



Bid Number: GEM/2022/B/2196791
Dated: 21-05-2022

Bid Document

Bid Details	
Bid End Date/Time	31-05-2022 16:00:00
Bid Opening Date/Time	31-05-2022 16:30:00
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	841

Bid Details

<p>Item Category</p>	<p>Main Valves 15 MM NB SIZE BALL VALVES WITHOUT COMMISSIONING SPARES , Main Valves 25 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES , Main Valves 40 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES , Main Valves 50 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES , Main Valves 65 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES , Main Valves 150 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES , Main Valves 200 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES , COMMISSIONING SPARES- BODY SEAL SETS-15 MM NB SIZE , COMMISSIONING SPARES- BODY SEAL SETS-25 MM NB SIZE , COMMISSIONING SPARES- BODY SEAL SETS-40 MM NB SIZE , COMMISSIONING SPARES- BODY SEAL SETS-50 MM NB SIZE , COMMISSIONING SPARES- BODY SEAL SETS-65 MM NB SIZE , COMMISSIONING SPARES- BODY SEAL SETS-150 MM NB SIZE , COMMISSIONING SPARES- BODY SEAL SETS-200 MM NB SIZE , COMMISSIONING SPARES- STEM WASHER SETS-15 MM NB SIZE , COMMISSIONING SPARES- STEM WASHER SETS-25 MM NB SIZE , COMMISSIONING SPARES- STEM WASHER SETS-40 MM NB SIZE , COMMISSIONING SPARES- STEM WASHER SETS-50 MM NB SIZE , COMMISSIONING SPARES- STEM WASHER SETS-65 MM NB SIZE , COMMISSIONING SPARES- STEM WASHER SETS-150 MM NB SIZE , COMMISSIONING SPARES- STEM WASHER SETS-200 MM NB SIZE , COMMISSIONING SPARES- STEM SEAL SETS-15 MM NB SIZE , COMMISSIONING SPARES- STEM SEAL SETS-25 MM NB SIZE , COMMISSIONING SPARES- STEM SEAL SETS-40 MM NB SIZE , COMMISSIONING SPARES- STEM SEAL SETS-50 MM NB SIZE , COMMISSIONING SPARES- STEM SEAL SETS-65 MM NB SIZE , COMMISSIONING SPARES- STEM SEAL SETS-150 MM NB SIZE , COMMISSIONING SPARES- STEM SEAL SETS-200 MM NB SIZE , MANDATORY SPARES- Complete Valve without Commissioning spares-15 MM NB SIZE , MANDATORY SPARES-Complete Valve without Commissioning spares-25 MM NB SIZE , MANDATORY SPARES-Complete Valve without Commissioning spares-40 MM NB SIZE , MANDATORY SPARES-Complete Valve without Commissioning spares-50 MM NB SIZE , MANDATORY SPARES-Complete Valve without Commissioning spares-65 MM NB SIZE , MANDATORY SPARES-Complete Valve without Commissioning spares-150 MM NB SIZE , MANDATORY SPARES-Complete Valve without Commissioning spares-200 MM NB SIZE</p>
<p>BOQ Title</p>	<p>BALL VALVES FOR PATRATU TPP PHASE I PROJECT</p>
<p>MSE Exemption for Years of Experience and Turnover</p>	<p>No</p>
<p>Startup Exemption for Years of Experience and Turnover</p>	<p>No</p>
<p>Document required from seller</p>	<p>Experience Criteria,Certificate (Requested in ATC),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</p>
<p>Bid to RA enabled</p>	<p>Yes</p>

Bid Details	
RA Qualification Rule	50% Lowest Priced Technically Qualified Bidders
Primary product category	Main Valves 15 MM NB SIZE BALL VALVES WITHOUT COMMISSIONING SPARES
Time allowed for Technical Clarifications during technical evaluation	7 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:

MANAGER, BHEL PEM
10250020-PEM, Noida, Department of Heavy Industry, Bharat Heavy Electricals Limited (BHEL), Ministry of Heavy Industries and Public Enterprises
(Manish Kumar Sinha)

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. 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.

2. 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 100%(selected by Buyer) percentage of total QUANTITY.

3. 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.

4. 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.

Main Valves 15 MM NB SIZE BALL VALVES WITHOUT COMMISSIONING SPARES

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	255	600

Main Valves 25 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	236	600

Main Valves 40 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

Main Valves 50 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	46	600

Main Valves 65 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES

(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

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

Main Valves 150 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	17	600

Main Valves 200 MM NB SIZE- BALL VALVES WITHOUT COMMISSIONING SPARES

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	48	600

COMMISSIONING SPARES- BODY SEAL SETS-15 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	26	600

COMMISSIONING SPARES- BODY SEAL SETS-25 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	24	600

COMMISSIONING SPARES- BODY SEAL SETS-40 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- BODY SEAL SETS-50 MM NB SIZE

(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
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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	5	600

COMMISSIONING SPARES- BODY SEAL SETS-65 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- BODY SEAL SETS-150 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- BODY SEAL SETS-200 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	5	600

COMMISSIONING SPARES- STEM WASHER SETS-15 MM NB SIZE

(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

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	26	600

COMMISSIONING SPARES- STEM WASHER SETS-25 MM NB SIZE

(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
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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	24	600

COMMISSIONING SPARES- STEM WASHER SETS-40 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- STEM WASHER SETS-50 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	5	600

COMMISSIONING SPARES- STEM WASHER SETS-65 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- STEM WASHER SETS-150 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- STEM WASHER SETS-200 MM NB SIZE

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

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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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	5	600

COMMISSIONING SPARES- STEM SEAL SETS-15 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	26	600

COMMISSIONING SPARES- STEM SEAL SETS-25 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	24	600

COMMISSIONING SPARES- STEM SEAL SETS-40 MM NB SIZE

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

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- STEM SEAL SETS-50 MM NB SIZE

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

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	5	600

COMMISSIONING SPARES- STEM SEAL SETS-65 MM NB SIZE

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

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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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- STEM SEAL SETS-150 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

COMMISSIONING SPARES- STEM SEAL SETS-200 MM NB SIZE

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

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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	5	600

MANDATORY SPARES-Complete Valve Without Commissioning Spares-15 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	13	600

MANDATORY SPARES-Complete Valve Without Commissioning Spares-25 MM NB SIZE

(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

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Consignees/Reporting Officer and Quantity

S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	12	600

MANDATORY SPARES-Complete Valve Without Commissioning Spares-40 MM NB SIZE

(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
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S.No.	Consignee/Reporting Officer	Address	Quantity	Delivery Days
1	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

MANDATORY SPARES-Complete Valve Without Commissioning Spares-50 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	3	600

MANDATORY SPARES-Complete Valve Without Commissioning Spares-65 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

MANDATORY SPARES-Complete Valve Without Commissioning Spares-150 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	2	600

MANDATORY SPARES-Complete Valve Without Commissioning Spares-200 MM NB SIZE

(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	Sachin Kumar Sharma	829119,BHEL Site office, 3x800MW PVUNL Patratu, Distt. - Ramagarh, Jharkhand, Pin: 829119	3	600

Buyer Added Bid Specific Terms and Conditions

1. Buyer Added Bid Specific ATC

Buyer Added text based ATC clauses

- This is a conditional tender enquiry. Financial bid (Part-II) opening of a bidder shall be subjected to the following:
 - Techno-Commercial evaluation by BHEL.
 - Qualification of Technical PQR
 - Offered item should mandatorily conform to PP-MII order provisions.
 - Approval of vendor by end Customer. Vendor is required to submit the Credentials as per Performa for vendor approval i.e. NTPC's sub-supplier questionnaire enclosed.

2. Payment Terms: -

Main Supply & Mandatory Spares Supply: -Payments shall be made to the **Seller within 90 days (45 days for seller qualified and registered as Micro or Small Enterprises as per MSMED Act., 60 days for seller qualified and registered as Medium Enterprises as per MSMED Act. & 90 days for Non MSME)** 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(i) of GeM GTC). Supplier has to provide Original + 1 copy of Tax invoice, Packing List, LR/RR or AWB, CRAC, Insurance intimation, Guarantee Certificate, E-way bill (as applicable) for payment.

- Terms of Delivery: As per cl. no. 13 of GTC on GeM (i.e. Free Delivery at site basis including loading) . However, Transit insurance shall be in the scope of Seller and unloading of items at delivery point shall be in the scope of BHEL. Bidder to quote prices accordingly.

4. As per GeM portal requirement, delivery is to be mentioned in days from the date of PO. Following Delivery schedule is proposed for subject tender, which is indicative only to fulfil the GeM requirement: -

Delivery Period for Main Supply including Commissioning Spares: 600 days from the date of PO.

Delivery Period for Mandatory Spares considering storage readiness by customer: 600 Days from the date of PO.

For contractual purpose -

Main Supply including Commissioning Spares for Unit-I - Delivery Schedule shall be Four (04) months from date of CAT-1 approval of Primary drawing/documents or BHEL manufacturing clearance, whichever is later, subjected to submission of R0 drawing/document within 14 days from PO and subsequent revisions incorporating all BHEL comments within 10 days of comments received from BHEL. 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.

