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GeM Tender Enquiry for Air Release Valve for 1x 660MW SAGARDIGHI Extn Unit-5 Project

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Annexure-I

	ADDITIONAL TERMS & CONDITIONS FOR AIR RELEASE VALVE PACKAGE IN 1x660MW SAGARDIGHI EXTN. PROJECT :- SAME SHALL SUPERSEDE TERMS AND CONDITIONS MENTIONED ELSEWHERE IN BID	
1	Terms Of Payment	
	a) Supply (For Main Supplies incl . Commissioning Spares, Mandatory Spares)	As per clause no. 12 (i), (ii) of GEM GTC 4.0 (Version 1.4) Supplier has to provide original 1 copy of Tax E-invoice (if applicable), Packing List, LR/RR, CRAC, Insurance intimation, Guarantee Certificate, Local content certificate, E-way bill (as applicable) for payment. Offline payment mode shall be selected. 100% Payment will be released after CRAC & receipt of complete documents within 90 days for Non-MSME vendors, within 45 days for Micro & Small vendors and 60 days for Medium enterprises (as per MSMED Act).
2	Terms Of Delivery	FOR Dispatch station. However, unloading of items (at delivery point) shall be in the scope of buyer. Insurance shall be in seller scope. Bidder to quote prices accordingly. Further, w.r.t. Transit Insurance supplier has to inform the details of dispatches (such as Policy No., Consignee Name, Consignment Packing details, Project Name, Purchase Order No., LR No. & date, Invoice No. & date, Dispatch Origin & destination details etc.) to policy underwriter.
3	Delivery Schedule	For Main Supplies: - Delivery schedule shall be as per Annexure-A . Delivery period for sake of GeM bid shall be chosen as 999 days (maximum allowable delivery time) from PO date. However, this period shall not be considered for Delivery and Delay analysis purpose. For Delivery and delay analysis purpose, standard delivery schedule mentioned in Annexure-A shall be considered. For Mandatory Spares: - 04 months from the date of BHEL clearance. Separate manufacturing clearance shall be accorded for mandatory spares.
4	Guarantee Terms	As per Cl. No. 10 of GTC on GeM for the bid. However, Guarantee & Warrantee time period shall be 18 months from the date of last supply in the contract for Main Supply & Mandatory Spares.
5	Quantity Variation	Qty Variation is +/- 10%.
6	Any other special major condition	<ol style="list-style-type: none"> 1. Material shall be dispatched only after issuance of MDCC/ clearance by BHEL. 2. PBG not-applicable as per GeM GTC cl. No. 7. 3. Non-Divisible package hence MSE preference will not be applicable.
7	This is a conditional tender enquiry. Reverse Auction of a bidder shall be subjected to the following: <ol style="list-style-type: none"> i) Approval of vendor by end customer i.e. (M/s WBPDCCL) ii) Techno-Commercial evaluation by BHEL. iii) Qualification of Technical PQR. iv) Offered item should mandatorily conform to PP-MII order provisions. 	
8	This item/package /system falls under the list of items defined in para 3 of ministry of finance guideline dtd. 20.09.16 (Procurement of items related to Public safety, Health, Critical Security operations & Equipment's etc.) & hence criteria of prior experience/Turnover shall be same for all the bidders including start-up/MSME.	
9	Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection.	

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10	<p>Bidders have to note, "For this procurement, the local content to categorize a supplier as a Class I local supplier as defined in Public Procurement (Preference to Make in India) Order 2017 dated 16.09.2020 issued by DPIIT. In case of subsequent orders issued by the nodal ministry, changing the definition of local content for the items of the NIT, the same shall be applicable even if issued after issue of this NIT, but before opening of Part-II bids against this NIT."</p> <p>Since this package falls under clause 3 (a) of DPIIT's PP-MII order 2017, Rev dated 16/09/2020 & MHI Order no. 9/45/2017 HE&MT-Part I dated 29.12.2021 issued by MHI, therefore, in line with clause of DPIIT's PP-MII order 2017, Rev dated 16/09/2020, "Class-I local suppliers" as defined in the order are eligible to bid.</p> <p>In accordance with para 9 (a) of DPIIT's PP-MII order 2017 revision dated 16/09/2020, Class-I local suppliers at the time of tender, bidding or solicitation shall be required to indicate percentage of local content and provide self-certification that the item offered meets the local content requirement for the Class-I local supplier". They shall also give details of the location(s) at which the local value addition is made as per annexure-IV.</p> <p>*Class-II suppliers as per MII order is not eligible to bid for subject tender and it is reserved for Class-I supplier having min. local content 60%. In case tender is showing for class-II suppliers also due to GeM logic, same may please be ignored/neglected.</p>
11	<p>Bidders to ensure that Third party / customer issued certificates being submitted as proof of PQR qualification should have verifiable details of document / certificate issuing authority such as name & designation of Issuing Authority and its organization contact number and e-mail Id etc. In case the same found not available, Purchaser has right to reject such document from evaluation.</p>
12	<p>Bidders to,</p> <ul style="list-style-type: none"> • ensure compliance to Ministry of Power (MoP) Order No. 25-11/6/2018-PG dt. 02/07/2020 & Order No. 11/05/2018-Coord. dt. 28/07/2020, if applicable. • ensure compliance of Ministry of Finance (MoF) Order (Public Procurement No. 1 & 2) F. No. 6/18/2019/PPD dt. 23/07/2020. • to submit "Model Certificate for Tenders" as per Annexure-III of Ministry of Finance (MoF) Order (Public Procurement No. 1 & 2) F. No. 6/18/2019/PPD dt. 23/07/2020. <p>Note: Subsequent orders/circulars to be checked and to be complied.</p>
13	<p>Due to COVID-19 pandemic and other pandemic condition prevailing in the country, BHEL/PEM may go for Remote Inspection of Offered items, if required. Vendors are requested to be equipped with the facilities/gadgets as indicated in the guidelines mentioned in "https://pem.bhel.com/Documents/VendorSection/Vendor/Guidelines.pdf" to take up the inspection REMOTELY.</p> <p>Inspection call to be raised by bidder on BHEL CQIR portal (details shall be shared at the of execution of order) and Inspection agency shall attend at the inspection within seven (07) days of the date on which the material is notified as being ready. In case of delay in witnessing of inspection beyond stipulated time (i.e. 7 days from the date on which the material is notified as being ready), by BHEL arising due to reasons not attributable to vendor, BHEL will extend the delivery period for such delay in carrying out inspection. If BHEL is not able to witness inspection up to 15 days then in addition to delay beyond stipulated period, extension in delivery time of 07 days for arranging fresh inspection will be given.</p> <p>When the tests have been satisfactorily completed at Seller/ Contractor's works, the Inspection Agency shall issue an inspection report that effect within seven (07) days after completion of the tests, but if the tests were not witnessed by the Inspection Agency or his representative, the material acceptance report would be issued within seven (07) days after receipt of the test certificates by the Purchaser.</p> <p>Purchaser will issue MDCC to the Seller/ Contractor within 7 days based on inspection report/ test certificates/Certificate of Conformance as applicable. In case of delay in issuance of MDCC beyond 7 days stipulated time (i.e. from the date of successful inspection report), by BHEL arising due to reasons not attributable to vendor, BHEL will extend the delivery period for such delay in issuing MDCC. If BHEL</p>

