  1.0 Integrity commitment, performance of the contract and punitive action thereof:  1.1. 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.  1.2. Commitment by Bidder/ Supplier/ Contractor:  1.2.1. 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.  1.2.2. 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.  1.2.3. 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/ execu	Noted

SECRECY OF CONFIDENTIAL INFORMATION: The Contractor undertakes and agrees that he/it will not disclose or reveal in part or full the proprietary/confidential information, which terms shall mean and include patents, trademarks, service marks, registered designs, copyright, design rights, know-how, confidential information, trade and business names and any other similar protected information of BHEL received during negotiation or currency of the contract to any third party or governmental authorities without written permission from BHEL. In the event of termination or expiry of the contractor shall return all proprietary/confidential information to BHEL. This clause shall survive termination or expiry of the contract.

All the input details: transmittals and sample drawings supplied for preparation of drawings are confidential information of BHEL for specific purpose only. The contractor shall never pass on / part with the information to anybody and shall maintain the secrecy of the information. As soon as the bills are certified by BHEL, all the relevant drawing files shall be erased from PCs and shall not be made use under any circumstances.

BHEL reserves the right to initiate appropriate action including legal proceeds / termination of contract, recovery of damages, penalties etc., if the contractor is found guilty / wrong usage of the documents given by BHEL for any unauthorised activity

By signing this Annexure, the vendor consents that the terms & conditions accepted, in this Annexure-A alone, shall be binding between BHEL and the Vendor; and no other terms quoted / mentioned, elsewhere in the Offer / Quotation will be considered / accepted by BHEL.

#### **PART-1 BID**

SI No.	MATLCD	DESCRIPTION	UNIT	QTY	QUOTED / NOT QUOTED
10	1001	2 Way, 2 Port Single Acting Normally Closed Solenoid Valve Port Size: 1/2" NPT(F) Technical Specification Ref.: TCI:DVC-LOT2/SOV/00 Quality Plan Ref.: QA:CI:STD:QP:11/05 Packing Procedure Ref.: QA:CI:STD:PR:04/03		26.00	
20	2 Way, 2 Port Single Acting Normally Open Solenoid Valve Port Size: 1/2" NPT(F) Technical Specification Ref.: TCI:DVC-LOT2/SOV/00 Quality Plan Ref.: QA:CI:STD:QP:11/05 Packing Procedure Ref.: QA:CI:STD:PR:04/03		NO	26.00	
		TOTAL		52.00	
No	te: The tender is	floated as a single package. Partial offer will be rejec	ted. Do	not men	tion the prices here.
		QUANTITY BREAK UP	1		
	CT: DVC Mejia Ur	T			
SL No.		DESCRIPTION	UNIT	QTY	DESTINATION
		NORMALLY CLOSED SOLENOID VALVE NORMALLY OPEN SOLENOID VALVE	NO	4.00	
		NORMALLY OPEN SOLENOID VALVE	NO NO	4.00 2.00	
		NORMALLY CEOSED SOLENOID VALVE	NO	2.00	
		NORMALLY CLOSED SOLENOID VALVE	NO	4.00	Project Site, Damodar
		NORMALLY OPEN SOLENOID VALVE	NO	4.00	Valley Corporation,
		NORMALLY CLOSED SOLENOID VALVE	NO	2.00	Mejia TPS, Bankura
		NORMALLY OPEN SOLENOID VALVE	NO	2.00	Dist, West Bengal
		NORMALLY CLOSED SOLENOID VALVE	NO	4.00	
		NORMALLY OPEN SOLENOID VALVE	NO	4.00	
		TOTAL		32.00	
PROJE	CT: DVC Chandra	pura Unit 7 DeNOx R&M			
SL No.		DESCRIPTION	UNIT	QTY	DESTINATION
1	L426119728201001	NORMALLY CLOSED SOLENOID VALVE	NO	4.00	
2	L426119728201002	NORMALLY OPEN SOLENOID VALVE	NO	4.00	D
3	L4261S9728201001	NORMALLY CLOSED SOLENOID VALVE	NO	2.00	Project Site, Damodar
4	L4261S9728201002	NORMALLY OPEN SOLENOID VALVE	NO	2.00	Valley Corporation, Chandrapura TPS,
5	L426119728201001	NORMALLY CLOSED SOLENOID VALVE	NO	4.00	Bokaro Dist, Jharkhand
6	L426119728201002	NORMALLY OPEN SOLENOID VALVE	NO	4.00	Dokaro Disc, Sharkhalla
		TOTAL	_	20.00	