Applicable Drawing/documents -

PE-V0-XXX-100-M051 : GA for Ball Valves

PE-QP-XXX-100-M006 : QP for Ball Valves

Delivery for Main Supply for Unit-II & III (Lot wise) shall be 4 Months from date of BHEL manufacturing clearance.

Mandatory Spares - Delivery period shall be Four (04) months from date of BHEL manufacturing clearance.

Further, followings also to be noted:

- A. Vendor to start manufacturing activities only after obtaining specific manufacturing clearance from BHEL Purchase Group.
- B. The end period specified is for completion of the deliveries. Deliveries to start progressively so as to meet the completion schedule.
- C. The delivery conditions specified are for contractual LD purposes however, BHEL may ask for early deliveries without any compensation thereof.

5. **Liquidated Damage-**

a) Main Supply :- Purchaser reserves the right to recover from the Seller/Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half ($\frac{1}{2}$) percent and applicable GST thereon, of the total main supply contract price excluding GST per week or part thereof, subject to a maximum of ten(10) percent of the total main supply 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) Mandatory Spares: - LD shall be applicable @ ½ percent and applicable GST thereon, of the total mandatory spares portion contract value excluding GST per week or part thereof, limiting to 10% of total contract value of mandatory spares excluding GST.

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.

Above LD clause shall prevail over the LD clause of GeM GTC.

6. Guarantee & Warranty: As per Cl. No. 10 of GTC on GeM for the bid. However, Guarantee & Warrantee time period shall be separate for Main Supply & Mandatory spares. It shall be 18 months from the date of last supply in the contract for Main Supply & Mandatory spares respectively.

Guarantee period (Unit-wise/Lot-wise/Stage-wise/Set-wise, as applicable) for supply package shall be eighteen (18) months from the date of last dispatch.

7. Quantity Variation: - Up to +25%, as per GeM ATC library clause. The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25% 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.

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. Provision of offline payment in GeM can be utilized.

10. Evaluation shall be on the basis of total all inclusive, landed price at consignee destination (Refer cl. no. 6 of GTC on GEM).

11. For this procurement, the local content to categorize a supplier as a Class I Local Supplier and Purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India),

(PPP-MII) Order 2017 dt. 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.

Regarding verification of local content, the local supplier at the time of tender, bidding or solicitation shall be required to provide certification as per para 9 of PP-MII order revision dated 16.09.2020.

Class-I local suppliers are only eligible to bid in this tender. Minimum local content for qualifying as class I local supplier is 80%. Bidders to quote accordingly.

12. 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. In case the same is found not available, BHEL has the right to reject such document from evaluation.

13. Bidders to,

- 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. 23/07/2020, if applicable.
- 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. 23/07/2020, if applicable.
- 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.

Note: Subsequent orders/circulars to be checked and to be complied.

14. Compliance of model clauses as provided in Annexure-III of Ministry of Finance Order (Public Procurement No. 1) issued on 23.07.2020 (Restrictions under Rule 144 (xi) of the GFR 2017) shall be applicable for subject tender. Model Certificates provided in same Annexure-III shall also be complied. Further relevant clause of order no. 25-11/6/2018-PG dated 02.07.20 issued by MoP shall also be complied. An undertaking regarding Model Clauses (as applicable from Annexure-III) shall be furnished along with bid documents.

15. "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 available at:

<https://pem.bhel.com/Documents/VendorSection/Vendor/Guidelines.pdf>

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.

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.

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.

16. All Bidders shall be required to submit applicable **Freight % & GST %** included in their prices during clarification stage of Tender.

17. Following BOQ Notes shall remain applicable: -

- Abbreviations used in BOQ are: IA - INSTRUMENT AIR, MAN - MANUAL, SA - SERVICE
A I R
- Commissioning Spares for Ball Valves: One Set consists of BODY SEAL, STEM WASHER & STEM SEAL.

18. Bidder has to provide the details as per **TECHNICAL PQR** (attached with Specifications of product catalogue) in its offer and has to note that bids of only those bidders shall be evaluated who meet the Technical Pre-Qualifying requirements'. The terms of technical PQR shall prevail in conflict (if any).

19. PQR criteria uploaded with Buyer uploaded Bid Specific document shall prevail Value of Experience criteria and Past performance parameter mentioned in GeM bid.

20. 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 (if applicable), Dispatch Clearance.

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/guideline.

22. Risk & Cost Purchase clause- As per Annexure for Risk and Cost enclosed with specification documents.

23. 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.

24. 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 %.

- 25.** 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.
- 26.** The bidder is required to upload, along with the bid, all relevant certificates as prescribed in the Product Specification given in the bid document.
- 27.** 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.
- 28.** All applicable Annexure & formats are attached with BOQ Specification for this Bid.
- 29.** Please furnish NTPC's Main & Sub-supplier questionnaire (enclosed with this enquiry) and submit all the supportive documents against details furnished therein (signed & stamped on each page).
- 30.** Consignee Details (for PRC - Provisional Receipt Certificate & CRAC - Consignee's Receipt cum Acceptance Certificate, as applicable) shall be as per Project Site official details. Consignee details of project considered are mentioned in NIT document for ready reference.
- 31.** Bidders to comply with Packing Instructions enclosed with specification documents.
- 32. Performance Bank Guarantee:**
Performance Security amount shall be @5% of the value of contract value shall be as per Cl. No. 7 of GTC of GeM. Further, if relaxation from end customer is received, same benefit shall be passed on to bidders as well.

Initial e-PBG validity: Initial ePBG validity shall be 26 months from PO date for Main supply & Mandatory Spares. However, BG will be released only after completion of all contractual liability or guarantee period, whichever is later.

- 33. "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% 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 percentage of **100%** of total value.

- 34. Additional Clauses of NIT:**

Dispatch Markings: -

Each box shall be marked with Capital Letters in "Red" indicating the PEM supply (Main Supply OR Commissioning spare/ Mandatory Spare) for 3X660 MW PVUNL Patraru STPP. Each package delivered under the Contract shall be marked by Supplier and such marking must be distinct and in English Language (all previous irrelevant markings being carefully obliterated). Such marking shall show the description and quantity of contents, the name and address of consignee, the Gross weight and Net weight of the package, the name of the Supplier, PEM P.O. reference number, with a distinctive number of mark sufficient for purposes of identification. Besides above necessary, packing shall bear a special marking `TOP', `BOTTOM', 'DO NOT TURN OVER", "KEEP DRY", "HANDLE WITH CARE", etc.

IMPORTANT

Two copies of respective standard manufacturer’s erection instruction/operation instruction manual shall be kept in each package / container for immediate reference by BHEL site and same shall be reflected in packing slip also

□ The Packing list details for the consignment must be put inside the Box/Boxes.

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 Box.

Mandatory Spares: - The Mandatory spares shall be properly packed separately in separate box 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 CUSTOMER 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 PVUNL. 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.

35. All other terms & conditions shall be as per GeM bid, selected Additional Terms & Conditions from GeM library and GTC on GeM version available on GeM Portal as on enquiry floating date.

Letter head of Company

Ref.....
Date.....

Reference: Tender Enquiry Ref- **GeM Bid no. GEM/2022/B/2196791 dt. 21/05/2022**

Name of Package: **Ball Valves**

NO COMMERCIAL DEVIATION

Yours very truly

.....(authorized signatory of company)

.....(firm name)

Company's Seal/stamp

Letter head of Company

Ref.....

Date.....

Reference: Tender Enquiry Ref- **GeM Bid no. GEM/2022/B/2196791 dt. 21/05/2022**

Name of Package: **Ball Valves**

NO TECHNICAL DEVIATION

Yours very truly

.....(authorized signatory of company)

.....(firm name)

Company's Seal/stamp

2. Buyer Added Bid Specific ATC

Buyer uploaded ATC document [Click here to view the file.](#)

3. 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.

4. Certificates

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.

5. Generic

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 %.

6. Generic

Bidder shall submit the following documents along with their bid for Vendor Code Creation:

- a. Copy of PAN Card.
- b. Copy of GSTIN.
- c. Copy of Cancelled Cheque.
- d. Copy of EFT Mandate duly certified by Bank.

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](#)

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---

BUYER SPECIFIC ATC

GeM BID NUMBER: GEM/2022/B/2196791 dt. 21/05/2022

PACKAGE: BALL VALVES

PROJECT: 3x800 MW PVUNL PATRATU TPP PHASE-I

1. This is a conditional tender enquiry. Financial bid (Part-II) opening of a bidder shall be subjected to the following:
 - i) Techno-Commercial evaluation by BHEL.
 - ii) Qualification of Technical PQR
 - iii) Offered item should mandatorily conform to PP-MII order provisions.
 - iv) Approval of vendor by end Customer. Vendor is required to submit the Credentials as per Performa for vendor approval i.e. NTPC's sub-supplier questionnaire enclosed.