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	is not able to issue MDCC up to 15 days then in addition to delay beyond stipulated period, 7 days' additional time shall be given to vendor to facilitate the vendor for arranging logistics arrangements.
14	The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/guideline.
15	Bidders to inform freight /GST percentage for all the items as part of un-priced bid to be submitted along with their Techno-Commercial offer. However, negotiation/RA shall be on Total Evaluation (FOR as per GeM) price only as per GeM logics. Detailed Price Break shall be reverse calculated based on freight/GST percentage furnished by bidder for Order Placement.
16	Bidder has to provide the details as per TECHNICAL PQR (at pg. no. 1 - 3 of 19 of technical specification document) in its offer and has to note that bids of only those bidders shall be evaluated who meet the Technical Pre-Qualifying requirements. Above terms for PQR shall prevail in conflict (if any).
17	For bidders (who are not registered with BHEL-PEM) - For registration in BHEL PEM- Online registration portal is operational, Non-registered Vendors who wish to apply for registration in BHEL-PEM can apply through Online Registration Portal available at www.pem.bhel.com - vendor section - Online Supplier Registration. All credentials and/or documents duly signed and stamped related to registration can be uploaded on the website and submit the application for registration. However, registration of suppliers is not mandatory in case of open tender.
18	<p>Dispatch Markings: - Each box shall be marked with Capital Letters in "Red" indicating: Main Supply OR Commissioning spare OR Mandatory Spare for 1X 660 MW SAGARDIGHI TPP EXTENSION UNIT 5, P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India Each package/Drum delivered under the Contract shall be marked by Supplier as per details listed below and such marking must be distinct and in English Language (all previous irrelevant markings being carefully obliterated) for purposes of identification. Each and every box(package) shall be marked with following: -</p> <ol style="list-style-type: none"> 1) Name and address of the consignee. 2) Project Reference. 3) Name of Supplier 4) P.O. reference no. along with package name. 5) Packing No. (1/10, 2/10, 3/10 when there are 10 packages for one consignment) 6) The Gross weight and net weight of the package. <p>Besides above necessary, packing shall bear a special marking "TOP", "BOTTOM", "DO NOT TURN OVER", "DEEP DRY", "HANDLE WITH CARE", etc.</p> <p>IMPORTANT Two copies of respective standard manufacturer's erection instruction /operation manual shall be provided for immediate reference by BHEL site.</p> <p>The Copy of complete Packing list for the consignment must be put inside the Box/Boxes.</p> <p>12 copies of supplier's Erection/ Instruction manuals to be given to the BHEL, PEM, PPEI Noida and 3 copies to BHEL, PSER, Sagardighi site within 30 days of dispatch for handing over to Customer/BHEL site.</p> <p>LOP shall essentially have O&M Manuals and E&C guidelines to be kept inside box duly enclosed.</p> <p>Commissioning Spares: - The commissioning spares shall be properly packed separately in separate box and each spare shall be properly tagged giving details i.e. dispatch (to match the description given in</p>

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the packing slip) to facilitate their proper identification. One Copy of Packing list must be put inside the packing Box.

Mandatory Spares: - Supplies of spares will be separate from main supply and separate manufacturing clearance shall be given for mandatory spares. The Mandatory spares shall be properly packed separately in separate boxes & boxes should be painted in red indicating Mandatory Spares in bold letters and each spare shall be properly tagged giving details i.e. item number of the equipment in line with the WBPDCCL approved BBU for Mandatory spares & Number per item (to match the description given in the packing slip) to facilitate their proper identification by ultimate customer M/s WBPDCCL. One Copy of Packing List must be put inside the BOX along with Manufacturing drawing no. reference, Catalogue reference etc.

Note: - MDCC for mandatory Spares shall be issued only after receipt of detailed list of mandatory spares & photographs before final packing clearly showing mandatory spares with due tagging as per packing list (to be sent over mail/CD). Separate dispatch clearance will be issued for the mandatory spares in line with availability of customer's stores at site.