### **BHARAT HEAVY ELECTRICALS LIMITED**

HIGH PRESSURE BOILER PLANT, TIRUCHIRAPALLI - 620 014

## TECHNICAL DELIVERY CONDITIONS FOR SUB - DELIVERY COMPONENTS OF CONTROLS AND INSTRUMENTATION



TCI:DVC-LOT2/SOV

PAGE 1 OF 3

#### **SOLENOID VALVES**

for

**Project:** DVC Combustion Modification Package – LOT 2 **Customer Nos.:** 4258 to 4262

#### **REVISION HISTORY**

REV. No.	DATE	DESCRIPTION	PREPARED	CHECKED	APPROVED
00	06-02-2021	Initial Release	(N.Rakesh)	(N.Rakesh)	(Aswini Kumar Panda)



#### 1.0 TECHNICAL SPECIFICATION

Sl. Characteristics		Requirements
1.0	Site Condition	
1.1	Altitude above mean sea level	110 m above MSL
1.2	Ambient temperature	49.5°C
1.3	Relative humidity	10 - 100 %
2.0	Solenoid Valve	
2.1	Operating Principle	Electromagnetic - Single Coil.
2.2	Power supply	24V DC ±10%
2.3	Pick up voltage	85% of rated voltage
2.4	No. of ways & port	2 way 2 port, Direct Acting Solenoid Valve
2.5	Port size (all ports)	½" NPT(F)
2.6	Action	Normally Open or Normally Closed as per purchase enquiry requirement
2.7	Leakage Class	IV or better
3.0	Solenoid Coil	- V
3.1	Duty	Suitable for continuous energization.
3.2	Insulation Class	Class - H
3.3	Enclosure	Stainless steel, IP-65
3.4	Rating	Vendor to indicate in the offer
4.0	Material	
4.1	Body	Bronze or better
4.2	Plunger	SS 316 or better
4.3	Seat	Buna – N / Viton
5.0	Process Medium	
5.1	Medium	Air
5.2	Operating pressure	5 - 7 bar
5.3	Temperature range	0 - 70 °C
5.4	Flow	2 Nm <sup>3</sup> /min (vendor to select suitable orifice)
6.0	Other Requirements	
6.1	Manual operator/ Manual override	Not required.
6.2	Manual reset	Not required.
6.3	Electrical connection	½" NPT Cable Gland shall be supplied by the Vendor. Flying leads are not acceptable.
6.4	Tests	Seat leakage test/CV test/Coil insulation test



Sl. No.	Characteristics	Requirements
7.0	Documents	
7.1	To be submitted along with offer	<ul> <li>a) Sub Delivery Enquiry Deviation Format indicating the Item Description, Technical Specification, Quality Plan, Packing Procedure references.</li> <li>b) Solenoid valve catalogue along with decodification details.</li> </ul>
7.2	To be submitted After Placement of Purchase Order for Approval	<ul><li>a) Data Sheets for Solenoid Valve.</li><li>b) O&amp;M along with data sheet &amp; test certificates.</li></ul>
7.3	Quality Plan	QA:CI:STD:QP:11/05
7.4	Packing Procedure	QA:CI:STD:PR:04/03

#### Note:

- 1. Vendor to duly sign and stamp for compliance/confirmation for the BHEL's specification.
- 2. In case of any deviation it shall be mentioned only in BHEL's Sub-Delivery Enquiry Deviation Format.
- 3. The entire system and accessories should not contain any asbestos material.