2. Payment Terms: -

Main Supply & Mandatory Spares Supply: -Payments shall be made to the **Seller within 90 days (45 days for seller qualified and registered as Micro or Small Enterprises as per MSMED Act., 60 days for seller qualified and registered as Medium Enterprises as per MSMED Act. & 90 days for Non MSME)** 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(i) of GeM GTC). Supplier has to provide Original + 1 copy of Tax invoice, Packing List, LR/RR or AWB, CRAC, Insurance intimation, Guarantee Certificate, E-way bill (as applicable) for payment.

3. Terms of Delivery: As per cl. no. 13 of GTC on GeM (i.e. Free Delivery at site basis including loading). However, Transit insurance shall be in the scope of Seller and unloading of items at delivery point shall be in the scope of BHEL. Bidder to quote prices accordingly.
4. As per GeM portal requirement, delivery is to be mentioned in days from the date of PO. Following Delivery schedule is proposed for subject tender, which is indicative only to fulfil the GeM requirement: -

Delivery Period for Main Supply including Commissioning Spares: 600 days from the date of PO.

Delivery Period for Mandatory Spares considering storage readiness by customer: 600 Days from the date of PO.

For contractual purpose -

Main Supply including Commissioning Spares for Unit-I - Delivery Schedule shall be Four (04) months from date of CAT-1 approval of Primary drawing/documents or BHEL manufacturing clearance, whichever is later, subjected to submission of R0 drawing/document within 14 days from PO and subsequent revisions incorporating all BHEL comments within 10 days of comments received from BHEL. 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.

Applicable Drawing/documents -

PE-V0-XXX-100-M051 : GA for Ball Valves

PE-QP-XXX-100-M006 : QP for Ball Valves

Delivery for Main Supply for Unit-II & III (Lot wise) shall be 4 Months from date of BHEL manufacturing clearance.

Mandatory Spares - Delivery period shall be Four (04) months from date of BHEL manufacturing clearance.

BUYER SPECIFIC ATC

GeM BID NUMBER: GEM/2022/B/2196791 dt. 21/05/2022

PACKAGE: BALL VALVES

PROJECT: 3x800 MW PVUNL PATRATU TPP PHASE-I

Further, followings also to be noted:

- A. Vendor to start manufacturing activities only after obtaining specific manufacturing clearance from BHEL Purchase Group.
- B. The end period specified is for completion of the deliveries. Deliveries to start progressively so as to meet the completion schedule.
- C. The delivery conditions specified are for contractual LD purposes however, BHEL may ask for early deliveries without any compensation thereof.

5. Liquidated Damage-

a) Main Supply :- Purchaser reserves the right to recover from the Seller/Contractor, as agreed liquidated damages and not by way of penalty, a sum equivalent to half ($\frac{1}{2}$) percent and applicable GST thereon, of the total main supply contract price excluding GST per week or part thereof, subject to a maximum of ten(10) percent of the total main supply 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) Mandatory Spares: - LD shall be applicable @ $\frac{1}{2}$ percent and applicable GST thereon, of the total mandatory spares portion contract value excluding GST per week or part thereof, limiting to 10% of total contract value of mandatory spares excluding GST.

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.

Above LD clause shall prevail over the LD clause of GeM GTC.

- 6. Guarantee & Warranty:** As per Cl. No. 10 of GTC on GeM for the bid. However, Guarantee & Warrantee time period shall be separate for Main Supply & Mandatory spares. It shall be 18 months from the date of last supply in the contract for Main Supply & Mandatory spares respectively. Guarantee period (Unit-wise/Lot-wise/Stage-wise/Set-wise, as applicable) for supply package shall be eighteen (18) months from the date of last dispatch.

BUYER SPECIFIC ATC

GeM BID NUMBER: GEM/2022/B/2196791 dt. 21/05/2022

PACKAGE: BALL VALVES

PROJECT: 3x800 MW PVUNL PATRATU TPP PHASE-I

7. **Quantity Variation:** - Up to +25%, as per GeM ATC library clause. The Purchaser reserves the right to increase or decrease the quantity to be ordered up to 25% 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.
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. Provision of offline payment in GeM can be utilized.
10. Evaluation shall be on the basis of total all inclusive, landed price at consignee destination (Refer cl. no. 6 of GTC on GEM).
11. For this procurement, the local content to categorize a supplier as a Class I Local Supplier and Purchase preference to Class I local supplier, is as defined in Public Procurement (Preference to Make in India), (PPP-MII) Order 2017 dt. 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.

Regarding verification of local content, the local supplier at the time of tender, bidding or solicitation shall be required to provide certification as per para 9 of PP-MII order revision dated 16.09.2020.

Class-I local suppliers are only eligible to bid in this tender. Minimum local content for qualifying as class I local supplier is 80%. Bidders to quote accordingly.

12. 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. In case the same is found not available, BHEL has the right to reject such document from evaluation.
13. Bidders to,
 - 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. 23/07/2020, if applicable.
 - 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. 23/07/2020, if applicable.
 - 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.

Note: Subsequent orders/circulars to be checked and to be complied.

14. Compliance of model clauses as provided in Annexure-III of Ministry of Finance Order (Public Procurement No. 1) issued on 23.07.2020 (Restrictions under Rule 144 (xi) of the GFR 2017) shall be applicable for subject tender. Model Certificates provided in same Annexure-III shall also be complied. Further relevant clause of order no. 25-11/6/2018-PG dated 02.07.20 issued by MoP shall also be

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complied. An undertaking regarding Model Clauses (as applicable from Annexure-III) shall be furnished along with bid documents.

15. "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 available at: <https://pem.bhel.com/Documents/VendorSection/Vendor/Guidelines.pdf>

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.

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.

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.

16. All Bidders shall be required to submit applicable **Freight % & GST %** included in their prices during clarification stage of Tender.
17. Following BOQ Notes shall remain applicable: -
- Abbreviations used in BOQ are: IA - INSTRUMENT AIR, MAN - MANUAL, SA - SERVICE AIR
 - Commissioning Spares for Ball Valves: One Set consists of BODY SEAL, STEM WASHER & STEM SEAL.
18. Bidder has to provide the details as per **TECHNICAL PQR** (attached with Specifications of product catalogue) in its offer and has to note that bids of only those bidders shall be evaluated who meet the Technical Pre-Qualifying requirements'. The terms of technical PQR shall prevail in conflict (if any).
19. PQR criteria uploaded with Buyer uploaded Bid Specific document shall prevail Value of Experience criteria and Past performance parameter mentioned in GeM bid.
20. 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 (if applicable), Dispatch Clearance.

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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/guideline.
22. Risk & Cost Purchase clause- As per Annexure for Risk and Cost enclosed with specification documents.
23. 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.
24. 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 %.**
25. 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.
26. The bidder is required to upload, along with the bid, all relevant certificates as prescribed in the Product Specification given in the bid document.
27. 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.
28. All applicable Annexure & formats are attached with BOQ Specification for this Bid.
29. Please furnish NTPC's Main & Sub-supplier questionnaire (enclosed with this enquiry) and submit all the supportive documents against details furnished therein (signed & stamped on each page).
30. Consignee Details (for PRC - Provisional Receipt Certificate & CRAC - Consignee's Receipt cum Acceptance Certificate, as applicable) shall be as per Project Site official details. Consignee details of project considered are mentioned in NIT document for ready reference.
31. Bidders to comply with Packing Instructions enclosed with specification documents.
32. **Performance Bank Guarantee:**
Performance Security amount shall be @5% of the value of contract value shall be as per Cl. No. 7 of GTC of GeM. Further, if relaxation from end customer is received, same benefit shall be passed on to bidders as well.

Initial e-PBG validity: Initial ePBG validity shall be 26 months from PO date for Main supply & Mandatory Spares. However, BG will be released only after completion of all contractual liability or guarantee period, whichever is later.
33. **"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

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PACKAGE: BALL VALVES

PROJECT: 3x800 MW PVUNL PATRATU TPP PHASE-I

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% 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 percentage of **100%** of total value.

34. Additional Clauses of NIT:

Dispatch Markings: -

Each box shall be marked with Capital Letters in "Red" indicating the PEM supply (Main Supply OR Commissioning spare/ Mandatory Spare) for 3X660 MW PVUNL Patrattu STPP. Each package delivered under the Contract shall be marked by Supplier and such marking must be distinct and in English Language (all previous irrelevant markings being carefully obliterated). Such marking shall show the description and quantity of contents, the name and address of consignee, the Gross weight and Net weight of the package, the name of the Supplier, PEM P.O. reference number, with a distinctive number of mark sufficient for purposes of identification. Besides above necessary, packing shall bear a special marking 'TOP', 'BOTTOM', 'DO NOT TURN OVER', "KEEP DRY", "HANDLE WITH CARE", etc.

IMPORTANT

- Two copies of respective standard manufacturer's erection instruction/operation instruction manual shall be kept in each package / container for immediate reference by BHEL site and same shall be reflected in packing slip also
- The Packing list details for the consignment must be put inside the Box/Boxes.

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 Box.

