BOQ: ENQUIRY - B5B1Y31493 - PARTING PLANE LOWER UPPER PART

SL NO		item no	Material Code, HSN No.	Drg no - Ver , Rev & Spec - Ver , Rev,Spec-Var	Description	Unit	Qty
1	8000131498	10	TC9217846007 84819090	D33010110009-00,,HY19578,01,NA	PARTING PLANE LOWER PART(CASTING)	EA	4.000
2	8000131493	10	84819090				
3	8000131499	10	TC9217846023 84819090	D33010110010-00,,HY19578,01,NA	PARTING PLANE UPPER PART(CASTING)	EA	4.000
4	8000131494	10	84819090				

Special Note:

Vendor has to submit the duly filled and signed NIT documents as mentioned below, otherwise offer shall not be considered.

- 1) Signed & Stamped copy of BOQ/Un-Priced Bid on Company Letter Head.
- 2) Annexure I signed & Stamped.
- 3) Annexure III (Indicating Class of Supplier under MII Policy on company Letter Head).
- 4) Annexure IV duly filled and signed & Stamped.
- 5) ITB (DOC no. HY:MM:ITB Rev:14) & SCC duly filled and signed & Stamped.
- 6) Technical Specification document/ Drawings to be signed & Stamped in all pages.
- 7) Documents as per PQC (Technical, Financial) duly filled along with supporting documents.
- 8) SQP (if applicable) to be signed & Stamped in all pages.
- 9) Valid MSME document (if bidder is MSME) NSIC or Udhyam certificate, If applicable.
- 10) Delivery location: TC Store 01, BHEL HPEP RC Puram, Hyderabad.
- 11) Delivery Period: 03 months from PO date.
- 12) Bidders have to submit the detailed Manufacturing activity plan along with delivery period.
- 13) Acceptance of Techno-Commercial offer shall be subjected to approval of BHEL / End customer.
- 14) Terms and conditions mentioned anywhere in your offer will not be considered. ITB and SCC terms & Conditions are final. In case of any deviation, vendor's offer is liable for rejection.
- 15) For the present Enquiry, with reference to the material specification, HY19578, clause no: 14.2, 14.2.1 and 14.2.2 are not applicable.
- 16) Tender evaluation will be on LUMPSUM basis.
- 17) MSE Preference: MSE vendor/s in L1+15% range will be awarded 100% Qty.
- 18) MII Preference: Class 1 vendor/s in L1+20% range will be awarded 100% Qty.



Special Conditions of Contract (SCC)

TC Purchase Department HPEP - RC Puram, Hyderabad - 502032

ITB Clause Ref No.	Clause	BHEL requirements	Bidder response		
3	Mode of Submission	Conventional	Non Deviatable		
5	Type of Bid	Two Part	Non Deviatable		
	Indigenous purchase - Destination	BHEL 01 Stores, Hyd	Non Deviatable		
6	Imports purchase - Destination	NA	NA		
	Freight	Supplier Scope			
	Insurance	Supplier Scope			
9	Price validity	90 Days from Part-1 bid opening date			
8	Delivery Period	03 Months from date of PO			
18	Evaluation basis	Refer BOQ	Non Deviatable		
9	Price Variation Clauser (PVC)	Not applicable	Non Deviatable		
	Payment Terms	As per ITB Clause 12			
	Tender cost	Not applicable	Non Deviatable		
12	Earnest Money Deposit (EMD)	Not applicable	Non Deviatable		
	E & C Supervision Charges	Not Applicable	Non Deviatable		
	Bank Guarantee against milestone payment	Not applicable	Non Deviatable		
Others	Contract execution Bank Guarantee	Not applicable	Non Deviatable		
17	Performance Bank Guarantee	Not applicable	Non Deviatable		
13	Max Penalty applicable on	Delayed Portion (Non-Deviatable)	Non Deviatable		
16	Guarantee / Warranty Period	As per Standard ITB GC/WC			
48	Detailed Billing Breakup (BBU)	Applicable	Non Deviatable		
	Customer approval of vendor	Applicable	Non Deviatable		
Others	Drawing approval	Applicable	Non Deviatable		
	QAP approval	Applicable	Non Deviatable		
36	Inspection by (All Indian supplier offers will be loaded by 0.174% for BHEL TPIA charges. This TPIA charges will be in BHEL Scope only)	BHEL/BHEL TPI	Non Deviatable		
Others	Reverse Auction	Not Applicable	Non Deviatable		
Others	Price Bid: 1. Penalty: In the event of delay in supply of goods, penalty of 0.5% per week or part there of shall be levied on the undelivered portion subject to a maximum of 10% of the undelivered Portion. 2. Vendors has to quote FOR Destination. 3. Integrity Pact to be submitted by Vendor (if applicable).				
Others	Other than terms agreed in SCC, ITB & It's Annexures are final. Other terms mentioned anywhere in your offer, will not be applicable.				