19 **Liquidated Damages:** -

a) **Main Supply & Commissioning Spares** :- Purchaser reserves the right to recover from the Seller/ Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half ($\frac{1}{2}$) percent and applicable GST thereon, of the total main supply & commissioning spares contract price excluding GST per week or part thereof, subject to a maximum of ten(10) percent of the total main supply & commissioning Spares contract price excluding GST, if the Seller/ Contractor fails to deliver any part of the ordered goods/stores within the period stipulated in the Order/ Contract.

b) **LD on Mandatory spares portion:** -

Purchaser reserves the right to recover from the Seller/ Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half ($\frac{1}{2}$) percent and applicable GST thereon, of the total Mandatory Spares contract price excluding GST per week or part thereof, subject to a maximum of ten (10) percent of the total Mandatory Spares contract price excluding GST, if the Seller/ Contractor fails to deliver any part of the ordered Mandatory Spares goods/stores within the period stipulated in the Order/ Contract.

c) **LD on Supervision E&C (if applicable):** - For delay in deputing service engineer, LD on supervision activities shall be applicable @ $\frac{1}{2}$ % of the total Supervision E&C portion contract value (excluding element of taxes) per week or part thereof, with applicable GST. However, total LD shall be limited to 10% of cumulative total contract (if applicable) value excluding taxes.

NOTE:

i. LR/RR date for indigenous supplies (Bill of Lading/AWB for Foreign supplies) shall be treated as the date of dispatch for levying LD. However, if receipted LR date for indigenous supply is beyond 30 days for FTL/ 45 days for PTL from the date of LR (PTL to be clearly mentioned in LR), such excess period shall be considered for LD purpose irrespective of dispatch date. Import General Manifest (IGM)/Bill of entry date (whichever is earlier), for foreign supplies, is beyond 90 days from the date of Bill of Lading/AWB, such excess period shall be considered for LD purpose irrespective of dispatch date.

ii. In case of any amendment/ revision, LD shall be linked to the amended/ revised contract value and delivery date(s).

iii. If Order/ Contract involves two or more Units/ Sets/ Lots/ Stages, then Liquidated Damages shall be levied on order/ contract value excluding GST of the delayed Unit/ Set/ Lot/ Stage, provided delivery stipulated in the Order/ Contract is Unit/ Set/ Lot/Stage wise, however total LD amount shall be limited to 10% of total order/ amended order value excluding GST of delayed Unit/ Set/ Lot/Stage. Any subsequent lot released (not envisaged in original contract) due to increase in quantity within permissible quantity variation shall be treated as separate lot for the purpose of LD.

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

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20	Risk & Cost Purchase - As per Annexure-V (Risk & Cost purchase)
21	The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies/ guidelines.
22	In course of evaluation, if more than one bidder happens to occupy L-1 status, effective L-1 will be decided by soliciting discounts from the respective bidders. In case more than one bidder happens to occupy L-1 status even after soliciting discounts, the L1 bidder shall be decided by a toss / draw of lots, in the presence of respective bidder(s) or their representative(s). Ranking will be done accordingly. BHEL's decision in such situation shall be final and binding .
23	GeM has the functionality to quote Single Unit Price (FOR) for each item. Bidders to furnish applicable Freight & GST % w.r.t. Ex Works included in Single quoted (FOR) price.
24	Successful bidder to submit detailed 'BOM' at the time of drawing/document submission after placement of PO along with undertaking as per annexure-II . Breakup prices of commissioning spares (if applicable) item wise and mandatory spares shall also be sought.
25	For recognition of dispatch, vendor to submit following documents to BHEL by e-mail/ fax immediately on dispatch: - GST compliant invoice, LR for Indian Vendors (indicating Invoice No., no. of boxes, PTL (if applicable) etc.) / Bill of Lading or AWB for foreign vendor, Packing List (Must be indicating No. of boxes, Packing size, Gross weight and net weight of each package, Contents of the package with cross reference to BoM item code no. or item serial no. and Quantity of each item separately), Insurance Intimation to underwriter through email/fax, Dispatch Clearance.
26	<ul style="list-style-type: none"> i. Bidder's offer is liable to be rejected if they don't upload any of the certificates / documents sought in the Bid document, ATC and Corrigendum if any. ii. Bidders are advised to check applicable GST on their own before quoting. Buyer will not take any responsibility in this regards. GST reimbursement will be as per actuals or as per applicable rates (whichever is lower), subject to the maximum of quoted GST %. iii. Data Sheet of the product(s) offered in the bid, are to be uploaded along with the bid documents. Buyers can match and verify the Data Sheet with the product specifications offered. In case of any unexplained mismatch of technical parameters, the bid is liable for rejection. iv. The bidder is required to upload, along with the bid, all relevant certificates such as BIS license, type test certificate, approval certificates and other certificates as prescribed in the Product Specification given in the bid document. v. While generating invoice in GeM portal, the seller must upload scanned copy of GST invoice and the screenshot of GST portal confirming payment of GST.

Annexure-I

Annexure-A to Standard Delivery Schedule

Sl. No.	Package Code	Package name	BHEL Drawing No	Drawing Title	Primary/ Secondary	Drg Sch for Vendors	Standard Delivery Terms for Supply Portion
1	100-87000-A	AIR RELEASE VALVES	PE-V0-XXX-100-M061	GA DRG FOR AIR RELEASE VALVE	Primary	R-0 within 14 days from PO & subsequent revisions incorporating all the BHEL comments within 10 days of comments received from BHEL.	Within Four (04) months, from date of CAT-1 approval of Primary drawing/documents, subjected to drawing/document submission/re-submission schedule as stipulated, in case of any delay in submission/re-submission of Primary drawing/documents, then same shall be reduced from the given delivery period
			PE-QP-XXX-100-M009	QP FOR AIR RELEASE VALVE	Primary		
				INFLOW GRAPH FOR AIR RELEASE VALVE	Secondary	within 30 days of issuance of MDCC	

- a. The end period specified is for completion of the deliveries. Deliveries to start progressively so as to meet the completion schedule.
- b. The delivery conditions specified are for contractual LD purposes, however BHEL may ask for early deliveries without any compensation thereof.
- c. Non-applicable drawings shall be decided during bid evaluation.
- d. Wherever schedule of drawings/documents submission / re-submission is stipulated in the Technical Specifications, same shall be superseded by delivery specified in NIT.