Mandatory Spares: - The Mandatory spares shall be properly packed separately in separate box 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 CUSTOMER 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 PVUNL. 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.

35. All other terms & conditions shall be as per GeM bid, selected Additional Terms & Conditions from GeM library and GTC on GeM version available on GeM Portal as on enquiry floating date.

BUYER SPECIFIC ATC

GeM BID NUMBER: GEM/2022/B/2196791 dt. 21/05/2022

PACKAGE: BALL VALVES

PROJECT: 3x800 MW PVUNL PATRATU TPP PHASE-I

Letter head of Company

Ref.....

Date.....

Reference: Tender Enquiry Ref- **GeM Bid no. GEM/2022/B/2196791 dt. 21/05/2022**

Name of Package: **Ball Valves**

NO COMMERCIAL DEVIATION

Yours very truly

.....(authorized signatory of company)

.....(firm name)

Company's Seal/stamp

BUYER SPECIFIC ATC

GeM BID NUMBER: GEM/2022/B/2196791 dt. 21/05/2022

PACKAGE: BALL VALVES

PROJECT: 3x800 MW PVUNL PATRATU TPP PHASE-I

Letter head of Company

Ref.....

Date.....

Reference: Tender Enquiry Ref- **GeM Bid no. GEM/2022/B/2196791 dt. 21/05/2022**

Name of Package: **Ball Valves**

NO TECHNICAL DEVIATION


Yours very truly

.....(authorized signatory of company)

.....(firm name)

Company's Seal/stamp

UNIT WISE QUANTITY DETAILS

		DATA SHEET - A BALL VALVES - BOM PATRATU 3X800 MW										SPECIFICATION NO.: PE-TS-020-100-M004													
		SECTION: II										REV. NO.: 0 DATE: 05.05.2022													
SHEET 1 OF 3																									
1	SL NO.	TAG NO.	2	3	4	5		6	7	8	9	10	11	12		13 14 15 16				17			18	19	
						DESIGN								BODY MATERIAL	TRIM MATERIAL	END CONN	SPECIAL FEATURES	MATCHING PIPE OD x THK		MAIN VALVES QTY WITHOUT COMMISSIONING SPARES NOS.					COMMISSIONING SPARES (SETS)
TYPE OF VALVE	SIZE mm (NB)	OPERATION	PRESSURE KG/CM2(G)	TEMP (DEG °C)	SERVICE	RATING, DESIGN & TESTING CODE						MM	MM					QTY. FOR STATION	QTY FOR UNIT-1	QTY FOR UNIT-2	QTY FOR UNIT-3	BODY SEAL	STEM WASHER	STEM SEAL	
1		(IA-151 TO IA-180 IA-187 TO IA-224) X 3 Contingency Spares: 51	BALL	15	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	21.8	3.20	0	119	68	68	26	26	26	13		
2		IA-111 TO IA-114,IA-117 IA-118 TO IA-128 (IA-81 TO IA-97) X 3 SA-111 TO SA-133 SA-51 TO SA-83) X3 Contingency Spares: 47	BALL	25	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	34.2	4.00	86	50	50	50	24	24	24	12		
3		IA-61 Contingency Spares: 1	BALL	40	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	48.8	4.00	2	0	0	0	2	2	2	2		
4		IA-55 , IA-116 (IA-51 TO IA-54) X 3 (SA-91 TO SA-98) X 3 Contingency Spares: 8	BALL	50	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	60.8	4.50	10	12	12	12	5	5	5	3		
5		IA-115 SA-115 Contingency Spares: 0	BALL	65	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST CARBON STEEL AS PER ASTM A216 Gr. WCB	SS 316	FLANGED AS PER ASME B 16.5 R/F	WITH TEFLON SEAT & HOT DIP GALVANIZED	76.6	4.50	2	0	0	0	2	2	2	2		
6		IA-31 TO IA-37 SA-01 TO SA-06 Contingency Spares: 4	BALL	150	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST CARBON STEEL AS PER ASTM A216 Gr. WCB	SS 316	FLANGED AS PER ASME B 16.5 R/F	WITH TEFLON SEAT & HOT DIP GALVANIZED	89.5	4.80	17	0	0	0	2	2	2	2		
7		IA-01 TO IA-24 SA-21 TO SA-44 Contingency Spares: 0	BALL	200	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST CARBON STEEL AS PER ASTM A216 Gr. WCB	SS 316	FLANGED AS PER ASME B 16.5 R/F	WITH TEFLON SEAT & HOT DIP GALVANIZED	115.0	5.40	48	0	0	0	5	5	5	3		
														TOTAL	165	181	130	130	66	66	66	37			

NOTES:-

1. IA - INSTRUMENT AIR, MAN - MANUAL, SA - SERVICE AIR
2. COMMISSIONING SPARES FOR BALL VALVES:- ONE SET CONSISTS OF BODY SEAL, STEM WASHER & STEM SEAL.

“Delivery of ‘Quantity for station’ and commissioning spares is planned/proposed with Unit-1 Quantity (Main supply) nos. and rest delivery (i.e. Unit-2, 3 & Mandatory spares) will be separate”


3X800 MW PATRATU STPP

TECHNICAL SPECIFICATION FOR BALL VALVES

**SPECIFICATION NO. PE-TS-020-100-M004
REV. No.: 00**



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

	TECHNICAL SPECIFICATION BALL VALVES 3X800MW PATRATU STPP	SPECIFICATION NO. PE-TS-020-100-M004
		REV. No.: 00
		DATE: 05.05.2022
		SHEET 1 OF 1

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2.	SECTION-II	i) DATA SHEET-A	3
		ii) QUALITY PLAN	4
		iii) COMPLIANCE SHEET	1

	TECHNICAL SPECIFICATION BALL VALVES 3X800MW PATRATU STPP	SPECIFICATION NO. PE-TS-020-100-M004	
		SECTION: I	
		REV. NO.: 00	DATE: 05.05.2022
		SHEET 1 OF 1	

SECTION-I

SPECIFIC TECHNICAL REQUIREMENTS

#

	SPECIFIC TECHNICAL REQUIREMENTS FOR BALL VALVES 3X800MW PATRATU STPP	SPECIFICATION NO: PE-TS-020-100-M004
		SECTION : I
		REV. No.: 00
		DATE: 05.05.2022
		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.

	SPECIFIC TECHNICAL REQUIREMENTS FOR BALL VALVES 3X800MW PATRATU STPP	SPECIFICATION NO: PE-TS-020-100-M004
		SECTION : I
		REV. No.: 00
		DATE: 05.05.2022
		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 3X800MW PATRATU STPP	SPECIFICATION NO: PE-TS-020-100-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 3X800MW PATRATU STPP	SPECIFICATION NO: PE-TS-020-100-M004
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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 3X800MW PATRATU STPP	SPECIFICATION No.: PE-TS-020-100-M004	
		SECTION: II	
		REV. No.: 00	DATE: 05.05.2022
		SHEET 1 OF 1	

SECTION-II

- DATA SHEET – A
- QUALITY PLAN
- COMPLIANCE SHEET



**DATA SHEET- A
BALL VALVES - BOM
PATRATU 3X800 MW**

SPECIFICATION NO.: PE-TS-020-100-M004

SECTION: II

REV. NO.: 0 DATE: 05.05.2022

SHEET 1 OF 3

1	2	3	4	5		6	7	8	9	10	11	12		13	14			15													
				TAG 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	COMMISSIONING SPARES (SETS)			MANDATORY SPARES (COMPLETE VALVE WITHOUT COMM. SPARES)	REMARKS
															PRESSURE KG/CM2(G)	TEMP (DEG °C)								MM	MM		NOS.	BODY SEAL	STEM WASHER		
1	(IA-151 TO IA-180 IA-187 TO IA-224) X 3 Contingency Spares: 51	BALL	15	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	21.8	3.20	255	26	26	26	13												
2	IA-111 TO IA-114,IA-117 IA-118 TO IA-128 (IA-81 TO IA-97) X 3 SA-111 TO SA-133 SA-51 TO SA-83) X3 Contingency Spares: 47	BALL	25	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	34.2	4.00	236	24	24	24	12												
3	IA-61 Contingency Spares: 1	BALL	40	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	48.8	4.00	2	2	2	2	2												
4	IA-55, IA-116 (IA-51 TO IA-54) X 3 (SA-91 TO SA-98) X 3 Contingency Spares: 8	BALL	50	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	PN 16 AS PER BS EN ISO 17292/ Manufacturer's Std. for GM BALL VALVES	GUN METAL AS PER IS 318 Gr.LTB2	GUN METAL AS PER IS 318 Gr.LTB2	SCREWED AS PER IS:554 FEMALE PARALLEL	WITH TEFLON SEAT	60.8	4.50	46	5	5	5	3												
5	IA-115 SA-115 Contingency Spares: 0	BALL	65	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST CARBON STEEL AS PER ASTM A216 Gr. WCB	SS 316	FLANGED AS PER ASME B 16.5 R/F	WITH TEFLON SEAT & HOT DIP GALVANIZED	76.6	4.50	2	2	2	2	2												
6	IA-31 TO IA-37 SA-01 TO SA-06 Contingency Spares: 4	BALL	150	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST CARBON STEEL AS PER ASTM A216 Gr. WCB	SS 316	FLANGED AS PER ASME B 16.5 R/F	WITH TEFLON SEAT & HOT DIP GALVANIZED	89.5	4.80	17	2	2	2	2												
7	IA-01 TO IA-24 SA-21 TO SA-44 Contingency Spares: 0	BALL	200	MAN	8.0	50	INSTRUMENT AIR & SERVICE AIR SYSTEMS	CL.150 OF ISO 17292	CAST CARBON STEEL AS PER ASTM A216 Gr. WCB	SS 316	FLANGED AS PER ASME B 16.5 R/F	WITH TEFLON SEAT & HOT DIP GALVANIZED	115.0	5.40	48	5	5	5	3												
												TOTAL	606	66	66	66	37														

NOTES:-
 1. IA - INSTRUMENT AIR, MAN - MANUAL, SA - SERVICE AIR
 2. COMMISSIONING SPARES FOR BALL VALVES:- ONE SET CONSISTS OF BODY SEAL, STEM WASHER & STEM SEAL.



