



Bid Document

Bid Details	
Bid End Date/Time	06-05-2022 11:00:00
Bid Opening Date/Time	06-05-2022 11:30:00
Bid Offer Validity (From End Date)	80 (Days)
Ministry/State Name	Ministry Of Heavy Industries And Public Enterprises
Department Name	Department Of Heavy Industry
Organisation Name	Bharat Heavy Electricals Limited (bhel)
Office Name	10250020-pem, Noida
Total Quantity	275
Item Category	BALL VALVE 100 NB -CSS , BALL VALVE 15 NB -FSS , BALL VALVE 150 NB -CSS , BALL VALVE 25 NB -FSS , BALL VALVE 50 NB -FSS , BODY SEAL FOR 100NB BALL VALVE , BODY SEAL FOR 15NB BALL VALVE , BODY SEAL FOR 150NB BALL VALVE , BODY SEAL FOR 25NB BALL VALVE , BODY SEAL FOR 50NB BALL VALVE , STEM WASHER FOR 100NB BALL VALVE , STEM WASHER FOR 15NB BALL VALVE , STEM WASHER FOR 150NB BALL VALVE , STEM WASHER FOR 25NB BALL VALVE , STEM WASHER FOR 50NB BALL VALVE , STEM SEAL FOR 100NB BALL VALVE , STEM SEAL FOR 15NB BALL VALVE , STEM SEAL FOR 150NB BALL VALVE , STEM SEAL FOR 25NB BALL VALVE , STEM SEAL FOR 50NB BALL VALVE , MANDATORY SPARES BALL VALVE 100 NB -CSS , MANDATORY SPARES BALL VALVE 15 NB -FSS , MANDATORY SPARES BALL VALVE 150 NB -CSS , MANDATORY SPARES BALL VALVE 25 NB -FSS , MANDATORY SPARES BALL VALVE 50 NB -FSS
BOQ Title	BALL VALVES for 1x660 MW Sagardighi Extn project
Years of Past Experience required	1 Year (s)
MSE Exemption for Years of Experience and Turnover	No
Startup Exemption for Years of Experience and Turnover	No
Document required from seller	Experience Criteria,Past Performance,Additional Doc 1 (Requested in ATC),Compliance of BoQ specification and supporting document *In case any bidder is seeking exemption from Experience / Turnover Criteria, the supporting documents to prove his eligibility for exemption must be uploaded for evaluation by the buyer
Past Performance	10 %
Bid to RA enabled	Yes
RA Qualification Rule	50% Lowest Priced Technically Qualified Bidders
Primary product category	MANDATORY SPARES BALL VALVE 50 NB -FSS

Bid Details	
Time allowed for Technical Clarifications during technical evaluation	4 Days
Payment Timelines	Payments shall be made to the Seller within 90 days of issue of consignee receipt-cum-acceptance certificate (CRAC) and on-line submission of bills (This is in supersession of 10 days time as provided in clause 12 of GeM GTC)
Evaluation Method	Total value wise evaluation

EMD Detail

Required	No
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ePBG Detail

Advisory Bank	State Bank of India
ePBG Percentage(%)	5.00
Duration of ePBG required (Months).	26

(a). EMD & Performance security should be in favour of Beneficiary, wherever it is applicable.

Beneficiary:

IFSC Code- SBIN0017313, NEWDELHI
10250020-PEM, Noida, Department of Heavy Industry, Bharat Heavy Electricals Limited (BHEL), Ministry of Heavy Industries and Public Enterprises
(Account No 39922687394)

Splitting

Bid splitting not applied.

Reserved for Make In India products

Reserved for Make In India products	Yes
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MSE Purchase Preference

MSE Purchase Preference	Yes
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1. Experience Criteria: In respect of the filter applied for experience criteria, the Bidder or its OEM {themselves or through reseller(s)} should have regularly, manufactured and supplied same or similar Category Products to any Central / State Govt Organization / PSU / Public Listed Company for number of Financial years as indicated above in the bid document before the bid opening date. Copies of relevant contracts to be submitted along with bid in support of having supplied some quantity during each of the Financial year. In case of bunch bids, the category of primary product having highest value should meet this criterion.

2. Bid reserved for Make In India products: : Procurement under this bid is reserved for purchase from Class 1 local supplier as defined in public procurement (Preference to Make in India), Order 2017 as amended from time to time and its subsequent Orders/Notifications issued by concerned Nodal Ministry for specific Goods/Products. However, eligible micro and small enterprises will be allowed to participate. The minimum local content to qualify as a class 1

local supplier is denoted in the bid document. All bidders must upload a certificate from the OEM regarding the percentage of the local content and the details of locations at which the local value addition is made along with their bid, failing which the bid is liable to be rejected. In case the bid value is more than Rs 10 Crore, the declaration relating to percentage of local content shall be certified by the statutory auditor or cost auditor, if the OEM is a company and by a practicing cost accountant or a chartered accountant for OEMs other than companies as per the Public Procurement (preference to Make-in -India) order 2017 dated 04.06.2020 . In case Buyer has selected Purchase preference to Micro and Small Enterprises clause in the bid, the same will get precedence over this clause.

3. Purchase preference to Micro and Small Enterprises (MSEs): Purchase preference will be given to MSEs as defined in Public Procurement Policy for Micro and Small Enterprises (MSEs) Order, 2012 dated 23.03.2012 issued by Ministry of Micro, Small and Medium Enterprises and its subsequent Orders/Notifications issued by concerned Ministry. If the bidder wants to avail the Purchase preference, the bidder must be the manufacturer of the offered product in case of bid for supply of goods. Traders are excluded from the purview of Public Procurement Policy for Micro and Small Enterprises. In respect of bid for Services, the bidder must be the Service provider of the offered Service. Relevant documentary evidence in this regard shall be uploaded along with the bid in respect of the offered product or service. If L-1 is not an MSE and MSE Seller (s) has/have quoted price within L-1+ 15% (Selected by Buyer) of margin of purchase preference /price band defined in relevant policy, such Seller shall be given opportunity to match L-1 price and contract will be awarded for 25%(selected by Buyer) percentage of total QUANTITY.

4. Estimated Bid Value indicated above is being declared solely for the purpose of guidance on EMD amount and for determining the Eligibility Criteria related to Turn Over, Past Performance and Project / Past Experience etc. This has no relevance or bearing on the price to be quoted by the bidders and is also not going to have any impact on bid participation. Also this is not going to be used as a criteria in determining reasonableness of quoted prices which would be determined by the buyer based on its own assessment of reasonableness and based on competitive prices received in Bid / RA process.

5. Past Performance: The Bidder or its OEM {themselves or through re-seller(s)} should have supplied same or similar Category Products for 10% of bid quantity, in at least one of the last three Financial years before the bid opening date to any Central / State Govt Organization / PSU / Public Listed Company. Copies of relevant contracts (proving supply of cumulative order quantity in any one financial year) to be submitted along with bid in support of quantity supplied in the relevant Financial year. In case of bunch bids, the category related to primary product having highest bid value should meet this criterion.

6. Reverse Auction would be conducted amongst first 50% of the technically qualified bidders arranged in the order of prices from lowest to highest. Number of sellers eligible for participating in RA would be rounded off to next higher integer value if number of technically qualified bidders is odd (e.g. if 7 bids are technically qualified, then RA will be conducted amongst L-1 to L-4). In case number of technically qualified bidders are 2 or 3, RA will be between all without any elimination. If Buyer has chosen to split the bid amongst N sellers, then minimum N sellers would be taken to RA round. In case Primary products of only one OEM are left in contention for participation in RA based on lowest 50% bidders qualifying for RA, the number of sellers qualifying for RA would be increased to get at least products of one more OEM (directly participated or through its reseller) if available. Further, if bid(s) of any seller(s) eligible for MSE preference is / are coming within price band of 15% of Non MSE L-1 or if bid of any seller(s) eligible for Make in India preference is / are coming within price band of 20% of non MII L-1, then such MSE / Make in India seller shall also be allowed to participate in the RA process.