Note: In case, Supplier is not filling the above sheet, it is understood that Supplier is accepting the BHEL Requirements mentioned as above.



(Attachment to Enquiry No. XXXXXXXXXX Due on Date XX.XX.XXXX for submission by 11.00 hrs to open from 14.00 hrs.)

INSTRUCTIONS TO BIDDER (ITB)

NOTE: Bidder to confirm in affirmative by typing "YES" or "Applicable Data" in the response column. Deviations, if any shall be recorded in deviations/comments column (Separate sheet can be attached if needed). Non deviatable clauses are indicated as "NON DEVIATABLE".

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SI.		BIDDER	DEVIATIONS		
No.	DETAILED TERMS & CONDITIONS	RESPONSE	/ COMMENT		
		(YES/NO)			
1	SCOPE OF SUPPLY:				

Signed & Sealed offers are invited for the Scope of Supply of goods or services or both as detailed in the enquiry. Relevant enclosures/supporting documents / catalogue, if any shall be enclosed to the technical offer.

DEFINITIONS

- 'The Buyer' means BHEL-HPEP, Ramachandrapuram, Hyderabad-502 032 of Bharat Heavy Electricals Limited (A Govt. of India Undertaking) incorporated under the companies Act having its registered office at BHEL House, Siri fort, New Delhi-110049, India and shall be deemed to include its successors and assigns. It may also be referred to as BHEL.
- 'The Bidder' means the persons, firm, company or organization on whom the Purchase order is placed and shall be deemed to include the bidder's successors, representatives, heirs, executors and administrator as the case may be. It may also be referred to as Contractor, supplier or bidder.
- 'Contract' shall mean and include the Purchase order incorporating various documents viz., Notice Inviting Tender (NIT), Offer, Letter Of Intent/Acceptance (LOI/LOA), Instruction to Bidders (ITB) and Special Conditions of Contract (SCC), specifications, inspection/quality plan, schedule of prices and quantities, drawings, if any, enclosed by Bidder/ provided by the Buyer or his authorized nominee and the samples or patterns if any to be provided under the provision of the contract.

 In case of any inconsistency or contradiction between any of the documents, the order of precedence shall be Purchase Order, LOI/LOA followed by Minutes Of Meeting (MOM), NIT, SCC, ITB.
- D 'Parties to the contract' shall mean the bidder and the buyer as named in the main body of the Purchase Order.