1 X 660 MW WBPDCS SAGARDIGHI EXTN UNIT V

GeM BID NO. -....., Dt:-

ANNEXURE -II (INSTRUCTIONS TO PACKING LIST)

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

Supplier to also give the following undertaking in the BOM:

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

Packing List must indicate:

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

The packing list must cover all the BOM items.

Supplier to give following undertaking in the packing list:

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

Annexure-III

UNDERTAKING

PROJECT NAME: 1 X 660 MW WBPDCS SAGARDIGHI EXTN UNIT V

PACKAGE NAME: AIR RELEASE VALVE

TENDER ENQUIRY REF:

"I (M/s) have read the clause (GOI- MOF F.No. 6/18/2019-PPD dated 23/07/2020 and clarification dated 24.07.2020) regarding restrictions on procurement from a bidder of a country which shares a land border with India; I hereby certify that M/s (bidder name) is not from a such country and eligible to be considered".

For(Bidder Company Name)

(Authorized Signatory)

Note :- Bidder is requested to furnish the above undertaking on company letterhead from the highest competent authority at your end (i.e Owner, partner, CMD, Director, company secretariat etc.).

Bidder's company letter head

Annexure-IV

TO WHOM IT MAY CONCERN

PROJECT NAME: 1 X 660 MW WBPDCS SAGARDIGHI EXTN UNIT V
PACKAGE NAME: AIR RELEASE VALVE
GeM Bid No.:

As per Make in India orders issued by Govt. of India, we hereby confirm that minimum local content for GeM tender no. will be%.

We further confirm that address for local value addition will be our registered works is at
.....

Your's faithfully

Authorised Signatory & stamp

Note :- Bidder is requested to furnish the above undertaking on company letterhead from the highest competent authority at your end (i.e Owner, partner, CMD, Director, company secretariat etc.).



BOQ CUM DATA SHEET - A
AIR RELEASE VALVES
1X660MW SAGARDIGHI TPS

SPEC. NO. PE-TS-445-100-M019

SECTION II

REV.00 DATED 26.09.2022

SHEET 01 OF 02

1	2	3	4	5	6		7	8	9	10	11	12	13		14	15	16	17
SL NO.	TAG NOS.	TYPE OF VALVE	SIZE mm (NB)	OPERATION	DESIGN		SERVICE	RATING, DESIGN & TESTING CODE	BODY MATERIAL	TRIM MATERIAL	END CONN	SPECIAL FEATURES	MATCHING PIPE		MAIN VALVES QTY WITHOUT COMMISSIONING SPARES NOS.	COMMISSIONING SPARES (COVER GASKET - NOS)	MANDATORY SPARES NO.	REMARKS
					PRESSURE KG/CM2(G)	TEMP(DEG 0 C)							MM	MM				
1	CW-12, CW-14 CW-16, CW-18 ,CW-55, CW-56 ,CW-57, CW-58,	ARV WITHOUT ISOLATING GATE VALVE	200	AUTO	5.5	80	WATER	PN1.0 IS:14845 FOR ARV	CAST IRON AS PER IS 210 Gr. FG 260	13% Cr SS AS PER ASTM A182 Gr F6a	ASME B16.1 CL 125 F/F	N.A	219.1	6.00	8	8	1	
													TOTAL	8	8	1		

NOTES

1. LEGENDS: AUTO=AUTOMATIC, ARV=AIR RELEASE VALVE
2. COMMISSIONING SPARES -> 1 SET OF COVER GASKET FOR EACH ARV
3. PRICES OF COMMISSIONING SPARES TO BE QUOTED SEPARATELY BY BIDDER. IT SHALL NOT BE CLUBBED WITH THE UNIT PRICE OF MAIN VALVES.
4. FOR DETAILED MATERIAL OF CONSTRUCTION, REFER SHEET 2 OF 2 OF DATASHEET-A.



PRE - QUALIFYING REQUIREMENTS

DOCUMENT No.: PE-TS-445-000-M061

REV. NO.:00 DATE: 26.09.2022

SHEET: 1 of 3

Project: 1X660 MW SAGARDIGHI TPS

Package: Air Release Valves

CRITERIA FOR EVALUATION (TECHNICAL / FINANCIAL):

1. Technical Pre-Qualifying Requirements:

1.1 The bidder (including cases as defined in clause no. 2.1 below) should have designed, in-house manufactured, tested, inspected and supplied Air Release Valves of minimum size of 150NB with material of construction as CI/ CS/SS as per IS:14845/ AWWA C512 for use in a power plant or for similar application.

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

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

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

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

1.4 In addition to above, bidder should have the following facilities for size and material of construction of Air Release Valve as per BHEL requirement as mentioned in Data sheet-A of Technical Specification:

- a) Capability of designing and manufacturing of the item(s).

PREPARED BY:

NAME: GK MORYE
DESIGNATION: DY. MGR.
DEPT.: PS-PEM/ MPL

REVIEWED BY:

NAME: SANJAY KUMAR
DESIGNATION: Sr. DGM
DEPT.: PS-PEM/ MPL

APPROVED BY:

NAME: B K AGARWAL
DESIGNATION: DH/ AGM(MPL)



PRE - QUALIFYING REQUIREMENTS

DOCUMENT No.: PE-TS-445-000-M061

REV. NO.:00 DATE: 26.09.2022

SHEET: 2 of 3

- b) In-house testing facilities for carrying out tests as per relevant standards & Quality Plan. In case, the in-house testing facilities are not available, then bidder shall furnish undertaking that test(s) will be carried out from govt. approved lab or test house recognized by reputed customers.