QA:CI:STD:QP:11

Rev: 05

Page: 1 of 2

#### CONTROLS AND INSTRUMENTATION/QA/FB

#### STANDARD QUALITY PLAN FOR

#### **SOLENOID VALVES**

REV	DATE	PREPARED	REVIEWED	APPROVED	REVISION HISTORY
00	17/01/1990	Sd/-	Sd/-	Sd/-	Initial release.
01	16/06/1997	Sd/-	Sd/-	Sd/-	Format revised
02	21/03/2002	Sd/-	Sd/-	Sd/-	Dept. name changed. CTQ requirements added & General revision.
03	08/01/2004	Sd/-	Sd/-	Sd/-	Revised to include the comments/feedback of Internal discussion.
04	20/01/2009	Sd/-	Sd/-	Sd/-	Format Revised. Hydro test included.
05	15/03/2010	RM.VAIRAVAN	RM.VAIRAVAN	N.SNIDHAR	Routine test revised
		apple !	DISTO		



## BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI - 620014

## QUALITY PLAN FOR SOLENOID VALVES

QA:CI:STD:QP:11 Rev: 05 Page: 2 of 2

SI.	Component &	Characteristics	Class	Type of	Quantum of check		Ref Doc. &	Format	AGENCY			REMARKS
No	Operation			Check	М	B/C	Acceptance STD	of record	М	В	С	
Α	FINISHED PROI	DUCTS INSPECTION										
01	Routine tests	a. Physical verification for model, type and dimension	Major	MEAS	100%	20%	Spec. Drg, IS 8935	TR	Р	W		
		b. Coil duty	Major	ELEC	Sample	Sample	Mfr Std.	TR	Р	W		
		c. Port size (all ports)	Major	PHYS	100%	20%	Spec. Drg, IS 8935	TR	Р	W		
		d. Mounting accessories	Major	PHYS	100%	20%	-Do-	TR	Р	W		
		e. Power supply voltage variation test	Major	ELEC	100%	20%	-Do-	TR	Р	W		
		f. Pick up voltage test	Major	ELEC	100%	20%	-Do-	TR	Р	W		
		g. HV/IR test	Major	ELEC	100%	20%	-Do-	TR	Р	W		
		i. Hydro test at 15 bar	Major	MECH	100%	20%	-Do-	TR	Р	W		
		j. Seat leak test	Major	MECH	100%	20%	-Do-	TR	Р	W		
		k. Functional test	Major	ELEC	100%	20%	-Do-	TR	Р	W		
		I. Type, Insulation of Copper wire	Major	PHYS	100%	Sample	-Do-	TC	Р	٧		
02	Type test	a. Enclosure protection test	Major	ENVI	One of Design	One of Design	Spec., IS 60947 Pt.1	TC	Р	٧		
		b. Temperature rise test for coil	Critical	THER	-Do-	-Do-	Spec. IS 8935	TC	Р	٧		

#### **B.NOTES:**

#### 1.LEGENDS:

THER Thermal MEAS Measurement MECH Mechanical ENVI Environmental **ELEC** Electrical TC Test certificate TC Test Certificate TR : Test Report

- 2. The vendor at their works shall arrange all testing facilities. Tests for which facilities are not available are to be carried out at recognized National Test Houses like ETDC/CIL/NPL/ERTL etc., at vendor cost.
- 3. Through Log Book / any other documents available at the vendor's works, it shall be possible to correlate the finished products with raw material and in process stage checks / inspection carried out.
- 4. All Measuring & Testing Instruments shall be periodically calibrated from recognized test houses certificates made available during inspection for verification.