	'Goods/Material' shall include Works and Services which are incidental or consequential to supply.	
	GENERAL INSTRUCTIONS:	
١.	Mode of submission of offer shall be as indicated in SCC	Non Deviatable
3	The quotation should be neatly typed and free from over writing/ erasures. Any correction or addition must be authenticated. The offer including annexures and brochures should be submitted in English / Hindi. All Pages of Techno Commercial Bids (Main Pages), ITB, SCC should be signed and Stamped. If there is a conflict in case of bilingual submission, the submission in English will be final. Prices shall be quoted both in figures and words. In case of any discrepancy in value, the prices quoted in words shall be considered for evaluation and establishing L1 Status. Any discount / revised offer / bids submitted by a bidder on his own shall be considered, provided it is received on or before the due date and time of offer / bid submission (Part-1). Conditional discounts shall not be considered for evaluation of tenders.	Non Deviatable
;	Incomplete offers are liable for rejection.	Non Deviatable
)	Bidders to please note that the Terms & conditions contained in this document and SCC are to be read fully before submission of quotations.	Non Deviatable
	Bidders are advised to comply with ITB and SCC, should there be any deviations (where deviations are permitted), it shall be entered in the deviation column. BHEL reserves the right to reject such offers or load the bid suitably for evaluation.	Non Deviatable
	Offers shall be submitted directly, only by the bidder or by their authorized representative / agent and the offer should be in line with the regulatory guidelines (i.e. A valid Agency agreement between principal bidder and agent / representative shall be attached and the agreement shall cover the scope of services rendered by Agent, Agency Commission and any other information called for as per the regulatory guidelines). OEM / Mill details shall be provided if bidder is not a manufacturer. Bid envelops shall bear the name of Bidder. In case of submission through authorized representative/agent, the name of representative/agent should also be mentioned apart from bidder name.	Non Deviatable
İ	Offer received after the specified time and date of submission will be rejected. No further correspondence shall be entertained.	Non Deviatable
	Unsolicited offers will not be considered.	Non Deviatable
	OTHER PARTICULARS (Please indicate applicable data)	
	Name of the Bid currency (freely tradable foreign currency for imports and Indian Rupees for indigenous purchase).	
3	Name of the Port of loading and Port of Discharge (applicable to imports).	



5 A	BID SUBMISSION PROCEDURE FOR CONVENTIONAL TENDER: For Single Part Bids:	
	The complete bid shall be submitted in a single sealed cover superscribing the Tender number and due date, addressed to Sr DGM/CMM, Vendor Complex, BHEL, Hyderabad and sent by appropriate mode to above address or dropped in tender box located at vendor complex on or before the specified time and date of submission of offers, preferably in the bidder's envelope. E- mail bids shall be sent to mail ID pricebid_hyd@bhel.in only as an attachment.	Non Deviatable
В.	For two-Part Bids:	
İ	The offer is to be submitted in two parts viz., Techno-commercial Bid - (Part-I), with all technical specification & scope including bill of material etc., Earnest Money Deposit (EMD)(wherever applicable) and unpriced bid with all applicable Commercial Terms and Conditions, rates of agency commission, duties, taxes and other charges, Signed and Stamped ITB and SCC, except the price, shall be kept in a separate sealed cover, superscribing enquiry No. (Techno-Commercial Bid) and due date AND Price Bid (Part-II), containing ONLY the price (including agency commission, if any) and the applicable duties/taxes/other charges shall be kept in a separate sealed cover superscribing Enquiry no. (Price bid) & due date.	Non Deviatable
	Both the above covers (Part –I & II) shall be kept in a Third cover superscribing Enquiry no. & due date.	
	Bidder can also submit offer through email. Technical offer to be submitted to mail ID technicalbid_hyd@bhel.in, and price bid to be submitted to mail ID pricebid_hyd@bhel.in only as an attachment. Interchanging the information in the mails may lead to rejection of the offer. Bidder shall have no claim on e-mail offers sent to any other e-mail ID.	
	In case of e-mail offers, the mail subject should contain Enquiry Number, Due date and Bidder name. Bidder address including contact details shall be mentioned in the content of the mail. Without these details, the offer is liable for rejection.	
	All techno commercial terms & conditions mutually agreed prior to price bid opening shall prevail and supersede any terms and conditions specified otherwise in price bid.	
ii	The bidders whose bids are techno commercially not accepted will be informed and EMD shall be returned wherever submitted.	
iii	Bidders will be allowed to submit the impact on their quoted prices due to changes in technical scope, specifications, and commercial terms/conditions as specified in NIT which in the opinion of BHEL, warrant changes in prices.	Non Deviatable
С	Bids shall be opened on due time and date in the presence of bidders who may like to be present. Only one representative of each bidder shall be permitted to attend the bid opening. Only the price bids of bidder (in case of two part bid) whose techno commercial bids are accepted will be opened later on a specified date.	Non Deviatable
6	DELIVERY TERMS	
Α	Indigenous Purchase	
	 a. Terms of Delivery for dispatches to BHEL Hyderabad (HPEP) shall be FOR Destination. b. Terms of Delivery for Direct Dispatch (DD) items shall be Ex Works. i. Incase specified in SCC that insurance is in customer/BHEL scope, price quoted shall include Freight charges up to Destination. ii. Otherwise, price quoted shall include Freight and Insurance upto Destination. However, 	
	beneficiary for insurance shall be BHEL.	
B.	Imports	
-	The goods shall be delivered on FCA capital airport basis in case of freight by Air and CIP basis in case of freight by Sea.	
<u>/</u>	Documentation for Payment	
Α	Indigenous Purchase	Nan
	Following documents shall be submitted immediately on dispatch of material to BHEL HPEP / Site a. Two numbers of Original Tax Invoice (Refer ITB clause no 11 for Tax Compliance)/ e-invoice or GST Portal if applicable) b. Packing List - clearly showing number of packages, gross weight and net weight. c. Test/Warranty/Guarantee certificates, O&M Manual (If specified in SCC) d. Insurance intimation/declaration certificate e. Pre-dispatch Inspection report /Third Party Inspection Certificates. f. Consignee copy of LR signed & stamped by Customer/Site representative for DD Items g. e-waybill	Non Deviatable
	h. Any other documents as specified in SCC. Softcopies of the above documents shall be uploaded in Pradan portal https://hpep.bhel.com/mm/	