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

- 1.5 To establish business continuity, bidder is required to submit at least two (2) Purchase order for Air Release Valves with minimum size of 100NB in last 3 (three) years prior to the date of bid submission as defined by BHEL-PEM in NIT.

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

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

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

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

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

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

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

PREPARED BY:

NAME: GK MORYE
DESIGNATION: DY. MGR.
DEPT.: PS-PEM/ MPL

REVIEWED BY:

NAME: SANJAY KUMAR
DESIGNATION: Sr. DGM
DEPT.: PS-PEM/ MPL

APPROVED BY:

NAME: B K AGARWAL
DESIGNATION: DH/ AGM(MPL)



PRE - QUALIFYING REQUIREMENTS

DOCUMENT No.: PE-TS-445-000-M061

REV. NO.:00 DATE: 26.09.2022

SHEET: 3 of 3

- 2.5 Notwithstanding anything stated above, BHEL reserves the right to assess the capabilities and capacity of the bidder/collaborators to perform the contract, should the circumstances warrant such assessment in the overall interest of BHEL.
- 2.6 After satisfactory fulfillment of all the above criteria/ requirement, offer shall be considered for further evaluation as per NIT and all the other terms of the tender.
- 2.7 Bidder to ensure that Third Party/customer issued certificates being submitted as proof of PQR qualification should have verifiable details of document/ certificate issuing authority such as name & designation of issuing authority and its organization contact number and email-id etc. In case the same found not available, purchaser has right to reject such document from evaluation.

PREPARED BY:

NAME: GK MORYE
DESIGNATION: DY. MGR.
DEPT.: PS-PEM/ MPL

REVIEWED BY:

NAME: SANJAY KUMAR
DESIGNATION: Sr. DGM
DEPT.: PS-PEM/ MPL

APPROVED BY:

NAME: B K AGARWAL
DESIGNATION: DH/ AGM(MPL)


1X660 MW SAGARDIGHI TPS

TECHNICAL SPECIFICATION FOR AIR RELEASE VALVES

SPECIFICATION NO.: PE-TS-445-100-M019
Rev. No.: 00




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

	TECHNICAL SPECIFICATION AIR RELEASE VALVES FOR 1X660MW SAGARDIGHI TPS	SPECIFICATION NO.: PE-TS-445-100-M019	
		SECTION:	
		REV. NO.: 00	DATE: 26.09.2022
		SHEET 1 OF 1	


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SECTION-I

SPECIFIC TECHNICAL REQUIREMENTS

	SPECIFIC TECHNICAL REQUIREMENTS	SPECIFICATION NO.: PE-TS-445-100-M019	
	AIR RELEASE VALVES	SECTION: I	
	1X660 MW SAGARDIGHI TPS	REV. NO.: 00	DATE: 26.09.2022
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1. GENERAL

- 1.1. The valves shall meet the technical requirements and conform to the requirements of Section-I and Data sheet-A of Section-II. However, in the event of contradictions between Section-I & Section-II/Data Sheet-A, Data Sheet-A will prevail.
- 1.2. The technical requirements for valves shall, in general, be as per the attached Data Sheet-A of Section-II.

2. SCOPE OF SUPPLY

- 2.1.1. The valves complete with all accessories shall be supplied as per Data Sheet-A of Section-II. For detail refer the same. Each valve (quantity and other details specified in Data Sheet-A) shall have lifting arrangement provision for handling i.e., lifting lugs, eye bolts etc.
- 2.2. Commissioning spares, as per Data Sheet-A.
- 2.3. Set of special tools and tackles, if required, for the maintenance, erection etc. of the equipment supplied.
- 2.4. Finish paints for touch-up painting of equipment after erection at site in sealed containers.
- 2.5. Various drawings, datasheets, operation and maintenance manuals etc. (Nos./ sets of hard copies shall be informed as per project specific requirement).

3. CODES AND STANDARDS


- 3.1. The design, materials, construction features, manufacture, inspection and testing of valves shall conform to the latest applicable codes and standards.
- 3.2. The valves covered under this specification shall be designed and tested as per IS:14845.
- 3.3. In case of any conflict between the above codes/ standards and this specification, the later shall prevail and in case of any further conflict in the matter, the interpretation of the specification by the BHEL shall be final and binding.

4. DESIGN REQUIREMENTS

- 4.1. Valves shall be flanged, double orifice, double float & kinetic type.
- 4.2. All valves shall be suitable for the service conditions i.e. flow, temperature, pressure and medium under which they are required to operate and those performing similar duties shall be interchangeable with each other unless otherwise specified.

5. MATERIALS

- 5.1. The materials of construction of main parts of Air Release valves shall be as specified in Data Sheet-A.

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5.2. The materials of construction of the remaining parts shall be as per the relevant standard governing the valves and to suit water quality. These materials shall be subjected to approval.

5.3. Material used in manufacture of valve shall be of tested quality.

6. CONSTRUCTION FEATURES

6.1. The float shall not close the valve at higher air velocities. The orifice contact joint with the float shall be leak tight. The valves shall efficiently discharge the displaced air automatically from pipes/ducts while filling them & admit air automatically into them while they are being emptied.

6.2. The valve shall also be able to release any trapped air while at normal working conditions from pipes/ducts.

6.3. The body of valve shall be of one-piece construction.

6.4. All valves shall be fitted with a stainless-steel nameplate (2 mm thick) with valve tag nos. & service description, engraved 1 mm deep and filled with black enamel paint. This nameplate is in addition to the rating plate being provided by vendor indicating the valve body material, rating, size etc.

7. MANUFACTURE OF VALVES

7.1. Valve castings shall be procured from foundries observing strict quality control and approved by reputed customers.


7.2. Particular care shall be taken to ensure that all foundry sand and loose material is properly removed from castings by fettling before the valve's assembly is started.