**DATA SHEET-A
BALL VALVES
3X800MW PATRATU STPP**

SPECIFICATION No.: PE-TS-020-100-M004

SECTION: II

REV. No.: 00

DATE: 05.05.2022

SHEET 2 OF 3

Materials of Construction

SL. No.	PART NAME	MATERIAL (CARBON STEEL BODY)	MATERIAL (GUN METAL BODY)
1	BODY AND END PIECES	CAST CARBON STEEL AS PER ASTM A 216 Gr. WCB (ABOVE 50 NB) (HOT DIP GALVANISED)	GUN METAL AS PER IS:318 Gr. LTB2 (UPTO 50 NB)
2	BALL, STEM AND GLAND	STAINLESS STEEL AS PER AISI 316 (BALL MIRROR FINISH)	GUN METAL AS PER IS:318 Gr. LTB2, IS:320 HT2 (STEM)
3	SEAT RING	VIRGIN UNFILLED OIL FREE PTFE (Non-Asbestos Type)	VIRGIN UNFILLED OIL FREE PTFE (Non-Asbestos Type)
4	BODY SEAL, STEM SEAL AND GLAND PACKING	VIRGIN UNFILLED OIL FREE PTFE (Non-Asbestos Type)	VIRGIN UNFILLED OIL FREE PTFE (Non-Asbestos Type)
5	BODY STUD	AISI 316	AISI 316
6	BODY NUT	AISI 316	AISI 316
7	GLAND NUT	AISI 316	AISI 316
8	LEVER	CARBON STEEL (HOT DIP GALVANISED) WITH PLASTIC SLEEVE GRIP	CARBON STEEL (HOT DIP GALVANISED) WITH PLASTIC SLEEVE GRIP
9	LEVER ADOPTER	CARBON STEEL (HOT DIP GALVANISED)	CARBON STEEL (HOT DIP GALVANISED)
10	STOPPER PIN	AISI 316	AISI 316
11	STEM WASHERS	SPRING STEEL	SPRING STEEL
12	NAME PLATE (FOR VALVE TAG No.)	SS 316 (2 MM THICK)	SS 316 (2 MM THICK)
13	GEAR BOX	IF APPLICABLE	NOT APPLICABLE
13.1	MAIN HOUSING/ COVER (TOTALLY ENCLOSED CONSTRUCTION)	CAST IRON IS:210 GR. FG 220/260	
13.2	INPUT SHAFT	13% CR SS/ EN8 (~200 BN)	
13.3	WORM	EN8 (~200 BN)	
13.4	WORM WHEEL	DUCTILE IRON/S.G. IRON	
13.5	HAND WHEEL	MALLEABLE IRON	



**DATA SHEET-A
BALL VALVES
3X800MW PATRATU STPP**

SPECIFICATION No.: PE-TS-020-100-M004


SECTION: II

REV. No.: 00





DATE: 05.05.2022

SHEET 3 OF 3

14	PAINING	NO PAINTING NEEDS TO BE DONE ON VALVES AS ALL PARTS OF THE VALVES ARE GALVANISED. HOWEVER, GEARBOX SHALL BE SUITABLY PAINTED TO PREVENT CORROSION.	NO PAINTING REQUIRED
----	---------	--	----------------------


	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN					SPEC. NO.: PE-TS-020-100-M004		DATE: 05-05-2022			
			CUSTOMER : PVUNL					QP NO.: PE-V0-434-100-M051		DATE: 05-05-2022			
			PROJECT: 3x800MW PATRATU STPP					PO NO.: LATER		DATE:			
			ITEM: GM BALL VALVES (SIZE 15 TO 50NB/ PN16) & CCS (SIZE 65 TO 200 NB/ CLASS 150)			SYSTEM: INST. AIR LINE		SECTION: II		SHEET 1 OF 4			
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	*		REMARKS	
					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	CORRELATION 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.
1.3	GEAR BOX												
1.3.1	GEAR, WORM GEAR & SHAFT	1. PHYSICAL, CHEMICAL PROPS.	MA	PHYSICAL, CHEM. TESTING	ONE PER BATCH	REL. STD./ DATA SHEET/ MFG. DRG.	REL. STD./ DATA SHEET/ MFG. DRG.	T.C.	√	P/W	V	V	
		2. HARDNESS	MA	MEASUREMENT	100%	REL. STD./ DATA SHEET/ MFG. DRG.	REL. STD./ DATA SHEET/ MFG. DRG.	T.C.	√	P/W	V	V	
1.3.2	GEAR BOX ASSEMBLY	1. APPEARANCE	MA	VISUAL	100%	DRG./DATA SHEET	DRG./DATA SHEET	INSPN. REPORT	√	P/W	V	V	
		2. PERFORMANCE	MA	OPERATION TEST	100%	DRG./DATA SHEET	DRG./DATA SHEET	SUPPLIER T.C.	√	P/W	V	V	
		3. DIMENSIONS	MA	MEASUREMENT	100%	REL. STD./ DATA SHEET/ MFG. DRG.	REL. STD./ DATA SHEET/ MFG. DRG.	INSPN. REPORT	√	P/W	V	V	
1.3.3	DESIGN VERIFICATION OF GEAR BOX	1. TORQUE CAPABILITY	MA	TESTING (TORQUE AT TWICE OF RATED TORQUE OF GEAR BOX)	ONE/ TYPE/MODEL/ RATED TORQUE	APPROVED PROCEDURE	APPROVED PROCEDURE	T.C.	√	P/W	V	V	REFER NOTE No. 7





BHEL					
ENGINEERING			QUALITY		
Prepared by:	Sign & Date	Name	Checked by:	Sign & Date	Name
ROHIT KUMAR		Rohit Kumar	Ashish Panigrahi		Ashish Panigrahi
Prince Malik		Prince Malik	HARISH KUMAR		Harish Kumar

BIDDER/ SUPPLIER	
Sign & Date	Seal

FOR CUSTOMER REVIEW & APPROVAL			
Doc No:	9585-001-131-QVM-Q-006		
Reviewed by:	Sign & Date	Name	Seal
Approved by:			


	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN					SPEC. NO.: PE-TS-020-100-M004		DATE: 05-05-2022			
			CUSTOMER : PVUNL					QP NO.: PE-V0-434-100-M051		DATE: 05-05-2022			
			PROJECT: 3x800MW PATRATU STPP					PO NO.: LATER		DATE:			
			ITEM: GM BALL VALVES (SIZE 15 TO 50NB/ PN16) & CCS (SIZE 65 TO 200 NB/ CLASS 150)			SYSTEM: INST. AIR LINE		SECTION: II		SHEET 2 OF 4			
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

		2. GEAR BOX P.O.D. (LIFE CYCLE TEST)	MA	CYCLE TESTING	ONE/ TYPE/MODEL/ RATED TORQUE	APPROVED PROCEDURE	APPROVED PROCEDURE	T.C.	√	P/W	V	V	REFER NOTE No. 7	
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		
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%	REF. NOTE NO.-2	APPD. DRG.	APPD. DRG.	INSPN. REPORT	√	P/W	W	W	





BHEL					
ENGINEERING			QUALITY		
	Sign & Date	Name		Sign & Date	Name
Prepared by:	 ROHIT KUMAR	Rohit Kumar	Checked by:	 Ashish Panigrahi	Ashish Panigrahi
Reviewed by:	 Prince Malik	Prince Malik	Reviewed by:	 HARISH KUMAR	Harish Kumar

BIDDER/ SUPPLIER	
Sign & Date	
Seal	

FOR CUSTOMER REVIEW & APPROVAL			
Doc No:	9585-001-131-QVM-Q-006		
	Sign & Date	Name	Seal
Reviewed by:			
Approved by:			