Imports

i) Bidder shall inform BHEL the readiness of material along with packing details 30 days in advance from the date of delivery.

For Hazardous cargo/DG cargo, supplier must provide the following documents prior to handing over shipment to freight forwarder, wherever freight is in BHEL scope:

- 1. Valid MSDS
- 2. DGD certificate with appropriate UN numbers.
- 3. Labelling and marking on DG cargo along with photo of packaging.
- 4. Self-declaration for consignment
- 5. Packaging Certificate as per DG Standards
- 6. TSA Approved Truckers details to be provided to forwarder at the time of shipment In addition to the above, supplier should ensure to comply all IATA DG regulations, if any new requirement is added in future.
- ii). Bidder shall also upload the soft copy of the dispatch documents consisting of BL / AWB, Invoice, delivery note, packing list, country of origin & Test certificates and other documents as specifically indicated in the SCC in PRADAN Portal (https://hpep.bhel.com/mm) within Five days from the B/L date for sea shipment and One day from AWB date for Air shipment and sent to email ids: mssea@bhel.in, msair@bhel.in, cmmfe@bhel.in.
- iii) AWB/BL must contain the information of BHEL GST no., and PAN no.

iv) Air Shipments:

Bidder shall ensure the following

- a) Port of discharge -- Mumbai/Chennai/Hyderabad (as indicated in SCC).
- b) Consignee shall be BHEL, Hyderabad. Material shall be air freighted through cargo mode only and not through Courier.
- c) Upon handing over the cargo to the forwarder, bidder shall ensure the acknowledgement receipt with wordings" Cargo handed over in sound condition for Air freighting".

Note: Warehouse receipt will not be considered for penalty calculations.