BALL VALVE 100 NB -CSS (14 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	14	999

BALL VALVE 15 NB -FSS (100 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	100	999

BALL VALVE 150 NB -CSS (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

BALL VALVE 25 NB -FSS (70 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	70	999

BALL VALVE 50 NB -FSS (15 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	15	999

BODY SEAL FOR 100NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

BODY SEAL FOR 15NB BALL VALVE (10 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	10	999

BODY SEAL FOR 150NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

BODY SEAL FOR 25NB BALL VALVE (7 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	7	999

BODY SEAL FOR 50NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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BOQ Detail Document	View File

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

STEM WASHER FOR 100NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

STEM WASHER FOR 15NB BALL VALVE (10 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	10	999

STEM WASHER FOR 150NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Consignees/Reporting Officer and Quantity

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1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

STEM WASHER FOR 25NB BALL VALVE (7 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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Consignees/Reporting Officer and Quantity

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1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	7	999

STEM WASHER FOR 50NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

Specification Document	View File
BOQ Detail Document	View File

Advisory-Please refer attached BOQ document for detailed consignee list and delivery period.

Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

STEM SEAL FOR 100NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

Specification Document	View File
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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

STEM SEAL FOR 15NB BALL VALVE (10 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	10	999

STEM SEAL FOR 150NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Technical Specifications

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STEM SEAL FOR 25NB BALL VALVE (7 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
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STEM SEAL FOR 50NB BALL VALVE (2 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Pratap Sarkar	742237,Construction Manager - BHEL site office Unit-V Sagardighi Thermal Power Project P.O. Manigram, District - Murshidabad, PIN:742237, West Bengal, India	2	999

MANDATORY SPARES BALL VALVE 100 NB -CSS (1 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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MANDATORY SPARES BALL VALVE 15 NB -FSS (1 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

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MANDATORY SPARES BALL VALVE 150 NB -CSS (1 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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MANDATORY SPARES BALL VALVE 25 NB -FSS (1 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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MANDATORY SPARES BALL VALVE 50 NB -FSS (1 pieces)

(Minimum 80% and 20% Local Content required for qualifying as Class 1 and Class 2 Local Supplier respectively)

Brand Type	Unbranded
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Buyer Added Bid Specific Terms and Conditions

1. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

ADDITIONAL TERMS & CONDITIONS :- SAME SHALL SUPERSEDE TERMS AND CONDITIONS MENTIONED ELSEWHERE IN BID	
1	Terms Of Payment a) Supply (Main supply along with commissioning spares and Mandatory spares) As per clause no. 12 (i) of GTC on GeM. Supplier has to provide Tax invoice, Packing List, LR/RR, CRAC, Insurance intimation, Guarantee Certificate, E-way bill (as applicable) for payment. Offline payment mode shall be selected. Payment will be released within 90days for Non-MSME vendors, within 45 days for Micro & Small vendors and 60 days for Medium enterprises (qualified and registered as Micro or Small as per MSMED Act) from CRAC & receipt of complete documents.
2	Terms Of Delivery As per cl. No. 13 of GTC on GeM. (i.e. Free Delivery at site basis including loading/unloading). 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.
3	Delivery Delivery schedule shall be as per “Annexure A: - Standard Delivery Schedule” . For Delivery and delay analysis purpose, delivery schedule mentioned in “Annexure A: - Standard Delivery Schedule” shall be considered. Delivery period chosen as 999 days from PO date shall not be considered for Delivery and Delay analysis purpose as same has been selected for sake of GeM only.

4	Guarantee Terms	As per Cl. No. 10 of GTC on GeM for the bid .However time period shall be as under: For Main Supply : Guarantee & Warrantee time period shall be 18 months from the date of last supply in the Main Supply scope. For Mandatory Spares : Guarantee & Warrantee time period shall be 18 months from the date of last supply in the Mandatory Spares Supply scope.
5	Quantity Variation	The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 % (percentage) of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly. However, maximum quantity variation shall be +25% of contract value. Bidders to quote accordingly.
6	Any other special major condition	1. Material shall be dispatched only after issuance of MDCC by BHEL. 2. Bank Guarantee submission shall be as per cl. No. 7 of GeM GTC with initial validity of 26 Months. Further, extension if any shall be as per GeM Terms. However, proportionate value of BG can be reduced on elapse of 2 months from expiry of Guarantee & Warrantee period of Main Supply Scope/Mandatory Spares Scope (as applicable).
7	This is a conditional tender enquiry. Reverse Auction of a bidder shall be subjected to the following: 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.	

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.</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 80% only. 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</p>
12	<p>evaluation.</p> <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 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 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.</p>
14	<p>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.</p>
15	<p>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.</p>
16	<p>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).</p>
17	<p>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.</p>

18 **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: -

- 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.

Besides above necessary, packing shall bear a special marking "TOP", "BOTTOM", "DO NOT TURN OVER", "DEEP DRY", "HANDLE WITH CARE", etc.

IMPORTANT

Two copies of respective standard manufacturer's erection instruction /operation manual shall be provided for immediate reference by BHEL site.

The Copy of complete Packing list for the consignment must be put inside the Box/Boxes.

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.

Valves shall essentially have **O&M Manuals and E&C** guidelines to be kept inside box duly enclosed.

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 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 (½) 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 (½) 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.

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.

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 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 licence, 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.
27	MSE preference will be given as per MSEs order & GeM logic.

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	100-04000-A	BALL VALVES Δ①	PE-V0-XXX-100-M051	GA DRG FOR BALL VALVES	Primary	R-0 within 14 days from PO & subsequent revisions incorporating all the BHEL comments within 10 days of comments received from BHEL. BHEL shall furnish comments / approval on each submission within 18 days from receipt.	Main Supply:- 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. Delay in BHEL's comments/approval beyond 18 days shall also be considered for delay analysis. For Mandatory Spares:- Within 04 months from the date of BHEL clearance. Separate manufacturing clearance shall be accorded for mandatory spares.
			PE-QP-XXX-100-M006	QP FOR BALL VALVES	Primary		
			PE-V0-XXX-100-M052	Torque and force calculations (as applicable)	Primary		
			PE-V0-XXX-100-M053	Gear box POD test procedure / test report / certificates for earlier conducted tests	Secondary		

- 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 evaluation of the package.
- d. Wherever schedule of drawings/documents submission / re-submission is stipulated in the Technical Specifications, same shall be superseded by delivery specified in NIT

2. Generic

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.

3. Inspection

Nominated Inspection Agency: On behalf of the Buyer organization, any one of the following Inspection Agency would be conducting inspection of stores before acceptance:
 Pre-dispatch Inspection at Seller Premises (applicable only if pre-dispatch inspection clause has been selected in ATC): At Vendors registered works
 Post Receipt Inspection at consignee site before acceptance of stores: NA

4. **Scope of Supply**

Scope of supply (Bid price to include all cost components) : Only supply of Goods

5. **Generic**

OPTION CLAUSE: The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 percent of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly.