	MANUFACTURER/BIDDER/VENDOR NAME & ADDRESS		QUALITY PLAN					SPEC. NO.: PE-TS-020-100-M004		DATE: 05-05-2022			
			CUSTOMER : PVUNL					QP NO.: PE-V0-434-100-M051		DATE: 05-05-2022			
			PROJECT: 3x800MW PATRATU STPP					PO NO.: LATER		DATE:			
			ITEM: GM BALL VALVES (SIZE 15 TO 50NB/ PN16) & CCS (SIZE 65 TO 200 NB/ CLASS 150)			SYSTEM: INST. AIR LINE		SECTION: II		SHEET 3 OF 4			
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	

		2. OPENING/ CLOSING	MA	OPERATION	100%	REFER NOTE NO.-2	SMOOTH OPERATION OF VALVE	SMOOTH OPERATION OF VALVE	-DO-	√	P/W	W	W	
			MA	TORQUE TESTING	100%		TORQUE CALCULATIONS	TORQUE WITHIN CALCULATED VALUE	-DO-	√	P/W	W	W	For 200NB size valve
		3. APPEARANCE: WORKMANSHIP, ORIENTATION, MARKING, TAG No.	MA	VISUAL	100%		APPD. DRG.	APPD. DRG.	INSPN. REPORT	√	P/W	W	W	
6.2	BODY	1. LEAK TIGHTNESS	CR	HYDRAULIC TEST	100%		APPD. DRG.	BS EN ISO 17292	T.C.	√	P/W	W	W	
6.3	SEAT	1. LEAK TIGHTNESS	CR	-DO-	100%		-DO-	-DO-	-DO-	√	P/W	W	W	
		2. LEAK TIGHTNESS	CR	PNEUMATIC TEST	100%		-DO-	-DO-	-DO-	√	P/W	W	W	
6.4	COMMISSIONING SPARES	WORKMANSHIP & SUITABILITY	MA	VISUAL	100%	100%	-DO-	APPD. DRG.	INSPN. REPORT	√	P/W	W	W	
7.0	PACKING	FIXING OF NAMEPLATE WITH VALVE TAG NOS	MA	VISUAL	100%	100%	APPD. DRG. / PACKING PROCEDURE (IF APPLICABLE).	APPD. DRG. / PACKING PROCEDURE (IF APPLICABLE)	SOFT COPY OF PHOTOGRAPHS	√	P/W	W	-	REFER NOTE-3.

BHEL					
ENGINEERING			QUALITY		
	Sign & Date	Name		Sign & Date	Name
Prepared by:	 ROHIT KUMAR	Rohit Kumar	Checked by:	 Ashish Panigrahi	Ashish Panigrahi
Reviewed by:	 Prince Malik	Prince Malik	Reviewed by:	 HARISH KUMAR	Harish Kumar

BIDDER/ SUPPLIER	
Sign & Date	
Seal	

FOR CUSTOMER REVIEW & APPROVAL			
Doc No:	9585-001-131-QVM-Q-006		
	Sign & Date	Name	Seal
Reviewed by:			
Approved by:			

	COMPLIANCE SHEET	SPECIFICATION NO. PE-TS-020-100-M004
	BALL VALVES	SECTION: II
	3X800MW PATRATU STPP	REV: 0
		DATE: 05.05.2022
		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:

1. All the bidders have to list out Technical deviations (if any) in detail in the above format.
2. Any deviation not mentioned above and shown separately or found hidden in offer, will not be taken cognizance of.
3. The final decision of acceptance/ rejection of the deviations quoted by the bidder shall be at the discretion of the Purchaser.
4. 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



PRE - QUALIFYING REQUIREMENTS

DOCUMENT No.: PE-TS-434-000-M059

REVISION No.: 00 DATE: 09.05.2022

SHEET 1 of 3

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

Project: 3X800MW PATRATU STPP

Package: Ball Valves

CRITERIA FOR EVALUATION (TECHNICAL / FINANCIAL):

1. Technical Pre-Qualifying Requirements:

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.

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.

Category-B: Minimum size of 150NB with CCS/CSS/CAS with min. #150 for use in a power plant or similar application.

Bidder to fulfill the PQR of both the categories individually.

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:

- (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.
- (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.
- (iii) Execution of one (1) purchase order as per sl. no. (i) above from one End-user and one (1) repeat contract from another Purchaser as per sl. no. (ii) above.
- (iv) Three (3) repeat contracts from one (1) Purchaser. Second and third repeat contract shall be after lapse of minimum one (1) & two (2) years respectively from supply completion of first contract.

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

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

PREPARED BY:

ROHIT KUMAR Digitally signed by ROHIT KUMAR
DN: cn=ROHIT KUMAR, o=BHEL, ou=PEM/
+05'30', email=rohitsonibhel.in, c=IN
Date: 2022.05.09 11:53:58 +05'30'

NAME: ROHIT KUMAR
DESIGNATION: Engineer
DEPT.: PS-PEM/ MPL

REVIEWED BY:

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ou=PEM-Noida,
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Date: 2022.05.09 12:22:55 +05'30'

NAME: PRINCE MALIK
DESIGNATION: Sr. Mgr.
DEPT.: PS-PEM/ MPL

APPROVED BY:

Bimal Kumar Agarwal Digitally signed by Bimal
Kumar Agarwal
Date: 2022.05.09 12:32:04
+05'30'

NAME: B K AGARWAL
DESIGNATION: AGM/DH-MPL
DEPT.: PS-PEM/ MPL

	PRE - QUALIFYING REQUIREMENTS	DOCUMENT No.: PE-TS-434-000-M059
		REVISION No.: 00 DATE: 09.05.2022
		SHEET 2 of 3

1.4 In addition to above, bidder should have the following facilities for maximum size of different material as per BHEL requirement as mentioned in Data Sheet-A of Technical Specification:

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

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

1.5 To establish business continuity, bidder is required to submit at least two (2) Purchase order 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.

Category-A: Minimum size of 15NB.

Category-B: Minimum size of 65NB.

2.0 Bidder to also comply with below mentioned general points:

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

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

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

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

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

<p>PREPARED BY:</p> <p>ROHIT KUMAR <small>Digitally signed by ROHIT KUMAR DN: cn=ROHIT KUMAR, o=BHEL, ou=PEM/MPL, email=rohit@bhel.in, c=IN Date: 2022.05.09 11:55:32 +05'30'</small></p> <p>NAME: ROHIT KUMAR DESIGNATION: Engineer DEPT.: PS-PEM/ MPL</p>	<p>REVIEWED BY:</p> <p>Prince Malik <small>Digitally signed by Prince Malik DN: cn=Prince Malik, o=BHEL, ou=PEM Noada, email=princemalik@bhel.in, c=IN Date: 2022.05.09 12:23:14 +05'30'</small></p> <p>NAME: PRINCE MALIK DESIGNATION: Sr. Mgr. DEPT.: PS-PEM/ MPL</p>	<p>APPROVED BY:</p> <p>Bimal Kumar Agarwal <small>Digitally signed by Bimal Kumar Agarwal Date: 2022.05.09 12:32:36 +05'30'</small></p> <p>NAME: B K AGARWAL DESIGNATION: AGM/DH-MPL DEPT.: PS-PEM/ MPL</p>
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	PRE - QUALIFYING REQUIREMENTS	DOCUMENT No.: PE-TS-434-000-M059
		REVISION No.: 00 DATE: 09.05.2022
		SHEET 3 of 3

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

<p>PREPARED BY:</p> <p>ROHIT KUMAR <small>Digitally signed by ROHIT KUMAR DN: cn=ROHIT KUMAR, o=BHEL, ou=PEM/MPL, email=rohitsoni@bhel.in, c=IN Date: 2022.05.09 11:55:51 +05'30'</small></p> <p>NAME: ROHIT KUMAR DESIGNATION: Engineer DEPT.: PS-PEM/ MPL</p>	<p>REVIEWED BY:</p> <p>Prince Malik <small>Digitally signed by Prince Malik DN: cn=Prince Malik, o=BHEL, ou=PEM-NOIDA, email=princemalik@bhel.in, c=IN Date: 2022.05.09 12:23:32 +05'30'</small></p> <p>NAME: PRINCE MALIK DESIGNATION: Sr. Mgr. DEPT.: PS-PEM/ MPL</p>	<p>APPROVED BY:</p> <p>Bimal Kumar Agarwal <small>Digitally signed by Bimal Kumar Agarwal Date: 2022.05.09 12:33:07 +05'30'</small></p> <p>NAME: B K AGARWAL DESIGNATION: AGM/DH-MPL DEPT.: PS-PEM/ MPL</p>
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Guidelines for Remote Inspection of PEM BOIs

1) OBJECTIVE:

To lay down the procedure for carrying out Remote Inspection of Bought-out Items (BOIs) for PEM suppliers wherever applicable.

2) SCOPE:

It will cover suppliers for packages of PEM BOIs for various project requirements.

Invitation is sent to the suppliers for remote inspection on applications like MS Teams, Webex, etc. by BHEL.