- d) In case of CIF/ shipments, bidder shall also inform BHEL the information about discharge port agent details and cargo arrival information within one day from the date of Shipment.
 - e) Following dimensions of single package may be noted.
 - i). Maximum dimension of the cargo(ODC) -- 125" x 88" x 63"
 - ii). Maximum weight of the cargo -- 3.5 MT.

If any package dimension or weight exceeds the above set limits, it will be treated as Over Dimension Cargo (ODC) or Over Weight Cargo and bidder shall inform BHEL 30 days in advance to the delivery date to enable BHEL to finalize the freight forwarder.

f). If package falls under Hazardous category, bidder shall communicate BHEL 30 days in advance period with document support.

v) Sea Shipments:-

bidder shall ensure the following

- a). Port of discharge -- Nhavaseva/Mumbai/Chennai.
- b). Place of Delivery / Final Destination for CIP shipments Nhavaseva CFS / Chennai CFS.
- c). In case of FOB shipments, bidder shall handover the material to BHEL nominated forwarder and obtain the cargo receipt.
- d). If the material cannot be containerized in 20 or 40 GP containers, an advance information of 30 days prior to the delivery date shall be communicated to BHEL for necessary arrangements and finalisation of freight forwarder.

e). For CIP shipments

- 1. In case of FCL shipments, Detention free period must be 14 days.
- 2. Bidder shall also inform BHEL the information about discharge port agent details and cargo arrival information within 5 days from the date of Shipment.
- 3. No charges for the services rendered till place of destination will be payable by BHEL. Incase liner / forwarder insist for charges, not in the scope of BHEL, the same will be adjusted from bidder account.
- 4. In case of CIF shipments -- Bidder must select a forwarder/liner whose discharge port published tariff for THC and other services is available. Any charges over and above the published tariff will not be borne by BHEL or will be adjusted from the bidder's bill.
- 5. bidder must insure the cargo for 110% of material value including the freight amount. (vi). Recovery charges for non-submission of documents: -

Bidder shall submit all the required documents to BHEL as prescribed in the Purchase order and NIT.

If BHEL incurs any charges such as Penalty, demurrage, container detention, wharfage, storage, Ground rent etc., due to non - compliance / non - submission of documents prescribed in Purchase Order/ NIT/Letter of credit, the same shall be recovered from the bidder as under:

1. EUROPE/USA/Black Sea/ Far East/Middle East/South East sector

A. For FOB Sea Consignments:-

Penalty for late submission / negotiation of documents beyond 14 days shall be as under:



	Period (From	Recoverable Charges	Recoverable container	Charges per day per
SI. no	Date of Bill of Lading)	LCL per week/ Break bulk cargo per day	20FT Container	40FT Container
i	Upto 14th day	Nil	Nil	Nil
ii	15th day onward	USD 10	USD 110	USD 200

B. For CIP Sea Shipments: -

Bidder shall provide rates for detention charges after free period at the time of offer itself in case of engagement of 20FT Container and 40FT category. In case of late presentation of documents to the bank recovery will be effected from the Bidder as per the rates quoted by the Bidder at the time of offer in this regard.

In case of Break bulk cargo and LCL, Demurrage charges shall be recovered at the rate of USD 1 per Ton per day and storage charges at the rate of USD 10 per week respectively shall be charged as late presentation charges.

- (vii) Description of items in invoice, packing list, BL / AWB or LR shall be same as PO item description. Bidders shall ensure that invoice shall contain PAN nos. of both bidder and BHEL along with other tax related numbers. BHEL PAN AAACB4146P and BHEL TAN HYDB00086C Any other additional documents sought by the statutory authorities, the same shall be produced by the bidder on priority basis.
- (viii) Bidder shall provide package details including number of packages, gross weight, net weight etc.
- (ix) The bidder shall provide the following documents at the time of submission of offer:
- a) No Business Connection in India declaration issued by the bidder as per the format specified. (or)
- b) (i) No Permanent Establishment in India declaration issued by the bidder as per the format specified.
 - (ii) Tax Residence Certificate issued by the bidder's tax authorities.
 - (iii) Form 10F, as attached in Annexure V, to be issued by the bidder.
- c) In case the bidder has a Business Connection in India as per Section 9 of Income Tax Act or significant economic presence in India as per rule 11 UD of IT Act or Permanent Establishment in India as per Article 5 of Double Taxation Avoidance Agreement between India and the bidder's country, the bidder shall provide a withholding tax order issued by the Indian Income Tax authority for recovery of applicable tax.