Disclaimer

The additional terms and conditions have been incorporated by the Buyer after approval of the Competent Authority in Buyer Organization. Buyer organization is solely responsible for the impact of these clauses on the bidding process, its outcome and consequences thereof including any eccentricity / restriction arising in the bidding process due to these ATCs and due to modification of technical specification and / or terms and conditions governing the bid. Any clause incorporated by the Buyer such as demanding Tender Sample, incorporating any clause against the MSME policy and Preference to make in India Policy, mandating any Brand names or Foreign Certification, changing the default time period for Acceptance of material or payment timeline governed by OM of Department of Expenditure shall be null and void and would not be considered part of bid. Further any reference of conditions published on any external site or reference to external documents / clauses shall also be null and void. If any seller has any objection / grievance against these additional clauses or otherwise on any aspect of this bid, they can raise their representation against the same by using the Representation window provided in the bid details field in Seller dashboard after logging in as a seller within 4 days of bid publication on GeM. Buyer is duty bound to reply to all such representations and would not be allowed to open bids if he fails to reply to such representations.

[This Bid is also governed by the General Terms and Conditions](#)

In terms of GeM GTC clause 26 regarding Restrictions on procurement from a bidder of a country which shares a land border with India, any bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with the Competent Authority. While participating in bid, Bidder has to undertake compliance of this and any false declaration and non-compliance of this would be a ground for immediate termination of the contract and further legal action in accordance with the laws.

---Thank You---

Index for documents

GeM Tender Enquiry for BALL VALVES for 1x 660MW SAGARDIGHI Extn Unit-5 Project

Sl. No.	Description	Annexures
1.	Additional terms and conditions	Annexure-I
2.	Clauses Instruction to Packing List	Annexure-II
3.	An undertaking regarding Model Certificate	Annexure-III
4.	Certificate for local Content	Annexure-IV
5.	BOQ CUM DATA SHEET	-
6.	PQR	-
7.	Technical Specification	-

Annexure-I

	ADDITIONAL TERMS & CONDITIONS :- SAME SHALL SUPERSEDE TERMS AND CONDITIONS MENTIONED ELSEWHERE IN BID	
1	Terms Of Payment	
	a) Supply (Main supply along with commissioning spares and Mandatory spares)	As per clause no. 12 (i) of GTC on GeM. Supplier has to provide Tax invoice, Packing List, LR/RR, CRAC, Insurance intimation, Guarantee Certificate, E-way bill (as applicable) for payment. Offline payment mode shall be selected. Payment will be released within 90days for Non-MSME vendors, within 45 days for Micro & Small vendors and 60 days for Medium enterprises (qualified and registered as Micro or Small as per MSMED Act) from CRAC & receipt of complete documents.
2	Terms Of Delivery	As per cl. No. 13 of GTC on GeM. (i.e. Free Delivery at site basis including loading/unloading). 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.
3	Delivery	Delivery schedule shall be as per “ Annexure A: - Standard Delivery Schedule ”. For Delivery and delay analysis purpose, delivery schedule mentioned in “ Annexure A: - Standard Delivery Schedule ” shall be considered. Delivery period chosen as 999 days from PO date shall not be considered for Delivery and Delay analysis purpose as same has been selected for sake of GeM only.
4	Guarantee Terms	As per Cl. No. 10 of GTC on GeM for the bid .However time period shall be as under: For Main Supply : Guarantee & Warrantee time period shall be 18 months from the date of last supply in the Main Supply scope. For Mandatory Spares : Guarantee & Warrantee time period shall be 18 months from the date of last supply in the Mandatory Spares Supply scope.
5	Quantity Variation	The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25 % (percentage) of bid quantity at the time of placement of contract. The purchaser also reserves the right to increase the ordered quantity by up to 25% of the contracted quantity during the currency of the contract at the contracted rates. Bidders are bound to accept the orders accordingly. However, maximum quantity variation shall be +25% of contract value . Bidders to quote accordingly.
6	Any other special major condition	1. Material shall be dispatched only after issuance of MDCC by BHEL. 2. Bank Guarantee submission shall be as per cl. No. 7 of GeM GTC with initial validity of 26 Months. Further, extension if any shall be as per GeM Terms. However, proportionate value of BG can be reduced on elapse of 2 months from expiry of Guarantee & Warrantee period of Main Supply Scope/Mandatory Spares Scope (as applicable).
7	This is a conditional tender enquiry. Reverse Auction of a bidder shall be subjected to the following: 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.	

Annexure-I

9	<p>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.</p>
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.</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 80% only. 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 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</p>

Annexure-I

	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 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.
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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</p> <p>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>Valves shall essentially have O&M Manuals and E&C guidelines to be kept inside box duly enclosed.</p>

Annexure-I

	<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 the packing slip) to facilitate their proper identification. One Copy of Packing list must be put inside the packing Box.</p> <p>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.</p> <p>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.</p>
19	<p>Liquidated Damages: -</p> <p>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 (½) 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.</p> <p>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 (½) 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.</p> <p>NOTE:</p> <p>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.</p> <p>ii. In case of any amendment/ revision, LD shall be linked to the amended/ revised contract value and delivery date(s).</p> <p>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.</p> <p>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.</p>
20	<p>Risk & Cost Purchase - As per Annexure-V (Risk & Cost purchase)</p>

Annexure-I

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 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 licence, 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.
27	MSE preference will be given as per MSEs order & GeM logic.

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	100-04000-A	BALL VALVES Δ①	PE-V0-XXX-100-M051	GA DRG FOR BALL VALVES	Primary	R-0 within 14 days from PO & subsequent revisions incorporating all the BHEL comments within 10 days of comments received from BHEL. BHEL shall furnish comments / approval on each submission within 18 days from receipt.	Main Supply:- 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. Delay in BHEL's comments/approval beyond 18 days shall also be considered for delay analysis. For Mandatory Spares:- Within 04 months from the date of BHEL clearance. Separate manufacturing clearance shall be accorded for mandatory spares.
			PE-QP-XXX-100-M006	QP FOR BALL VALVES	Primary		
			PE-V0-XXX-100-M052	Torque and force calculations (as applicable)	Primary		
			PE-V0-XXX-100-M053	Gear box POD test procedure / test report / certificates for earlier conducted tests	Secondary		

- 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 evaluation of the package.
- 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: BALL VALVES

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: BALL VALVES

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.).

ANNEXURE-V

(RISK AND COST CLAUSE)

1. BHEL reserves the right to terminate the contract or withdraw portion of work and get it done through other agency, at the risk and cost of the contractor *after due notice of a period of 14 days* by BHEL in any of the following cases:
 - i) If the Seller/Contractor fails to deliver the goods or materials or any instalment thereof within the period(s) fixed for such delivery or the Seller's poor progress of the supply/ services vis-a-vis delivery/execution timeline as stipulated in the Contract, backlog attributable to seller including unexecuted portion of supply does not appear to be executable within balance available period;
 - ii) Delivers goods or materials not of the contracted quality and failing to adhere to the contract specifications;
 - iii) Withdrawal from or repudiation/ abandonment of the supply/ services by Seller before completion as per contract or if the Seller refuses or is unable to supply goods or materials covered by the Order/Contract either in whole or in part or otherwise fails to perform the Order/Contract;
 - iv) Non-supply by the Seller within scheduled completion/delivery period as per Contract or as extended from time to time, for the reasons attributable to the Seller;
 - v) Termination of Contract on account of any other reason (s) attributable to Seller.
 - vi) Assignment, transfer, subletting of Contract without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.
 - vii) If the Seller be an individual or a sole proprietorship Firm, in the event of the death or insanity of the Seller;
 - viii) If the Seller/Contractor being an individual or if a firm on a partnership thereof, shall at any time, be adjudged insolvent or shall have a receiving order for administration of his estate made against him or shall take any proceeding for composition under any Insolvency Act for the time being in force or make any assignment of the Order/Contract or enter into any arrangement or composition with his creditors or suspend payment or if the firm dissolved under the Partnership Act;
 - ix) If the Seller/Contractor being a company is wound up voluntarily or by order of a Court or a Receiver, Liquidator or Manager on behalf of the debenture holders and creditors is appointed or circumstances shall have arisen which entitles the Court of debenture holder and creditors to appoint a receiver, liquidator or manager;
 - x) Non-compliance to any contractual condition or any other default attributable to Seller.