3) MINIMUM REQUIREMENTS AT SUPPLIER'S WORKS:

- i. Uninterrupted internet services
- ii. Good internet bandwidth (Min 100 Mbps)
- iii. Good resolution camera (2 nos) – one preferably CCTV (static at one place) and one hand hold (moving)
- iv. Smart phone with minimum 8MPi camera front and back both with optical zoom facility suitable for using web applications like Webex, MicroSoft (MS) Teams, etc.
- v. Computer and Scanner with good resolution
- vi. Digital signatures of supplier's Quality Engineer
- vii. Availability of web applications like Webex, MicroSoft (MS) Teams, as required.
- viii. All Test certificates, internal test reports, calibration reports, etc. for the items offered for inspection.
- ix. Availability of the above to be submitted to BHEL two days in advance before inspection.
- x. Dedicated team from supplier side for facilitating inspection requirements.
- xi. For ensuring proper visibility, the suggested Portable lighting sources (torch/ electric LED bulb of minimum 15 W) with no glare is to be ensured at offered job, location for remote inspection/testing. This is to be verified before start of the inspection.
- xii. The GPS location co-ordinates or any method to locate inspection location shall be captured indicating the location of the Vendor-Premises of remote inspection/testing.

4) MINIMUM REQUIREMENTS AT BHEL and CUSTOMER LOCATION :

- i. Uninterrupted internet services
- ii. Suitable internet bandwidth
- iii. Digital signatures wherever required.
- iv. Availability of web applications like Webex, MS Teams, etc. as required.
- v. Clearance from customer for conducting remote inspection

5) PROCEDURE:

- i. Supplier will raise the inspection call in BHEL - CQIR portal.
- ii. Supplier shall ensure availability of minimum requirements at supplier's works as mentioned above at point 3.

- iii. Before starting the inspection, the supplier shall submit the documents (TCs, internal test reports and calibration certificates as per approved QAP) two days before the date of inspection for review by BHEL and supplier shall coordinate with BHEL and if found satisfactory, inspection shall be considered for remote.
 - iv. Prior to commencement of remote inspection a pre inspection meeting shall be organised by BHEL inspector with supplier to ascertain the readiness for remote inspection.
- 6) During inspection, supplier shall share the location on Google maps for verifying the address of the manufacturer. Location may be captured by BHEL as screenshot.
- i. Inspection shall be on the basis of approved Quality Plans and associated reference documents mentioned.
 - ii. For witnessing inspection, supplier shall bring the mobile video camera near to the surface of the equipment or as per requirement of the inspector for clarity in viewing the test/ equipment which shall be the responsibility of supplier. Supplier shall ensure that proper lighting is available during live video streaming.
 - iii. Before start of the inspection, inspector shall ensure that all instruments shall have valid calibration report. Supplier shall ensure use of digital instruments preferably for inspection to the extent possible.
 - iv. Details of suppliers's dedicated team handling the remote inspection shall also be incorporated in the CQIR.
 - v. All details of inspection/ testing referred documents shall be mentioned in the CQIR. Recording of remote inspection shall be maintained by the BHEL inspector and this recording (unedited) shall be maintained at BHEL system for a minimum period of 3 years or till the warranty period whichever is later.
 - vi. PEM (Engineering) shall accord final technical clearance, in case of any deviation in inspected item noticed during inspection.
 - vii. Inspection shall be conducted by PEM-Q&BE assigned inspector along with PEM-Engg (if required). CQIR shall be prepared and maintained by PEM-Q&BE.
 - viii. PG will issue MDCC on the basis of acceptance of inspected items along with accepted packing photographs as per contract provisions.
- 7) **UNDERTAKING BY VENDOR:** Material inspected through remote inspections is meeting all technical requirements of BHEL. In case of any discrepancy from the above procedure/ material inspected, if found later, vendor will replace the materials without any cost implication to BHEL.
- 8) Vendor shall provide the signed and stamped of the above guidelines to BHEL as a token of acceptance.

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. -----

Company's Seal/stamp

ANNEXURE FOR RISK & COST

1. 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 in 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 instalment 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. delivering 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.

2. BHEL's right to go for Risk and Cost, Calculation of Risk and Cost amount & L D, recovery options to BHEL are given as under: -

2.1 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.

2.1.1 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).

2.1.2 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.

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

LD against delay in executed work shall be calculated in line NIT terms & conditions, 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.

2.2 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.

Letter head of Company (<Rs. 10 Cr value)

Ref.....

Date.....

To,
Bharat Heavy Electricals Limited
PS-PEM, PPEI Building,
Plot No. 25, Sector -16A,
Noida (U.P.) - 201301

Subject: -Certification regarding local content

Reference: Tender Enquiry No.- **GeM Bid no.**

Name of Package: **Ball Valves**

Dear Sir,

We hereby certify that items offered by us of **Ball Valves** for **Patratu project** meets the requirement of minimum local content in line **GeM Bid no.....**and the Public Procurement (Preference to Make in India), Order 2017 dated 15.06.2017, 28.05.2018, 29.05.2019, 04.06.2020 & 16.09.2020.

Local Content -%

We further confirms that details of location at which the local value addition is made will be our registered works at(address of the works)

Yours very truly
.....(authorized signatory of company)
.....(firm name)

Letter head of Company

Ref.....

Date.....

MODEL CERTIFICATE

Reference: Tender Enquiry Ref- **GeM Bid no.** Name of Package: **Ball Valves**

Model Certificate for Tenders

"I have read the clause regarding restrictions on procurement from a bidder of a country which shares a land border with India; I certify that this bidder is not from such a country or, if from such a country, has been registered with the

Competent Authority. I hereby certify that this bidder fulfills all requirements in this regard and is eligible to be considered. [Where applicable, evidence of valid registration by the Competent Authority shall be attached.]"

Yours very truly

.....(authorized signatory of company)

.....(firm name)

Company's Seal/stamp



CORPORATE QUALITY ASSURANCE/ कॉरपोरेट गुणवत्ता आश्वासन
MAIN CONTRACTOR'S PROPOSAL CUM EVALUATION REPORT
मुख्य संविदाकार प्रस्ताव सह मुल्यांकन रिपोर्ट

Ref No: संदर्भ सं.:		Date: तिथि:		
i.	Main Contractor मुख्य संविदाकार			
ii.	Project परियोजना			
iii.	Package Name पैकेज का नाम	Package No पैकेज सं.		
iv.	Proposed Item/Scope of Sub-contracting उप-संविदा(अनुबंध) का प्रस्तावित मद/ दायरा			
v.	Item covered under निम्नलिखित के अंतर्गत शामिल मद	Schedule-1 /अनुसूची- 1	<input type="checkbox"/>	
		Schedule-2 अनुसूची- -2	<input type="checkbox"/>	
vi.	If item is Schedule-1 and proposed sub-vendor is indigenous, Main Contractor to explain how the contractual provisions will be fulfilled /यदि मद अनुसूची -1 है और प्रस्तावित उप-विक्रेता स्वदेशी है, तो मुख्य संविदाकार को स्पष्ट करना होगा कि संविदा/अनुबंध के प्रावधान कैसे पूरे किए जाएंगे			
vii.	Name and Address of the proposed Sub-vendor's works /प्रस्तावित सब-वेंडर का नाम तथा पता			
viii.	PO placement date/ Start of manufacturing (if self-manufactured) as per L2 network पीओ नियोजन की तिथि / एल- 2 नेटवर्क के अनुसार विनिर्माण (यदि स्व-निर्मित है) की शुरुआत			
ix.	Item Description (Type/Size/Rating/Scope of Sub-Contracting) मद का विवरण (प्रकार / आकार / रेटिंग / उप-अनुबंध का दायरा)	Total quantity of proposed item envisaged in this package (Nos/ Running Meters/ Kgs/ Tons etc) इस पैकेज में परिकल्पित प्रस्तावित मद की कुल मात्रा (संख्या / क्रियाशील मीटर / किलोग्राम / टन आदि)	Quantity proposed to be procured from proposed sub-vendor (Nos/ Running Meters /Kgs /Tons etc) प्रस्तावित उप-विक्रेता (संख्या / क्रियाशील मीटर / किलोग्राम / टन आदि) से खरीदी जाने वाली मात्रा	Timeline for quantity requirements as per project schedule & whether the proposed Sub-vendor equipped with adequate capacity to supply proposed order quantity in time / परियोजना समय सूची के अनुसार मात्रा आवश्यकताओं के लिए समय-सीमा और क्या प्रस्तावित उप-विक्रेता समय पर प्रस्तावित मांग की मात्रा की आपूर्ति करने में पूरी तरह से सक्षम है
x.	Supply experience of the proposed sub-vendor (including supplies to Main Contractor, if any) for similar item/scope of sub-contracting, for last 3 years (Note:- Only relevant experience details w.r.t. proposed item/scope of subcontracting to be brought out here) पिछले 3 वर्षों के लिए उप-अनुबंध के समान मद / दायरे के लिए प्रस्तावित सब-वेंडर (मुख्य संविदाकार हेतु आपूर्ति, यदि कोई हो, सहित) का आपूर्ति अनुभव (नोट: - उप-अनुबंध के प्रस्तावित मद / दायरे के संबंध में केवल प्रासंगिक अनुभव के विवरण का उल्लेख हो			