8. TESTING, INSPECTION & QUALITY ASSURANCE

8.1. The items covered under this contract shall be subjected to inspection, testing and quality surveillance. The Inspection Agency shall, at all reasonable times have access to Vendor's works, Quality Control records and all facilities as reasonably required for carrying out the inspection and testing efficiently, and these shall be provided by the vendor free of cost.

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

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

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8.4. There may be minor changes in quality plan depending on customer/consultant comments which will have to be accommodated by vendor at no extra cost.


9. PAINTING REQUIREMENT FOR CAST IRON VALVES:

Following steps to be followed for painting of valves:

- 9.1. Surface preparation shall be done by means of sand blasting, which shall conform to SSPC SP10/ NACE 2/Sa2½ Standard.
- 9.2. Primer Coat shall consist of one coat (minimum DFT of 100 microns) of epoxy resin-based zinc phosphate primer.
- 9.3. Intermediate Coat (or Under Coat) shall consist of one coat (minimum DFT of 100 microns) epoxy resin-based paint pigmented with Titanium Dioxide.
- 9.4. Top Coat shall consist of one coat (minimum DFT of 75 microns) of epoxy paint of approved shade/ Aluminium colour with glossy finish.
Additional one coat (minimum DFT of 25 microns) of Finish Coat of polyurethane shall be provided.
- 9.5. Total DFT of paint system shall not be less than **300** microns.

10. PACKING INSTRUCTIONS:

- 10.1. Each valve shall be drained, cleaned, prepared and suitably protected in such a way so as to minimize the possibility of damage and deterioration during transit and storage.
- 10.2. The valve shall be dispatched in total assembled form.
- 10.3. Body ends shall be suitably sealed to protect them against damage during transit and storage.
- 10.4. A thin sheet steel circular blanking plate of a diameter 6mm less than the bolt holes inner P.C.D. shall be firmly fixed to the flange faces by the application of adhesive after first ensuring that the flange faces have been thoroughly degreased. A thin coat of adhesive shall be applied to the flange face and the blanking plate and then allowed to dry for 15-20 minutes. The coated face of the blanking plate should then be offered up to the face of the flange taking care that the plate is concentric with the flange. Firm pressure shall be applied to ensure intimate contact between plate and flange. A wooden blank should then be bolted to the flange using a minimum of 4 bolts.
- 10.5. Valve Tag Nos. shall be incorporated in all the dispatch documents.
- 10.6. Proper care shall be taken to avoid damage to the painted surface during transit.
- 10.7. All the valves shall be packed suitably in wooden cases in order to avoid damage during transit and also during storage at site in tropical climate conditions.

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10.8. Vendor to provide soft copy of photos/snaps of duly packed valve. The soft copies to be provided by vendor after final inspection of valves. Clearance for dispatch of valves will be given only after satisfactory packing conditions of valves from vendor's work.

There may be minor changes in packing depending on customer/consultant comments which will have to be accommodated by vendor at no extra cost.

11. SPARES

11.1. Mandatory Spares: Refer Data Sheet-A.

11.2. Order for the spares may be placed simultaneously or otherwise at the option of purchaser.

12. EXCLUSIONS FROM THE BIDDER'S SCOPE:

12.1. Counter flanges and their nuts and bolts.

12.2. Erection & Commissioning of equipment at site.

13. DOCUMENTS TO BE SUBMITTED ALONG WITH OFFER

13.1. Bidder shall submit the following documents duly filled, signed and stamped along with the bid:

13.1.1. Compliance sheet.

13.1.2. Documents as per the list indicated in the NIT.

The above are the only documents which will be used for technical evaluation unless other documents are asked for during technical clarifications. Any other technical document enclosed with the bid shall be ignored for the purpose of technical evaluation. All other documents attached with the specification are for information of the vendor and no comments shall be marked on these.

14. DOCUMENTS TO BE SUBMITTED AFTER AWARD OF CONTRACT:

Category-A:


- GA Drawing indicating complete cross-sectional arrangement of valve, binding dimensions, dismantling clearances, weight and Bill of Material incorporating all material of construction (MOC) of various parts & relevant standard to which MOC confirms to.
- Quality plan duly signed and stamped.

Approval of above documents shall be required for manufacturing clearance and the same shall be considered for delay analysis by BHEL.

Category-B:

- Characteristics curves of ARV while filling and emptying.

Above document is required as information for approval of category-A documents. This shall not be considered for delay analysis.

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SECTION-II

- DATA SHEET – A
- QUALITY PLAN
- COMPLIANCE SHEET




DATA SHEET - A
AIR RELEASE VALVES
1X660MW SAGARDIGHI TPS

SPEC. NO. PE-TS-445-100-M019
SECTION II
REV.00 DATED 26.09.2022
SHEET 01 OF 02

1	2	3	4	5	6		7	8	9	10	11	12	13		14	15	16	17
SL NO.	TAG NOS.	TYPE OF VALVE	SIZE mm (NB)	OPERATION	DESIGN		SERVICE	RATING, DESIGN & TESTING CODE	BODY MATERIAL	TRIM MATERIAL	END CONN	SPECIAL FEATURES	MATCHING PIPE		MAIN VALVES QTY WITHOUT COMMISSIONING SPARES NOS.	COMMISSIONING SPARES (COVER GASKET - NOS)	MANDATORY SPARES NO.	REMARKS
					PRESSURE KG/CM2(G)	TEMP(DEG 0 C)							MM	MM				
1	CW-12, CW-14 CW-16, CW-18 ,CW-55, CW-56 ,CW-57, CW-58,	ARV WITHOUT ISOLATING GATE VALVE	200	AUTO	5.5	80	WATER	PN1.0 IS:14845 FOR ARV	CAST IRON AS PER IS 210 Gr. FG 260	13% Cr SS AS PER ASTM A182 Gr F6a	ASME B16.1 CL 125 F/F	N.A	219.1	6.00	8	8	1	
													TOTAL	8	8	1		


NOTES

1. LEGENDS: AUTO=AUTOMATIC, ARV=AIR RELEASE VALVE
2. COMMISSIONING SPARES -> 1 SET OF COVER GASKET FOR EACH ARV
3. PRICES OF COMMISSIONING SPARES TO BE QUOTED SEPARATELY BY BIDDER. IT SHALL NOT BE CLUBBED WITH THE UNIT PRICE OF MAIN VALVES.
4. FOR DETAILED MATERIAL OF CONSTRUCTION, REFER SHEET 2 OF 2 OF DATASHEET-A.