1.1 Risk & Cost Amount against Balance Work:

Risk & Cost amount against balance work shall be calculated as follows:

$$\text{Risk \& Cost Amount} = [(A-B) + (A \times H/100)]$$

Where,

A= Value of Balance scope of Work (*) as per rates of new contract

B= Value of Balance scope of Work (*) as per rates of old contract being paid to the contractor at the time of termination of contract i.e. inclusive of PVC & ORC, if any.

H = Overhead Factor to be taken as 5

In case (A-B) is less than 0 (zero), value of (A-B) shall be taken as 0 (zero).

1.2 * Balance scope of work (in case of termination of contract):

Difference of Contract Quantities and Executed Quantities as on the date of issue of Letter for 'Termination of Contract', shall be taken as balance scope of Work for calculating risk & cost amount.

Contract quantities are the quantities as per original contract. If, Contract has been amended, quantities as per amended Contract shall be considered as Contract Quantities.

Items for which total quantities to be executed have exceeded the Contract Quantities based on drawings issued to contractor from time to time till issue of Termination letter, then for these items total Quantities as per issued drawings would be deemed to be contract quantities.

Substitute/ extra items whose rates have already been approved would form part of contract quantities for this purpose.

Substitute/ extra items which have been executed but rates have not been approved, would also form part of contract quantities for this purpose and rates of such items shall be determined in line with contractual provisions.

However, increase in quantities on account of additional scope in new tender shall not be considered for this purpose.

NOTE: In case portion of work is being withdrawn at risk & cost of contractor instead of termination of contract, contract quantities pertaining to portion of work withdrawn shall be considered as 'Balance scope of work' for calculating Risk & Cost amount.

1.3 LD against delay in executed work in case of Termination of Contract:

LD against delay in executed work shall be calculated in line with LD clause no. 16 of GCC, for the delay attributable to contractor. For limiting the maximum value of LD, contract value shall be taken as Executed Value of work till termination of contract.

Method for calculation of LD against delay in executed work in case of termination of contract" is given below.

- i. Let the time period from scheduled date of start of work till termination of contract excluding the period of Hold (if any) not attributable to contractor = T1
- ii. Let the value of executed work till the time of termination of contract = X
- iii. Let the Total Executable Value of work for which inputs/fronts were made available to contractor and were planned for execution till termination of contract = Y
- iv. Delay in executed work attributable to contractor i.e. $T2 = [1 - (X/Y)] \times T1$
- v. LD shall be calculated in line with LD clause (clause 16) of the Contract for the delay attributable to contractor taking "X" as Contract Value and "T2" as period of delay attributable to contractor.

2. Recoveries arising out of Risk & Cost and LD or any other recoveries due from Contractor

Without prejudice to the other means of recovery of such dues from the Seller recoveries from the Seller on whom risk & cost has been invoked shall be made from the following:

- a) Dues available in the form of Bills payable to seller, SD, BGs against the same contract.
- b) Dues payable to seller against other contracts in the same Region/Unit/ Division of BHEL.
- c) Dues payable to seller against other contracts in the different Region/Unit/ division of BHEL.

In-case recoveries are not possible with any of the above available options, Legal action shall be initiated for recovery against contractor.

RISK & COST PURCHASE.

DEFAULT/ BREACH OF CONTRACT, INSOLVENCY AND RISK PURCHASE

In case of delays (beyond the maximum late delivery period as per LD clause) in supplies, or if there be defective supplies or non-fulfilment of any other terms and conditions of the Contract as enumerated subsequently in this clause, then, without prejudice to its right to recover any expenses, losses or damages to which the Buyer may be put to incur or sustain by reason of the Seller/Contractor's default or breach of Order/Contract or to suspend business dealings with the Seller/Contractor in terms of the Buyers' Guidelines for Suspension of Business Dealings as applicable from time to time, the Buyer shall also be entitled to cancel the Order/ Contract either in whole or portion thereof without compensation to Seller. On the occurrence of any of the acts/omissions mentioned below, the Buyer may if it so desires, procure upon such terms and in such manner as deemed appropriate, plant/ equipment/ stores not so delivered or others of similar description where plant/ equipment/ stores exactly complying with particulars are not, in the opinion of the Buyer (which shall be final), readily procurable, at the risk and cost of the Seller.

The Seller shall be liable to the Buyer for any excess costs incurred thereof and the Seller shall continue the performance of the Order/Contract to the extent not cancelled under the provisions of this clause. The Seller shall on no account be entitled to any gain on such repurchases. If the Bidder does not agree to this Risk Purchase clause, BHEL reserves the right to reject the bid/offer of the Bidder.

The order/contract may be cancelled in whole or part thereof and Risk & Cost Clause in line with terms and conditions of PO/Contract may be invoked by the Buyer in any of the following cases:


- i. If the Seller/Contractor fails to deliver the goods or materials or any installment thereof within the period(s) fixed for such delivery or the Seller's poor progress of the supply/services vis-à-vis delivery/execution timeline as stipulated in the contract, backlog attributable to the Seller including unexecuted portion of supply does not appear to be executable within balance period available;
- ii. delivers goods or materials not of the contracted quality and failing to adhere to the contract specifications/execution methodology;
- iii. withdrawal from or repudiation/abandonment of the supply/services by the Seller before completion as per contract or if the Seller refuses or is unable to supply goods or materials covered by the order/Contract either in whole or in part or otherwise fails to perform the Order/Contract.


- iv. Non supply by the Seller within scheduled completion/delivery period as per contract or as extended from time to time for reasons attributable to the Seller;
- v. Termination of Contract on account of any other reason(s) attributable to the Seller.
- vi. Assignment, transfer, sub-letting of Contract without BHEL's written permission resulting in termination of Contract or part thereof by BHEL.
- vii. If the Seller be an individual or a Sole Proprietorship, in the event of death or insanity of the Seller.
- viii. If the Seller/Contractor being an individual or if a partnership firm thereof, shall at any time be adjudged insolvent or shall have a receiving order for administration of his estate made against him or shall take any proceeding for composition under any Insolvency Act for the time being in force or make any assignment of the order/Contract or enter into any arrangement or composition with his creditors or suspend payment or if the firm dissolved under the Partnership Act;
- ix. If the Seller/Contractor being a Company is wound up voluntarily or by order of a Court or a Receiver, Liquidator or Manager on behalf of the debenture holders and creditors is appointed or circumstances have arisen which entitles the Court of debenture holder and creditors to appoint a receiver, liquidator or manager
- x. Non- Compliance to any contractual condition or any other default attributable to the Seller.

Such defaulting vendor/Seller shall not be eligible to participate in re-tendering conducted on account of risk purchase made due to fault of such vendor/Seller.

BHEL's right to go for Risk and Cost, Calculation of Risk and Cost amount & LD, recovery options to BHEL are given in detail in Annexure-V hereto.