- 5. Type test certificate shall not be earlier than 5 years from the date of Purchase enquiry.
- 6. Vendor to give tentative inspection program in advance and confirm exact date two weeks in advance for arranging BHEL's inspection.
- 7. Packing shall be as per the "PACKING PROCEDURE "indicated in the specification.

#### C. REFERENCE STANDARDS:

(For Indicated Standards Refer the Latest Version)

IS 8935 : Actuators – Electric solenoid operated

IS 60947 pt.1 : General rules for low voltage switchgear. (Degree of

Enclosure protection offered by enclosures)

IS 4905 : Methods of random sampling

SQP11R5.doc

## BHARAT HEAVY ELECTRICALS LIMITED TIRUCHIRAPPALLI

## CONTROLS AND INSTRUMENTATION / FB QUALITY ASSURANCE

# STANDARD PACKING PROCEDURE FOR ALL INSTRUMENTS AND MISCELLEANEOUS ITEMS (ELECTRICAL, ELECTRONIC AND PNEUMATIC)

Rev	Date	Prepared	Checked	Approved	Revision History
00	01.01.96	Sd/-	Sd/-	Sd/-	Initial History
01	28.03.02	Sd/-	Sd/-	Sd/-	Department name changed
02	26.02.07	Sd/-	Sd/-	Sd/-	Revised after discussion with
					Shipping Dept.
03	17.12.16	A.SRIHARI RAO	RM.VAIRAVAN	S.DAKSHINAMOORTHY	Revised to suit all type of
		A. Suhan Lea	21280	Davan holy	instruments.

#### 1. Scope

This procedure gives minimum guidelines to be complied with for packing of Electrical, Electronic and pneumatic Instruments. This packing shall be suitable for different handling operations and for the adverse conditions during transportation and during indoor / outdoor storage for period more than one year.

#### 2. Material for packing

The individual instrument shall be packed in carton box (specifically made for particular instrument) and grouped together inside a box made of wood or plywood as per National / International standard.

#### 3. Packing

- Items shall be inspected for cleanliness immediately before packaging. Dirt, oil, residue, metal chips or other forms of contamination shall be removed.
- Adequate protection shall be provided against mechanical damage and atmospheric corrosion in transit and, for equipment suitable for outside storage, for prolonged storage at the site prior to installation.
- Water proof barrier material high density polythene shall be used as a resistant to grease and water; it shall protect items from airborne and windblown soils.
- Desiccants like silica gel to be used inside the carton box. Silica gel shall conform to IS 3401. The gel is to be packed in sachets placed at different positions inside the components for absorbing moisture. The quantity of silica gel shall be adequate for storage period of one year.
- All tapped openings in equipment shall be plugged with plastic plugs to protect internal / external threads.
- Use a sturdy cardboard shipping carton, large enough for at least 3 inch foam padding around the instrument.
- Do not use loose plastic foam pieces, which can shift during transport.
- Secure the box flaps with packaging tape or box staples.

#### 3.1) Marking & Labelling:

- Components and their containers shall be identified by marking. Shipping marks shall be on all sides of package. The shipping marks shall be at least 3 inches high where space permits. Markings are to be in black paint or ink depending on shade of the package surface.
- Cautionary symbols to be stenciled in red waterproof paint or ink.

#### QA:CI:STD:PR:04 / Rev 03

- The gap between job and the box shall be filled with suitable material like jute, coir, thermo coal, etc.
- For export packing additional care shall be taken as per contract requirements if applicable. Otherwise, suitable box made of seasoned wood and / or plywood sheets of required thickness shall be used with suitable sea worthy packing protection.

#### 4. Marking

 After completing the packing, Stencil marking, as per dispatch instructions and symbol marking as per Annexure – I shall be made. Please ensure the box is stenciled with "FRAGILE ITEM", "HANDLE WITH CARE".

#### 5. Packing Slip

A copy of the packing slip, kept in a polythene cover shall be kept inside the box.
 Another copy of the packing slip, kept in a polythene cover shall be kept outside the box and firmly fixed to the case.