	DATA SHEET-A AIR RELEASE VALVES 1X660MW SAGARDIGHI TPS	SPECIFICATION NO.: PE-TS-445-100-M019	
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SERVICE: WATER SYSTEM

S. No.	PARTICULAR	MATERIAL
1	BODY, HP& LP COVERS, COWL, JOINT SUPPORTING RING	CAST IRON AS PER IS 210 Gr. FG 260
2	LP SEAT RING	Natural Rubber
3	H.P. ORIFICE, ORIFICE PLUG & FLOAT GUIDE	ASTM A182 Gr F6a with 13% Cr
4	H.P. & L.P. FLOATS	Wooden (ebonite coated)
5	GASKET	Rubber
6	BOLTS & NUTS	ASTM A193 Gr. B7 & ASTM A194 Gr. 2H
7	NAME PLATE FOR PURCHASER'S VALVE TAG NOS.	AISI 316 (2 MM THICK)

	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN						SPEC. NO : PE-TS-445-100-M019		DATE: 26.09.2022			
			CUSTOMER: WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED.						QP NO.: PE-QP-445-100-M019		DATE: 26.09.2022			
			PROJECT: 1X660 MW SAGARDIGHI TPS						PO NO.: LATER		DATE: --			
			ITEM: AIR RELEASE VALVES				SYSTEM: LP VALVES (WATER SYSTEMS)		SECTION:		SHEET 1 OF 3			
SL NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLAS S	TYPE OF CHECK	QUANTUM OF CHECK	REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS		
1	2	3	4	5	6		7	8	9	*	**		10	
					M	C/N				D	M	C	N	


1.0 MATERIALS														
1.1	BODY, HP & LP COVER, COWL, HP ORIFICE & PLUG	1. PHYSICAL & CHEMICAL PROPERTIES	MA	PHYSICAL, CHEMICAL TEST	1/HEAT / HEAT TREATMENT	---	APPD.DRG./ REL. STANDARD	APPD.DRG./ REL. STANDARD	MTC	√	P/W	V	V	CORRELATION OF BODY REQD. WITH MTC HEAT NO.
		2. SURFACE DEFECTS	MA	VISUAL	100%	---	MSS SP 55	MSS SP 55	INSP. REPORT	√	P/W	V	V	
		3. SUB SURFACE DEFECTS FOR BODY ONLY	CR	RT	100%	---	ASME B 16.34	ASME B16.34 APPENDIX I	RADIOGRAPHS & RT REPORT	√	P/W	V	V	FILM REVIEW BY BHEL (FOR CCS/ D2 Ni/SS/DUPLEX SS BODY VALVES ONLY)
		4. DIMENSIONS	MA	MEASUREMENT	100%	---	APPRD. DRG.	APPRD. DRG.	INSP. REPORT	√	P/W	V	V	
1.2	WOODEN FLOATS	1. DIMENSIONS	MA	MEASUREMENT	100%	---	APPRD. DRG.	APPRD. DRG.	INSP. REPORT	√	P/W	V	V	
		2. SURFACE DEFECTS	MA	VISUAL	100%	---	APPRD. DRG.	FREE FROM DEFECTS	INSP. REPORT	√	P/W	V	V	

2.0 INPROCESS CONTROL														
2.1	MACHINING OF BODY, COVER, ORIFICE	1. DIMENSIONS	MA	MEASUREMENT	100%	---	APPD. DRG.	APPD.DRG	INSP. REPORT	√	P/W	V	V	
		2. SURFACE DEFECTS	MA	VISUAL	100%	---	MSS SP 55	MSS SP 55	INSP. REPORT	√	P/W	V	V	
		3. SUB SURFACE DEFECTS	MA	PT	100%	---	ASME B 16.34	AMSE B 16.34 Appendix III	TEST REPORT	√	P/W	V	V	

BHEL					
ENGINEERING			QUALITY		
	Sign & Date	Name		Sign & Date	Name
Prepared by:		Govind Kumar Morye	Checked by:		Ashish Panigrahi
Reviewed by:		Sanjay Kumar	Reviewed by:		Harish Kumar

BIDDER/ SUPPLIER	
Sign & Date	
Seal	

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

	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN						SPEC. NO : PE-TS-445-100-M019		DATE: 26.09.2022			
			CUSTOMER: WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED.						QP NO.: PE-QP-445-100-M019		DATE: 26.09.2022			
			PROJECT: 1X660 MW SAGARDIGHI TPS						PO NO.: LATER		DATE: --			
			ITEM: AIR RELEASE VALVES				SYSTEM: LP VALVES (WATER SYSTEMS)		SECTION:		SHEET 2 OF 3			
SL NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLAS S	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS	
1	2	3	4	5	6		7	8	9	*	**			10
					M	C/N					D	M	C	