BOQ CUM DATA SHEET

		BOQ-DATA SHEET- A BALL VALVES 1X660 MW SAGARDIGHI TPS								SPECIFICATION NO.: PE-TS-445-100-M004 SECTION: II REV. NO.: 00 DATE: 18-04-2022								
		2	3	4	5		6	7	8	9	10	11	12		13	14	15	16
SL. NO.	TYPE OF VALVE	SIZE mm (NB)	OPERATION	DESIGN		SERVICE	RATING, DESIGN & TESTING CODE	BODY MATERIAL	TRIM MATERIAL	END CONN	SPECIAL FEATURES	MATCHING PIPE OD x THK		MAIN VALVES QTY (WITHOUT COMMISSIONING SPARES) NOS.	COMMISSIONING SPARES (SETS)			MANDATORY SPARES (COMPLETE ASSEMBLY WITHOUT COMMISSIONING SPARES) NOS.
				PRESSURE KG/CM2(G)	TEMP (DEG° C)							MM	MM		BODY SEAL	STEM WASHER	STEM SEAL	
1	Ball	15	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL. 800 OF ISO 17292	FORGED STAINLESS STEEL AS PER ASTM A182 F304	ASTM-A351 CF8M	SOCKET WELDED AS PER ASME B 16.11	EXTENDED PIECE ON BOTH SIDES	21.3	2.77	100	10	10	10	1
2	Ball	25	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL. 800 OF ISO 17292	FORGED STAINLESS STEEL AS PER ASTM A182 F304	ASTM-A351 CF8M	SOCKET WELDED AS PER ASME B 16.11	EXTENDED PIECE ON BOTH SIDES	33.4	3.38	70	7	7	7	1
3	Ball	50	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL. 800 OF ISO 17292	FORGED STAINLESS STEEL AS PER ASTM A182 F304	ASTM-A351 CF8M	SOCKET WELDED AS PER ASME B 16.11	EXTENDED PIECE ON BOTH SIDES	60.3	3.91	15	2	2	2	1
4	Ball	100	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST STAINLESS STEEL AS PER ASTM A351 CF8M	ASTM-A351 CF8M	FLANGED AS PER ASME B 16.5 R/F	-	114.3	3.1	14	2	2	2	1
5	Ball	150	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST STAINLESS STEEL AS PER ASTM A351 CF8M	ASTM-351CF 8M	FLANGED AS PER ASME B 16.5 R/F	-	168.3	3.4	2	2	2	2	1
NOTES:- 1. IA - INSTRUMENT AIR, MAN - MANUAL, SA - SERVICE AIR 2. All ball valves shall be provided with PTFE seats and seals. 3. COMMISSIONING SPARES FOR BALL VALVES:- ONE SET CONSISTS OF BODY SEAL, STEM WASHER & STEM SEAL. 4. FOR MATERIAL OF CONSTRUCTION REFER SHEET 2 OF 2 OF DATA SHEET. 5. MAIN VALVE PRICES SHALL BE EXCLUSIVE OF COST OF COMMISSIONING SPARES PRICES. 6. BIDDER IS REQUIRED TO QUOTE UNIT PRICE OF EACH ITEM UNDER COMMISSIONING SPARES SEPARATELY & INDIVIDUALLY i.e. PRICES OF ALL COMMISSIONING SPARES SHALL NOT BE CLUBBED/ INCLUDED IN THE UNIT PRICE OF MAIN VALVES.												TOTAL	201	23	23	23	5	

	PRE - QUALIFYING REQUIREMENTS	DOCUMENT No.: PE-TS-445-000-M059
		REVISION No.: 00 DATE: 18.04.2022
		SHEET 1 of 3

Standard document No.: PE-TS-999-000-M059

Project: 1x660 MW SAGARDIGHI TPP
Package: Ball Valves
<u>CRITERIA FOR EVALUATION (TECHNICAL / FINANCIAL):</u>
<p>1. <u>Technical Pre-Qualifying Requirements:</u></p> <p>1.1 The bidder should have designed, in-house manufactured, tested, inspected and supplied Ball Valves (as mentioned below) for use in a power plant or for similar application.</p> <p style="padding-left: 40px;">Category-A: Minimum size of 50NB with FCS/FSS/FAS with #800 or Gun metal with #PN 16.0 for use in a power plant or similar application.</p> <p style="padding-left: 40px;">Category-B: Minimum size of 150NB with CCS/CSS/CAS with min. #150 for use in a power plant or similar application.</p> <p style="padding-left: 40px;"><i>Bidder to fulfill the PQR of both the categories individually.</i></p> <p>1.2 The item(s) mentioned in point 1.1 should have performed successfully in similar installations for at least one year. To establish meeting this requirement, the bidder shall conform to any one of the following clauses:</p> <p style="padding-left: 40px;">(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 the 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.</p> <p style="padding-left: 40px;">(ii) Minimum one (1) repeat contract from two (2) different Purchasers (i.e. 2 no. 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.</p> <p style="padding-left: 40px;">(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.</p> <p style="padding-left: 40px;">(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.</p> <p>1.3 The bidder to furnish the following documents, as applicable, in support of the above:</p> <p style="padding-left: 40px;">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).</p> <p style="padding-left: 40px;">b) For point 1.2 (ii) & (iv): Purchase Order(s), Material Dispatch Clearance Certificate (MDCC)/ Material Receipt Certificate (MRC)/Lorry Receipt (LR)/ Supply Invoice.</p>

PREPARED BY:	REVIEWED BY:	APPROVED BY:
NAME: PUNEET PORWAL DESIGNATION: MGR. DEPT.: PS-PEM/ MPL	NAME: SANJAY KUMAR DESIGNATION: SDGM DEPT.: PS-PEM/ MPL	NAME: B K AGARWAL DESIGNATION: AGM DEPT.: PS-PEM/ MPL

	PRE - QUALIFYING REQUIREMENTS	DOCUMENT No.: PE-TS-445-000-M059
		REVISION No.: 00 DATE: 18.04.2022
		SHEET 2 of 3

<p>1.4 In addition to above, bidder should have the following facilities for different material & maximum size as per BHEL requirement as mentioned in Data Sheet-A of Technical Specification:</p> <p>a) Capability of designing and manufacturing of the item(s).</p> <p>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.</p> <p>Bidder to submit supporting documents (Purchase Order (s)/ Certificate indicating capacity and details/ undertaking of manufacturing & testing facilities) for point (a) & (b) above.</p> <p>1.5 To establish business continuity, bidder is required to submit at least two (2) Purchase order with min. size of ball valve as specified below in last 3 (three) years prior to the date of bid submission as defined by BHEL-PEM in NIT for each category.</p> <p>Category-A: Minimum size of 15NB.</p> <p>Category-B: Minimum size of 65NB.</p> <p>2.0 Bidder to also comply with below mentioned general points:</p> <p>2.1 Offers of the JV companies/ Joint Bidders/ bidders having collaboration/ licensing agreement/ MOU/ Indian subsidiaries shall be evaluated as follows:</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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).</p> <p>2.3 Consideration of offer shall be subject to customer's approval of bidders, if applicable.</p>

PREPARED BY:	REVIEWED BY:	APPROVED BY:
NAME: PUNEET PORWAL DESIGNATION: MGR. DEPT.: PS-PEM/ MPL	NAME: SANJAY KUMAR DESIGNATION: SDGM DEPT.: PS-PEM/ MPL	NAME: B K AGARWAL DESIGNATION: AGM DEPT.: PS-PEM/ MPL

	PRE - QUALIFYING REQUIREMENTS	DOCUMENT No.: PE-TS-445-000-M059
		REVISION No.: 00 DATE: 18.04.2022
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<p>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.</p> <p>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.</p> <p>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 items of the tender.</p> <p>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.</p>

PREPARED BY: NAME: PUNEET PORWAL DESIGNATION: MGR. DEPT.: PS-PEM/ MPL	REVIEWED BY: NAME: SANJAY KUMAR DESIGNATION: SDGM DEPT.: PS-PEM/ MPL	APPROVED BY: NAME: B K AGARWAL DESIGNATION: AGM DEPT.: PS-PEM/ MPL
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1x660 MW SAGARDIGHI TPS

TECHNICAL SPECIFICATION

FOR


BALL VALVES

SPECIFICATION NO. PE-TS-445-100-M004

REV. No.: 00




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

	TECHNICAL SPECIFICATION BALL VALVES 1x660 MW SAGARDIGHI TPS	SPECIFICATION NO. PE-TS-445-100-M004
		REV. No.: 00
		DATE: 18-04-2022
		SHEET 1 OF 1

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2.	SECTION-II	i) DATA SHEET-A	2
		ii) QUALITY PLAN	3
		iii) COMPLIANCE SHEET	1

	SPECIFIC TECHNICAL REQUIREMENTS FOR BALL VALVES 1x660 MW SAGARDIGHI TPS	SPECIFICATION NO: PE-TS-445-100-M004
		SECTION : I
		REV. No.: 00
		DATE: 18-04-2022
		SHEET 1 OF 4

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 The valves complete with all accessories shall be supplied as per Data sheet-A of Section-II. For detail refer the same.
- 2.2 Commissioning spares, if any.
- 2.3 Mandatory spares as applicable depending upon the project 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 BSEN ISO 17292 (replaces BS: 5351).
- 3.3 In case of any conflict between the above codes/ standards and this specification, the latter shall prevail and in case of any further conflict in the matter, the interpretation of the specification by the Engineer shall be final and binding.