#### 6. Caution

• Do not pack any other Mechanical items with this case.

#### 7. General

- These packing procedures are the minimum requirements in addition to the standard instructions mentioned in the Purchase Order and Specification.
- Deviation to meet the packing procedure requirements / non-clarity in packing approach in any quotation will be liable for rejection of offer.

#### <u>ANNEXURE - 1</u>



FRAGILE, HANDLE WITH CARE



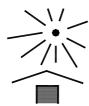
USE NO HOOKS

NUTE: The design of heavy goods packages cannot always resist top lifting by grabhooks.



THIS WAY UP

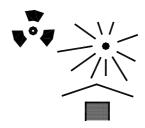
NITE: Certain designs of small cases make it difficult to distinguish top from bottom.



KEEP AWAY FROM HEAT



INTERNATIONAL "SLING HERE" SYMBOL

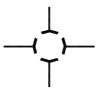


PROTECT FROM HEAT AND RADIOACTIVE SOURCES



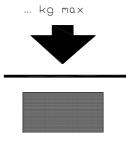
KEEP DRY

 $N\square TE\colon$  Not all cases have waterproof internal linears: plywood used in the construction may not have a waterproof glueline.



CENTRE OF GRAVITY

NOTE: This should be stancilled as a minimum on the two longest case sides (this information will normally be supplied by the manufacturer of the item(s) packed).



STACKING LIMITATION

 $\ensuremath{\mathsf{N}\square\mathsf{TE}}\xspace$  The maximum load in kilograms should be marked above the arrow.

RHIII	PURCHASE / MM / BOI ENQUIRY DEVIATION						
429-024		PAGE	1 OF 1				
SCHEDULE OF DEVIATION TO BOI ENQUIRY NO:	1702100041	DATE	08.03.2021				
DESCRIPTION	SOLENOID VALVES FOR COAL FIRE	ED THERMAL PO	WER PLANT				
SPECIFICATION	TCI:DVC-LOT2/SOV/00						
QUALITY PLAN	QA:CI:STD:QP:11/05						
PACKING PROCEDURE	QA:CI:STD:PR:04/03						
DATASHEET	N/A						
DOCUMENT REFERENCE	BHEL ENQ. CALLED FOR	FIRM'S ALT	ERNATIVE OFFER				
CERTIFIED THAT OTHER THAN	THE ABOVE DEVIATIONS, WE ARE	ACCEPTING ALL	THE OTHER				
	EMENTS IN FULL TO YOUR ENQUIR		IIIE OIIIEN				
STATION:							
DATE:	SIGNATURE OF FIRM'S REPRESENT		FIRM SEAL				
	be taken only in the extreme case. additional sheets with page control						

#### **Certificate by Chartered Accountant on letter head**

This is to Certify	that M/s				,			
(hereinafter				_	its registered office at is registered under MSMED Act 2006,			
					dtd:,			
Category:	(ı	nicro/small))	. (Copy enclosed).					
Further verified from the Books of Accounts that the investment of the company as per the latest audited financial year as per MSMED Act 2006 is as follows:								
<ol> <li>For Manufacturing Enterprises: Investment in plant and machinery (i.e. original cost excluding land and building and the items specified by the Ministry of Small Scale Industries vide its notification No.S.0.1722(E) dated October 5, 2006;</li> <li>Rs Lacs</li> </ol>								
2. For Service Enterprises: Investment in equipment (original cost excluding land end building and furniture, fittings and other items not directly related to the service rendered or as may be notified under the MSMED Act, 2006: Rs								
(Strike off whichever is not applicable)								
The above investment of Rs Lacs is within permissible limit of Rs Lacs for Micro / Small (Strike off which is not applicable) Category under MSMED Act 2006.								
		Or						
The company has been graduated from its original category (Micro/ Small) (Strike off which is not applicable) and the date of graduation of such enterprise from its original category is								
Date								
(Signature) Name -								