8 Delivery Schedule					
	The tendered goods shall be delivered within the period stipulated in NIT/ SCC as accepted. Inordinate delay/early supply are liable for rejection/Hold on payment.	Non Deviatable			
9	Pricing Terms	<u> </u>			
	Quoted price shall be inclusive of Packing & Forwarding and shall remain firm and valid during the execution of PO. Offers with PVC will be rejected outright except in cases where specifically called for in the SCC.	Non Deviatable			
10	PRICE VALIDITY:				
	Unless otherwise specified, offer shall be valid for a period of 90 days from the date of bid opening (Technical bid /part-I in case of two part bid). However the prices quoted for spare parts of the Main equipment shall be kept valid for a period as specified in SCC.	Non Deviatable			
11	Taxes & Duties (RATE TO BE INDICATED by the bidder against the space provided)				



Indigenous Purchase

- Non Deviatable
- i) Only valid GST registered bidders will be considered for the tender. The GSTIN of the bidder should be clearly mentioned in the offer.
- ii) If bidder is exempted from GST registration under any provision of the GST Law, a declaration with due supporting documents should be furnished for considering the offer.
- iii) Bidder to quote the applicable taxes in the following manner:
- Harmonized System of Nomenclature (HSN) of Goods
- Services Accounting Code(SAC) of Services.
- IGST/CGST/SGST/UTGST: Rate of Tax to be quoted as extra in % against the space provided iv) Bidders to ensure correct applicability of IGST/CGST/SGST/UTGST based on the Inter / Intra state movement of goods/services.
- v) In case Bidder has opted for GST Composition Scheme, the same may be stated explicitly both in their technical and price bids. An undertaking to the effect that any change in the status of the bidder will be intimated.
- vi) Any other taxes & duties not covered anywhere above may be indicated separately.

Taxes deducted at source:

- TDS as per the extant statutes shall be deducted.
- In case bidder does not provide PAN details, higher rate of tax shall be deducted as per the Act.
- Concessional certificates, if any, should be provided well in time for lower deduction of tax.