4. DESIGN REQUIREMENTS


- 4.1 These valves shall be used for non-corrosive media like compressed air systems (i.e. service air, instrument air etc.) and shall be of non-fire safe design.
- 4.2 Valves shall be selected in the appropriate rating based on the pressure/temperature conditions and service media mentioned in Data sheet-A of Section-II.
- 4.3 Valves with screwed/ socket welding ends up to size of 50NB shall be in 3-piece/ 2-piece construction and valves of size 65NB and above with flanged/butt welding ends shall be short body design and in 3-piece/ 2-piece construction.

5. MATERIALS

- 5.1 The materials of construction of main parts of Ball valves shall be as specified in Data Sheet-A.
- 5.2 The materials of construction of the remaining parts shall be as per the relevant standard governing the valves. 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 All valves with screwed ends shall have screwed female parallel pipe threads as per IS: 554/ASME B 1.20.1.
- 6.2 All valves with flanged ends shall have raised face flanges and drilling details as per ANSI B16.5.

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		SHEET 2 OF 4

- 6.3 Valves with socket welded and butt welded ends shall have extended pieces. These extended pieces shall be connected through screwed ends on one side and the other end will be suited to match the pipe depending on the type of end details i.e. socket/butt welds ends. Socket weld ends and Butt weld ends shall be as per ASME B16.11 and ASME B16.25 respectively.
- 6.4 Body seats shall be of renewable type and shall be of moulded PTFE completely contained and shall provide leak tightness in either direction and be suitable for service temperatures.
- 6.5 All the valves shall be provided with integral stop on body limiting quarter turn operation.
- 6.6 All the ball valves shall be of tight shut off type and the lever shall be designed such that lever is parallel to the flow direction when the valve is in open position.
- 6.7 All the ball valves fitted with a steel lever shall be closed by turning the lever in the clockwise direction. The direction of closing the valve and "Shut" position shall be marked on the valves. The lever shall have plastic covering. For gear operated valves the hand wheel shall clearly marked Open & Shut with arrows indicating the direction of rotation which they refer. Valves shall be closed by rotating the hand wheel in the clock wise direction when looking at the face of the hand wheel.
- 6.8 Each lever / hand wheel of the valve shall be fitted with a circular/ rectangular nameplate of SS material indicating the purchaser's Valve Tag No. and service description.
- 6.9 Valve end position limit switches (open and close) shall be provided and monitored for valves as per Data Sheet-A.


7.0 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 manufacture is started.

8.0 QUALITY ASSURANCE, TESTING & INSPECTION

- 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. 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.
- 8.4 The minimum NDT/testing and inspection requirements for valve shall be as per the attached Quality Plan. However, in case of order, final inspection and testing shall be carried out as per the final approved quality plan without any price implications.

Note: 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.

	SPECIFIC TECHNICAL REQUIREMENTS FOR BALL VALVES 1x660 MW SAGARDIGHI TPS	SPECIFICATION NO: PE-TS-445-100-M004
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		SHEET 3 OF 4

8.5 Carbon steel valves shall be hydraulically tested for leak tightness before galvanizing the valve body and end pieces (pressure parts) also.

8.6 Hydrostatic/Air Tests:

- a. All the valves shall be tested hydraulically for strength and tightness of seats at the pressures as mentioned in BSEN ISO 17292.
- b. No leakage shall be allowed for hydraulic tests and zero leakage shall be allowed for pneumatic tests as mentioned in BSEN ISO 17292, for the valves covered under this specification.

8.7 Dimensional and functional checks shall be carried out.

9.0 GALVANIZING REQUIREMENT (FOR CARBON STEEL):

Carbon steel valve bodies and all other carbon steel valve parts including handle lever & lever adopter shall be degreased, thoroughly cleaned, pickled & rinsed as specified in IS: 2629. Then all these carbon steel body valves & parts shall be hot dip galvanized as per IS: 2629. The minimum thickness of galvanizing shall be 50 microns

10.0 CLEANING, PROTECTION AND PACKING FOR DESPATCH:

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 Valves with screwed and socket welding ends shall be protected by means of polythene caps/ rubber and protectors to prevent damage of ends & also to avoid foreign material entering the valve while shipment & storage.

10.5 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 flanges 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.

10.6 Valve Tag Nos. shall be incorporated in all the dispatch documents.

10.7 Proper care shall be taken to avoid damage to the painted surface during transit.

10.8 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 for a period of 15-18 months.

10.9 Vendor to provide the following:


- Photographs (soft) of valves duly placed inside the wooden box just before final packing.
- Photographs (soft) of the wooden box in which the valves have been finally packed just before dispatch.

Clearance for dispatch of valves will be given only after receiving the photos of valves in satisfactory condition as mentioned in the conditions stated above.

11.0 SPARES

a) **Mandatory Spares:** As per Data Sheet A

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

	SPECIFIC TECHNICAL REQUIREMENTS FOR BALL VALVES 1x660 MW SAGARDIGHI TPS	SPECIFICATION NO: PE-TS-445-100-M004
		SECTION : I
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12.0 DOCUMENTS TO BE SUBMITTED ALONG WITH OFFER

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

- a) Compliance sheet
- b) 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.

13.0 DOCUMENTS TO BE SUBMITTED AFTER AWARD

13.1 Category-A:

- 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.
- b. Quality plan duly signed and stamped.

Submission/Resubmission of above documents shall be considered for delay analysis by BHEL.


13.2 Category-B:

NIL

14.0 EXCLUSIONS:

The following are excluded from the bidder's scope:

- a. Counter flanges and their nuts and bolts.
- b. Erection & Commissioning of equipment at site.

	TECHNICAL SPECIFICATION BALL VALVES 1x660 MW SAGARDIGHI TPS	SPECIFICATION No.: PE-TS-445-100-M004	
		SECTION: II	
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SECTION-II