2.2	FLOATS WITH EBONITE COATING, LP SEAT RING	1. SURFACE DEFECTS	MA	VISUAL	100%	---	IS: 14845	COMPLETE COVERING OF WOODEN FLOAT WITH EBONITE- FOR FLOATS COMPLETE COVERING OF VULCANITE COATING- FOR LP SEAT RING	INSP. REPORT	√	P/W	V	V	
		2. HARDNESS	MA	MEASUREMENT	100%	---	APPD. DRG.	APPD DRG	TEST CERTIFICATE.	√	P/W	V	V	
		3. DIMENSIONS	MA	MEASUREMENT	100%	---	APPD. DRG.	APPD DRG	INSP. REPORT.	√	P/W	V	V	
3.0	ASSEMBLY	1. DIMENSIONS	MA	MEASUREMENT	100%	---	APPD. DRG.	APPD. DRG.	INSP. REPORT.	√	P/W	V	V	

4.0 TESTING														
4.1	BODY	1. LEAKAGE	CR	HYDROSTATIC TEST	100%	REFER NOTE-2	APPD. DRG. / IS 14845	NO LEAKAGE	TEST CERTIFICATE.	√	P	W	V	
4.2	ORIFICES (FOR ARV)	FUNCTIONAL TEST	CR	AIR/WATER	100%		APPD. DRG/ IS 14845	NO LEAKAGE	TEST CERTIFICATE.	√	P	W	V	
5.0	COMPLETE VALVE	OVERALL DIMENSIONS	MA	MEASUREMENT	SAMP LE		APPD. DRG.	APPD. DRG.	INSP. REPORT	√	P	W	V	
6.0	END CONNECTION	1. DIMENSIONS	CR	MEASUREMENT	100%		APPD. DRG.	APPD. DRG.	INSPN. REPORT	√	P	W	V	
7.0	FINAL INSPECTION	1. CLEANLINESS, WORKMANSHIP, ORIENTATION, MARKING AND TAG	MA	VISUAL	100%		APPD. DRG.	APPD. DRG.	INSPN. REPORT	√	P	W	V	
8.0	PAINTING	1. QUALITY AND THICK- NESS OF PAINT	MA	VISUAL AND MEASUREMENT WITH PAINT THICKNESS GAUGE	100%	---	APPD. DRG.	APPD. DRG	INSPN. REPORT	√	P/W	V	V	

BHEL					
ENGINEERING			QUALITY		
	Sign & Date	Name		Sign & Date	Name
Prepared by:		Govind Kumar Morye	Checked by:		Ashish Panigrahi
Reviewed by:		Sanjay Kumar	Reviewed by:		Harish Kumar

BIDDER/ SUPPLIER	
Sign & Date	
Seal	

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

	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN						SPEC. NO : PE-TS-445-100-M019		DATE: 26.09.2022			
			CUSTOMER: WEST BENGAL POWER DEVELOPMENT CORPORATION LIMITED.						QP NO.: PE-QP-445-100-M019		DATE: 26.09.2022			
			PROJECT: 1X660 MW SAGARDIGHI TPS						PO NO.: LATER		DATE: --			
			ITEM: AIR RELEASE VALVES				SYSTEM: LP VALVES (WATER SYSTEMS)		SECTION:		SHEET 3 OF 3			
SL NO.	COMPONENT & OPERATIONS	CHARACTERISTICS	CLASS	TYPE OF CHECK	QUANTUM OF CHECK		REFERENCE DOCUMENT	ACCEPTANCE NORMS	FORMAT OF RECORD	AGENCY			REMARKS	
1	2	3	4	5	6		7	8	9	*	**			10
					M	C/N				D	M	C	N	
9.0	PACKING	APPD. DRG.	MA	VISUAL	100%	100%	APPD. DRG. / PACKING PROCEDURE (IF APPLICABLE)	APPD. DRG. / PACKING PROCEDURE (IF APPLICABLE)	INSPN. REPORT	√	P/W	W	V	REFER NOTE '3'

NOTES:

1. In case of foreign supplier, all test certificates shall be furnished by the supplier, duly witnessed/verified by supplier's TPI.
2. 10% or min. 2 nos. at random by BHEL/Customer & 100% by supplier for each type, size & rating.
3. Following to be noted for packing:
 - a. Material shall be packed suitably in order to avoid damage of paint and valve during transit and also during storage at site in tropical climate conditions.
 - b. Photographs of the packing just before dispatch for information of PEM.
4. The latest revisions/year of issue of all the standard indicated in the QP shall be referred.
5. BHEL reserves the right for conducting repeat test, if required.

LEGENDS:

*RECORDS, IDENTIFIED WITH "TICK"(√) SHALL BE ESSENTIALLY INCLUDED BY SUPPLIER IN QA DOCUMENTATION,
 ** **M**: SUPPLIER/ MANUFACTURER/ SUB-SUPPLIER, **C**: MAIN SUPPLIER/ BHEL/ THIRD PARTY INSPECTION AGENCY, **N**: CUSTOMER,
P: PERFORM, **W**: WITNESS, **V**: VERIFICATION, AS APPROPRIATE, **D**: DOCUMENTATION
MA: MAJOR, **MI**: MINOR, **CR**: CRITICAL, **MTC**: Mill Test Certificate, **RT**: Radiographic Test, **PT**: Penetrant Test

BHEL					BIDDER/ SUPPLIER		FOR CUSTOMER REVIEW & APPROVAL			
ENGINEERING			QUALITY		Sign & Date		Doc No:			
	Sign & Date	Name		Sign & Date	Name	Seal		Sign & Date	Name	Seal
Prepared by:		Govind Kumar Morye	Checked by:		Ashish Panigrahi			Reviewed by:		
Reviewed by:		Sanjay Kumar	Reviewed by:		Harish Kumar			Approved by:		

 	COMPLIANCE SHEET AIR RELEASE VALVES 1x660MW SAGARDIGHI TPS	SPECIFICATION NO.: PE-TS-445-100-M019	
		SECTION : II	
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A. I hereby comply/not comply (*) to all the requirements of this technical specification in totality.

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

Name of Bidder / Authorized Representative: -

Designation: -

Signature: -

Company Seal: -

Date: -