Terms & Conditions to be complied

- 1. All invoices (incl. Credit Notes, Debit Notes) to contain BHEL HPEP GSTIN ie 36AAACB4146P1ZG. Invoices submitted should be in the format as specified under GST Law. All details as mentioned in Invoice Rules including Dealer GST registration number (GSTIN), invoice number with date of issue, quantity, rate, value, taxes with nomenclature CGST, SGST, UGST, IGST mentioned separately. HSN Code / SAC Code etc.
- 2. Reimbursement of GST amount will be made only upon completion of the following:
- i. Bidder declaring such invoice in their GSTR-1 Return/IFF
- ii. Receipt of Goods or Services and Submission of Tax invoice by BHEL
- iii. The tax invoice is reflected in the GSTR2B of BHEL, HPEP (buyer). Payment of GST will be made only if it is matching with data uploaded by the Bidder in GST portal.
- 3. In case of discrepancy in the data uploaded by the bidder in the GSTN portal vis-a-vis the tax invoice or in case of any shortages or rejection in the supply, then BHEL will not be able to avail the tax credit. The same would be available in PRADAN Portal for the bidder's information. Bidder has to rectify the data discrepancy in the GSTN portal or issue credit note or debit note (details also to be uploaded in GSTN portal) for the shortages or rejections in the supplies or additional claims for processing of such invoices.
- 4. In cases where invoice details have been uploaded by the bidder but failed to remit the GST amount to GST Department within stipulated time, then GST on the invoices in default will be recovered from the bidder along with the applicable interest.
- 5. In case GST credit is delayed/denied to BHEL due to non/delayed receipt of goods and/or tax invoice or expiry of timeline prescribed in GST law for availing such ITC, or any other reasons not attributable to BHEL, such GST amount will be recoverable from bidder along with interest levied/leviable on BHEL.
- 6. GST TDS deducted as per GST Act, is uploaded in GSTN portal along GSTR7. Bidders can directly download the GST TDS Certificate from the GSTN Portal.
- 7. Bidders to note that Rules & Regulations pertaining to E-way bill system are to be strictly adhered to, as and when notified by Govt. authorities.
- 8. Vendors who fall under the E-Invoice regulations, i.e., having an annual turnover of Rs. 10 crores (Rs 5 crore w.e.f 01.08.2023) in the previous year shall issue e-invoice in line with Rule 48(4) of CGST Rules failing which GST amount will not be reimbursed to the vendor even if the other requirements are fulfilled.
- 9. In case the vendor is exempted by the GST department under the Rule 48(4) of CGST Rules from issuing E-invoice, a declaration as prescribed in the Notification 17/2022 Central Tax dated 01-08-2022 shall be provided on the invoice.
- 10. Vendors who do not fall under the E-Invoice regulations, i.e., whose annual turnover is less than Rs. 10 crores (Rs 5 crore w.e.f 01.08.2023) in the previous year have to give an undertaking indemnifying BHEL that the vendor is not falling under the E-invoice requirement category and that in case of any breach of this E-invoicing requirement, the vendor indemnifies BHEL of any consequences that may arise due to such a breach.
- 11. No GST shall be levied on liquidated damages / penalty.

B. Foreign Purchase (Imports)



	The offered price shall be inclusive of all the Taxes and duties as applicable in country of export / country of dispatch for the quoted price. Taxes deducted at source:	Non Deviatable
	a. In case of goods or services subject to Income tax in India, such tax as per the extant statute shall be recovered.	
	b. In case bidder does not provide necessary documents for beneficial taxation (Refer clause 7-B-(ix) a-c of ITB), the TDS deduction shall be at the maximum percentage stipulated as per the provisions of Income Tax Act.	
12	Payment Terms: Unless otherwise specified in SCC, following shall be the terms of Payment.	
A	Indigenous: a. Micro & Small Enterprises (MSEs) - 100% Direct EFT payment within 45 days b. Medium Enterprises - 100% Direct EFT payment within 60 days c. Non MSME Bidders - 100% direct EFT Payment within 90 Days Note	
	A. Above due date is reckoned from the date of Receipt of material or 15 days from the date of submission of complete set of documents as per PO whichever is later. Payment will be made for Material accepted value. B. MSEs (covered under MSME Act) need to register and renew periodically and update the same with	
	BHEL C. The taxes that are reimbursed are limited to applicable taxes as on the Purchase Order delivery date or the amount actually paid whichever is less.	
	D. Adherence to the above time schedule of payment is contingent upon Bidder complying with GST provisions and availment of Input Tax Credit by BHEL before the date of payment. E. In case of packaged items, 10% of supply value will be retained till completion of total supplies. F. Bidders to comply with clause 11 on GST requirements	
	G. MSE benefits are not applicable to Traders/Wholesalers registered as MSEs	
В	Imports: i) 100% payment (less Indian Agency Commission, if any) shall be through Wire Transfer with a credit period of 60 days - Cash Against Documents (CAD) ii) In case Bidder opts for Letter of Credit payment, the LC Usance period shall be 90 days with respective bank charges to respective accounts and loading of 0.50% iii) Indian Agency commission if payable and so specified in the Purchase order shall be paid in Indian Rupees, considering the SBI TT selling exchange rate; as on the date of payment after successful	
	completion of the contract.	
С	Conditions for LC: a. LC validity period will be 90 days and for any extension, applicable charges will be to bidder's account. b. LC will be opened after successful completion of pre dispatch inspection prior to the scheduled / agreed delivery date. LC will be opened within 15 bank working days from the date of request.	Non Deviatab Ie
D	Conditions for both Indigenous & Foreign Bidders:	Non
	 a. In case Bidders insist for lesser Credit period and BHEL accepts, a loading of 0.60% for every 15 days reduction will be applicable. b. In case PBG as required is not furnished, Payment will be released deducting the BG amount, which will be paid after expiry of warranty period against submission of supplementary claim. c. Payment does not imply in any respect whatsoever a waiver of Buyer's right to performance of the Order. Buyer is entitled to set off claimable debts against claimable liabilities with the bidder by means of a setoff Note. 	Deviatab le
E	Wherever EMD is applicable, the EMD will be paid back to unsuccessful bidders within fifteen days after award of the contract. Successful bidder's EMD will be retained till submission of Performance Bank Guarantee (PBG). Tender Fee wherever applicable is not refundable. No interest shall be payable by BHEL on earnest money or security deposit or any money due to the contractor by BHEL.	Non Deviatab le