- DATA SHEET – A
- QUALITY PLAN
- COMPLIANCE SHEET



**DATA SHEET - A
BALL VALVES
1X660 MW SAGARDIGHI TPS**

SPECIFICATION NO.: PE-TS-445-100-M004

SECTION: II

REV. NO.: 00 DATE: 18-04-2022


SHEET 1 OF 2

1	2	3	4	5		6	7	8	9	10	11	12		13	14	15	16	17
SL. NO.	TYPE OF VALVE	SIZE mm (NB)	OPERATION	DESIGN		SERVICE	RATING, DESIGN & TESTING CODE	BODY MATERIAL	TRIM MATERIAL	END CONN	SPECIAL FEATURES	MATCHING PIPE OD x THK		MAIN VALVES QTY (WITHOUT COMMISSIONING SPARES) NOS.	COMMISSIONING SPARES (SETS)			MANDATORY SPARES (COMPLETE ASSEMBLY WITHOUT COMMISSIONING SPARES) NOS.
				PRESSURE KG/CM2(G)	TEMP (DEG ° C)							MM	MM		BODY SEAL	STEM WASHER	STEM SEAL	
1	Ball	15	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL. 800 OF ISO 17292	FORGED STAINLESS STEEL AS PER ASTM A182 F304	ASTM-A351 CF8M	SOCKET WELDED AS PER ASME B 16.11	EXTENDED PIECE ON BOTH SIDES	21.3	2.77	100	10	10	10	1
2	Ball	25	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL. 800 OF ISO 17292	FORGED STAINLESS STEEL AS PER ASTM A182 F304	ASTM-A351 CF8M	SOCKET WELDED AS PER ASME B 16.11	EXTENDED PIECE ON BOTH SIDES	33.4	3.38	70	7	7	7	1
3	Ball	50	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL. 800 OF ISO 17292	FORGED STAINLESS STEEL AS PER ASTM A182 F304	ASTM-A351 CF8M	SOCKET WELDED AS PER ASME B 16.11	EXTENDED PIECE ON BOTH SIDES	60.3	3.91	15	2	2	2	1
4	Ball	100	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST STAINLESS STEEL AS PER ASTM A351 CF8M	ASTM-A351 CF8M	FLANGED AS PER ASME B 16.5 R/F	-	114.3	3.1	14	2	2	2	1
5	Ball	150	MAN	10	80	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST STAINLESS STEEL AS PER ASTM A351 CF8M	ASTM-351CF 8M	FLANGED AS PER ASME B 16.5 R/F	-	168.3	3.4	2	2	2	2	1
NOTES:- 1. IA - INSTRUMENT AIR, MAN - MANUAL, SA - SERVICE AIR 2. All ball valves shall be provided with PTFE seats and seals. 3. COMMISSIONING SPARES FOR BALL VALVES:- ONE SET CONSISTS OF BODY SEAL, STEM WASHER & STEM SEAL. 4. FOR MATERIAL OF CONSTRUCTION REFER SHEET 2 OF 2. 5. MAIN VALVE PRICES SHALL BE EXCLUSIVE OF COST OF COMMISSIONING SPARES PRICES. 6. BIDDER IS REQUIRED TO QUOTE UNIT PRICE OF EACH ITEM UNDER COMMISSIONING SPARES SEPARATELY & INDIVIDUALLY i.e. PRICES OF ALL COMMISSIONING SPARES SHALL NOT BE CLUBBED/ INCLUDED IN THE UNIT PRICE OF MAIN VALVES.												TOTAL	201	23	23	23	5	

	DATA SHEET-A BALL VALVES 1x660 MW SAGARDIGHI TPS	SPECIFICATION No.: PE-TS-445-100-M004	
		SECTION: II	
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		SHEET 2 OF 2	

Materials of Construction


SL. No.	PART NAME	MATERIAL (STAINLESS STEEL BODY)
1	BODY AND END PIECES	FORGED STAINLESS STEEL AS PER ASTM A 182 Gr. F304 (UPTO 50 NB) CAST STAINLESS STEEL AS PER ASTM A 351 Gr. CF8M (ABOVE 50 NB)
2	BALL,	ASTM A 351 Gr. CF8M (BALL MIRROR FINISH)
3	STEM AND GLAND	STAINLESS STEEL AS PER AISI 316
4	SEAT RING	VIRGIN UNFILLED OIL FREE PTFE (Non-Asbestos Type)
5	BODY SEAL, STEM SEAL AND GLAND PACKING	VIRGIN UNFILLED OIL FREE PTFE (Non-Asbestos Type)
6	BODY STUD	AISI 316
7	BODY NUT	AISI 316
8	GLAND NUT	AISI 316
9	LEVER	AISI 316 WITH PLASTIC SLEEVE GRIP
10	LEVER ADOPTER	AISI 316
11	STOPPER PIN	AISI 316
12	STEM WASHERS	SPRING STEEL
13	NAME PLATE (FOR VALVE TAG No.)	SS 316 (2 MM THICK)
14	PAINTING	NO PAINTING NEEDS TO BE DONE AS ALL PARTS OF STAINLESS STEEL.

	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN					SPEC. NO.: PE-TS-445-100-M004		DATE: 08-04-2022			
			CUSTOMER : M/S WBPDCI					QP NO.: PE-QP-445-100-M006		DATE: 08-04-2022			
			PROJECT: 1x660 MW SAGARDIGHI TPS					PO NO.: LATER		DATE:			
			ITEM: FSS BALL VALVES (SIZE 15 TO 50NB / CLASS 800) & CSS (SIZE 65 TO 200 NB/ CLASS 150)			SYSTEM: INSTRUMENT & SERVICE AIR		SECTION: II		SHEET 1 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	*	**		
					M	C/N				D	M	C	N

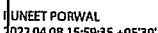
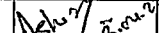
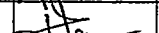
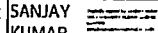
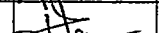
1.0 MATERIALS													
1.1	BODY, END PIECES BALL, SPINDLE, GLAND, LEVER, FASTENERS	1. PHYSICAL, CHEMICAL PROPS.	MA	PHYSICAL, CHEM. TESTING	ONE PER BATCH/ LOT/ HEAT	APPD. DRG. / REL. STD.	APPD. DRG. / REL. STD.	MILL T.C.	√	P/W	V	V	CORELATION REQD. FOR BODY & END PIECES W.R.T. HEAT Nos.
		2. HEAT TREATMENT	CR	REVIEW OF H.T. RECORDS	100%	-DO-	-DO-	H.T. INTERNAL INSPN. RECORDS	√	P/W	V	V	
		3. SURFACE DEFECTS	MA	VISUAL	100%	MSS-SP-55	FREE FROM DEFECTS	INSPN. REPORT	√	P/W	V	V	
1.2	BODY, END PIECES	1. SURFACE DEFECTS	CR	PENETRANT TEST	100%	ASTM E 165	ANSI B 16.34	TEST REPORT	√	P/W	V	V	APPLICABLE ONLY FOR SS CASTINGS.
2.0 IN PROCESS INSPECTION													
2.1	MACHINING OF ALL COMPONENTS	1. DIMENSIONS	MA	MEASUREMENT	100%	MFG. DRG.	MFG. DRG.	LOG BOOK	-	P/W	-	-	
		2. SURFACE FINISH	MA	VISUAL	100%	MFG. DRG.	MFG. DRG.	LOG BOOK	-	P/W	-	-	
		3. HARDNESS (FOR BALL AND SPINDLE)	MA	HARDNESS TESTING	100%	APPD. DRG. / REL. STD.	APPD. DRG. / REL. STD.	T.C.	√	P/W	V	V	
		4. SURFACE DEFECTS	CR	PENETRANT TEST	100%	ASTM E 165	ANSI B16.34	T.C.	√	P/W	V	V	FOR BALL, SPINDLE SEATS & MACHINED SURFACES.
3.0 BEFORE GALVANISING - SHELL TEST FOR PRESSURE PARTS (FOR CS VALVES ONLY)													
3.1	BODY, END PIECES (PRESSURE PARTS)	LEAK TIGHTNESS	CR	HYDRAULIC TEST	100%	APPD. DRG.	NO LEAKAGE	T.C.	√	P/W	V	V	
4.0	HOT DIP GALVANIZING OF CARBON STEEL BODY, END PIECES AND ALL OTHER CARBON STEEL VALVE PARTS	1. FREEDOM FROM SURFACE DEFECTS	MA	VISUAL	100%	IS:2629	IS:2629	INSPN REPORT	√	P/W	V	V	
		2. UNIFORMITY IN THICKNESS	MA	THICKNESS	VALVE BODY AT RANDOM	IS:2629	IS:2629	INSPN REPORT	√	P/W	V	V	THICKNESS 50 MICRONS (MIN.) TO BE CHECKED WITH ELCOMETER.
		3. ADHESION	MA	KNIFE TEST	-DO-	IS:2629	IS:2629	INSPN REPORT	√	P/W	V	V	