CORPORATE QUALITY ASSURANCE/ कॉरपोरेट गुणवत्ता आश्वासन
MAIN CONTRACTOR'S PROPOSAL CUM EVALUATION REPORT
मुख्य संविदाकार प्रस्ताव सह मुल्यांकन रिपोर्ट

Project/Package परियोजना/पैकेज	Customer Name ग्राहक का नाम	Supplied Item (Type/Rating/Model /Capacity/Size etc) आपूर्ति मद् (प्रकार/रेटिंग /मॉडल /क्षमता/आकार आदि)	PO ref no/date पीओ संदर्भ सं./तिथि	Supplied Quantity आपूर्ति की मात्रा	Date of Supply आपूर्ति की तिथि
<i>We confirm that as per our assessment, the proposed sub-vendor has requisite capabilities & supply experience and is suitable for supplying the proposed item/scope of sub-contracting/हम अपने आकलन के अनुसार इस बात की पुष्टि करते हैं कि, प्रस्तावित उप-विक्रेता के पास अपेक्षित क्षमता और आपूर्ति करने का अनुभव है और उप-अनुबंध के दायरे /प्रस्तावित मद् की आपूर्ति के लिए उपयुक्त है।</i>					
Name: नाम:	Desig: पद:	Contact No: दूरभाष सं.:	Sign: हस्ताक्षर:	Date: तिथि:	

Company's Seal/Stamp:- कंपनी का मुहर:-



CORPORATE QUALITY ASSURANCE/ कॉरपोरेट गुणवत्ता आश्वासन
SUB-VENDOR QUESTIONNAIRE/ सब-वेंडर प्रश्नावली

i.	Item/Scope of Sub-contracting उप-संविदा(अनुबंध) का मद/ दायरा	
ii.	Address of the registered office पंजीकृत कार्यालय का पता	Details of Contact Person संपर्क व्यक्ति का विवरण (Name, Designation, Mobile, Email) (नाम, पदनाम, मोबाइल, ईमेल)
iii.	Name and Address of the proposed Sub-vendor's works where item is being manufactured प्रस्तावित उप-विक्रेता के कार्यों का नाम और पता, जहां मद का निर्माण किया जा रहा है	Details of Contact Person: संपर्क व्यक्ति का विवरण (Name, Designation, Mobile, Email) (नाम, पदनाम, मोबाइल, ईमेल)
iv.	Annual Production Capacity for proposed item/scope of sub-contracting उप-संविदा(अनुबंध) के प्रस्तावित मद / दायरे के लिए वार्षिक उत्पादन क्षमता	
v.	Annual production for last 3 years for proposed item/scope of sub-contracting उप-संविदा(अनुबंध) के प्रस्तावित मद / दायरे के लिए पिछले 3 वर्षों का वार्षिक उत्पादन	
vi.	Details of proposed works प्रस्तावित कार्यों का विवरण	
1.	Year of establishment of present works वर्तमान फैक्टरी की स्थापना का वर्ष	
2.	Year of commencement of manufacturing at above works उपरोक्त फैक्टरी में निर्माण कार्य शुरू होने का वर्ष	
3.	Details of change in Works address in past (if any) पूर्व में फैक्टरी स्थल में परिवर्तन का विवरण (यदि कोई हो)	
4.	Total Area कुल क्षेत्र	
	Covered Area शामिल क्षेत्र	
5.	Factory Registration Certificate फैक्टरी पंजीकरण प्रमाण पत्र	Details attached at Annexure – F2.1 विवरण अनुलग्नक- एफ 2.1 पर संलग्न है
6.	Design/ Research & development set-up डिजाइन / अनुसंधान और विकास सेटअप (No. of manpower, their qualification, machines & tools employed etc.) (श्रमिकों की संख्या, उनकी योग्यता, मशीन और उपलब्ध उपकरण आदि)	Applicable / Not applicable if manufacturing is as per Main Contractor/purchaser design Details attached at Annexure – F2.2 (if applicable) लागू / लागू नहीं, अगर विनिर्माण मुख्य संविदाकार / खरीददार के डिजाइन के अनुसार है) विवरण अनुलग्नक –एफ 2.2 पर संलग्न है। (यदि लागू हो)
7.	Overall organization Chart with Manpower Details (Design/Manufacturing/Quality etc) मैनपावर विवरण के साथ समग्र संगठन का चार्ट(डिजाइन / विनिर्माण / गुणवत्ता आदि)	Details attached at Annexure – F2.3 विवरण अनुलग्नक – F2.3 में संलग्न है।



CORPORATE QUALITY ASSURANCE/ कॉरपोरेट गुणवत्ता आश्वासन
SUB-VENDOR QUESTIONNAIRE/ सब-वेंडर प्रश्नावली

8.	After sales service set up in India, in case of foreign sub-vendor(Location, Contact Person, Contact details etc.) भारत में बिक्री सेवा की स्थापना के बाद, विदेशी उप-विक्रेता के मामले में(स्थल , संपर्क व्यक्ति, संपर्क विवरण आदि)	Applicable / Not applicable लागू / लागू नहीं Details attached at Annexure – F2.4 विवरण अनुलग्नक -2.4 पर संलग्न है।			
9.	Manufacturing process execution plan with flow chart indicating various stages of manufacturing from raw material to finished product including outsourced process, if any फ्लोचार्ट सहित विनिर्माण प्रक्रिया निष्पादन योजना , जिसमें आउटसोर्स प्रक्रिया, यदि कोई हो, सहित कच्चे माल से तैयार उत्पाद तक विनिर्माण के विभिन्न चरणों को दर्शाया गया हो,	Details attached at Annexure – F2.5 विवरण अनुलग्नक - F2.5में संलग्न है।			
10.	Sources of Raw Material/Major Bought Out Item कच्चे माल के स्रोत / खरीदे हुए मुख्य मद	Details attached at Annexure – F2.6 विवरण अनुलग्नक - F2.6में संलग्न है।			
11.	Quality Control exercised during receipt of raw material/BOI, in-process , Final Testing, packing कच्चे माल / खरीदे हुए मद, प्रक्रियाबद्ध, अंतिम परीक्षण, पैकिंग करते समय गुणवत्ता नियंत्रण	Details attached at Annexure – F2.7 विवरण अनुलग्नक - F2.7 पर संलग्न है			
12.	Manufacturing facilities (List of machines, special process facilities, material handling etc.) विनिर्माण सुविधा(मशीनों की सूची, विशेष प्रक्रिया सुविधाएं, सामग्री रख-रखाव आदि)	Details attached at Annexure – F2.8 विवरण अनुलग्नक - F2.8में संलग्न है।			
13.	Testing facilities (List of testing equipment) परीक्षण सुविधाएं(परीक्षण उपकरण की सूची)	Details attached at Annexure – F2.9 विवरण अनुलग्नक – F2. 9 में संलग्न है।			
14.	If manufacturing process involves fabrication then- यदि निर्माण प्रक्रिया में फेब्रिकेशन की गई है तो- List of qualified Welders पात्र वेल्डर की सूची List of qualified NDT personnel with area of specialization विशेषज्ञता के क्षेत्र सहित पात्र एनडीटी कार्मिकों की सूची	Applicable / Not applicable लागू / लागू नहीं Details attached at Annexure – F2.10 विवरण अनुलग्नक - F2.10में संलग्न है। (if applicable) लागू / लागू नहीं			
15.	List of out-sourced manufacturing processes with Sub-Vendors' names & addresses सब-वेंडर द्वारा बाह्य स्रोतों (उनके नाम और पते सहित)से करवाएं गए निर्माण प्रक्रियाओं की सूची	Applicable / Not applicable लागू / लागू नहीं Details attached at Annexure. –F2.11 विवरण अनुलग्नक - F2.10में संलग्न है। (if applicable) (यदि लागू हो)			
16.	Supply reference list including recent supplies नवीनतम आपूर्ति सहित आपूर्ति संदर्भ सूची	Details attached at Annexure – F2.12 विवरण अनुलग्नक - F2.12 में संलग्न है। (as per format given below) (नीचे दिए गए प्रारूप के अनुसार)			
Project/ package परियोजना /पैकेज	Customer Name ग्राहक का नाम	Supplied Item (Type/Rating/Model /Capacity/Size etc) आपूर्ति की गई वस्तु (प्रकार / रेटिंग / मॉडल / क्षमता / आकार आदि)	PO ref no/date पीओ संदर्भ सं. / तिथि	Supplied Quantity आपूर्ति की मात्रा	Date of Supply आपूर्ति की तारीख
17.	Product satisfactory performance feedback letter/certificates/End User Feedback उत्पाद के संतोषजनक प्रदर्शन संबंधी फीडबैक पत्र / प्रमाण पत्र / अंतिम उपयोगकर्ता फीडबैक	Attached at annexure - F2.13 अनुलग्नक F2. 3पर संलग्न है			