BHEL				BIDDER/ SUPPLIER				FOR CUSTOMER REVIEW & APPROVAL			
ENGINEERING		QUALITY		Sign & Date		Seal		Doc No:			
Prepared by:	Sign & Date	Name	Checked by:	Sign & Date	Name			Sign & Date		Name	Seal
Reviewed by:	SANJAY KUMAR	Sanjay Kumar	Reviewed by:	<i>[Signature]</i>	Ashish Panigrahi			Reviewed by:			
								Approved by:			

12/4/22

	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN					SPEC. NO.: PE-TS-145-100-M004		DATE: 08-04-2022		
								CUSTOMER : M/S WBPDCI		QP NO.: PE-QP-445-100-M006		DATE: 08-04-2022
			PROJECT: 1x660 MW SAGARDIGHI TPS					PO NO.: LATER		DATE:		
			ITEM: FSS BALL VALVES (SIZE 15 TO 50NB / CLASS 800) & CSS (SIZE 65 TO 200 NB/ CLASS 150)			SYSTEM: INSTRUMENT & SERVICE AIR		SECTION: II		SHEET 2 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	*	**		
					M C/N				D	M	C	N


5.0	ASSEMBLY OF ALL VALVE													
5.1	BALL AND SEAT	MIRROR FINISH (BALL)	CR	BUFFING/ GRINDING/ MACHINING	100%	THE SURFACE SHALL BE SMOOTH AND SHALL HAVE UNIFORM CONTACT WITH SOFT SEAT		LOG BOOK	√	P/W	V	V		
6.0	FINAL TESTING													
6.1	ASSEMBLY	1. DIMENSIONS	MA	MEASUREMENT	100%	REFER NOTE-2	APPD. DRG.	APPD. DRG.	INSPN. REPORT	√	P/W	W	V	
		2. OPENING/ CLOSING	MA	OPERATION	100%		SMOOTH OPERATION OF VALVE	SMOOTH OPERATION OF VALVE	-DO-	√	P/W	W	V	
		3. APPEARANCE: WORKMANSHIP, ORIENTATION, MARKING, TAG No.	MA	VISUAL	100%		APPD. DRG.	APPD. DRG.	INSPN. REPORT	√	P/W	W	V	
6.2	BODY	1. LEAK TIGHTNESS	CR	HYDRAULIC TEST	100%		APPD. DRG.	BS EN ISO 17292	TEST CERT.	√	P/W	W	V	
6.3	SEAT	1. LEAK TIGHTNESS	CR	-DO-	100%		-DO-	-DO-	-DO-	√	P/W	W	V	
		2. LEAK TIGHTNESS	CR	PNEUMATIC TEST	100%		-DO-	-DO-	-DO-	√	P/W	W	V	
6.4	COMMISSIONING SPARES	WORKMANSHIP & SUITABILITY	MA	VISUAL	100%	100%	-DO-	APPD. DRG.	INSPN. REPORT	√	P/W	W	V	
7.0	PACKING	SOUNDNESS OF PACKING	MA	VISUAL	100%	100%	APPD. DRG. / PACKING PROCEDURE (IF APPLICABLE)	APPD. DRG. / PACKING PROCEDURE (IF APPLICABLE)	INSPN. REPORT	√	P/W	W	-	REFER NOTE-3.

BHEL					
ENGINEERING			QUALITY		
Prepared by:	Sign & Date	Name	Checked by:	Sign & Date	Name
	 PUNEET PORWAL 2022.04.08 15:59:35 +05'30'	Puneet Porwal	 Ashish Panigrahi	 Harish Kumar	
Reviewed by:	 SANJAY KUMAR	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:			

13/4/22

	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN					SPEC. NO.: PE-TS-445-100-M004		DATE: 08-04-2022		
								CUSTOMER : M/S WBPDCI		QP NO.: PE-QP-445-100-M006		DATE: 08-04-2022
			PROJECT: 1x660 MW SAGARDIGHI TPS					PO NO.: LATER		DATE:		
			ITEM: FSS BALL VALVES (SIZE 15 TO 50NB / CLASS 800) & CSS (SIZE 65 TO 200 NB/ CLASS 150)			SYSTEM: INSTRUMENT & SERVICE AIR		SECTION: II		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	*	**		
					M	C/N			D	M	C	N

NOTES:


- In case of foreign supplier, all test certificates shall be furnished by the supplier, duly witnessed/verified by supplier's TPIA.
- 10% or min. 2 nos. at random by BHEL/Customer & 100% by supplier for each type, size & rating.
- Following to be noted for packing:
 - 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.
 - Photographs of the packing (with LR No.) just before dispatch for information of PEM.
- BHEL reserves the right for conducting repeat tests, if required.
- Welding and Impregnation of casting are not permitted.
- The latest revision/year of issue of all the standard indicated in the QP shall be referred.
- All materials shall be as per Approved drgs/ Data sheet for valves.

LEGENDS:

- *: Records, identified with "Tick"(√) shall be essentially included by supplier in QA Documentation.
- ** M: Supplier/ Manufacturer/ Sub-Supplier
- P: Perform
- MA: Major Characteristic
- MTC: Mill Test Certificate
- D: Documentation
- C: Main Supplier/BHEL/ Third Party Inspection agency
- W: Witness
- MI: Minor Characteristic
- PT: Penetrant Test
- NDT: Non Destructive Testing
- N: Customer
- V: Verification
- CR: Critical Characteristic
- UT: Ultrasonic Test

BHEL				BIDDER/ SUPPLIER		FOR CUSTOMER REVIEW & APPROVAL			
ENGINEERING		QUALITY		Sign & Date		Doc No:			
Prepared by:	Sign & Date	Name	Checked by:	Sign & Date	Name	Reviewed by:	Sign & Date	Name	Seal
	PUNEET PORWAL 2022.04.08 15:59:51 +0530	Puneet Porwal	Ashish Panigrahi 15.04.22		Ashish Panigrahi				
Reviewed by:	SANJAY KUMAR	Sanjay Kumar	Harish Kumar		Harish Kumar	Approved by:			

793656/2022/PS-PEM-MPL

	COMPLIANCE SHEET BALL VALVES 1x660MW, SAGARDIGHI THERMAL POWER EXTENSION PROJECT (UNIT #5)	SPECIFICATION NO. PE-TS-445-100-M004
		SECTION: II
		REV: 0
		DATE: 18.04.2022
		SHEET 1 OF 1

I hereby comply/not comply (*) to all the requirements of this technical specification in totality.

* In case the bidder does not comply to the technical specification, the deviations shall be explicitly listed in

TABLE-1 below in case of procurement through GeM portal

Or else

Cost of Withdrawal sheet of GCC

TABLE – 1

S. NO.	VOLUME / SECTION	PAGE NO.	CLAUSE NO.	COMPLETE DESCRIPTION OF DEVIATION	REASON FOR QUOTING DEVIATION
TECHNICAL DEVIATIONS ONLY					

NOTES FOR TABLE-1:

- All the bidders have to list out Technical deviations (if any) in detail in the above format.
- Any deviation not mentioned above and shown separately or found hidden in offer, will not be taken cognizance of.
- The final decision of acceptance/ rejection of the deviations quoted by the bidder shall be at the discretion of the Purchaser.
- Bidders to note that any Technical deviation not listed above and requested after Part-I opening shall not be considered.

PARTICULARS OF BIDDER'S AUTHORISED REPRESENTATIVES		
NAME	DESIGNATIONS	SIGN & DATE