13	Penalty clause:	
	In the event of delay in supply /part-supply of goods, Penalty as detailed below is leviable a. Penalty of 0.5% per week or part there of shall be levied, limited to a max of 10% (ten percent) of delayed portion value / order value (as specified in SCC). b. Penalty applicable for delay in documentation is as per SCC. c. Date Reckoned for Penalty Indigenous Orders with delivery terms FOR HPEP: C Note date. Indigenous Orders (Others): Date of e-waybill. Imports: For CIP/CIF Orders: IGM date Imports: For FOB Orders: AWB / BL date Imports: For FCA Orders: Date of acknowledgement from Freight Forwarder. For Ex Work Orders (both air and sea): Latest of Air Freight Request (AFR), Invoice, Packing List, Inspection date (if applicable) or any other documentary evidence confirming material readiness. d. In case of Deviation to above Penalty clause, loading applicable to the extent to which not agreed by Bidder. e. Timelines as mentioned in the Annexure 1 will be considered for reckoning delivery.	
14	Excess materials supplied beyond tolerance limit as specified in PO will not be paid and bidder may raise	Non
15	credit note for the excess/unaccepted material as per GST law. Rejected materials , if any, shall be collected by the bidder within 90 days of such communication to the bidder. Beyond this period the bidder forfeits their right to the materials.	Deviatab Non Deviatab
16	Guarantee / Warranty Period: Wherever required, and so provided in the specifications/SCC/Purchase Order, the bidder shall guarantee that the goods supplied shall comply with the specifications laid down, for materials, workmanship and performance. a. Guarantee period shall be 12 months from the date of commissioning or 18 months from the date of supply whichever is earlier. b. In case erection & commissioning is involved, guarantee period shall be 12 months from the date of commissioning.	Non Deviatab Ie
	c. In case of equipment bought as a package which are intended to be incorporated in installations or systems, the guarantee period shall be 12 months from the date of commissioning of such equipment. The guarantee period shall be extended by the period during which the goods are not in compliance. If the delivery is found to be non-complaint, bidder shall replace, repair or re-execute the as requested by BHEL. If the bidder defaults on his obligations, buyer has the right to proceed to replace, repair or re-execute at the bidder's expense. A guarantee period as described above shall apply afresh to replaced, repaired or re-executed parts of a delivery.	
	Loading for deviation: In case warranty specified in SCC is over and above the period mentioned in b & c above; loading will be 1% per annum for the deviation in warranty end period, on the contract value. Expected commissioning period is as indicated in SCC.	
17	PERFORMANCE BANK GUARANTEE (PBG) (Applicable in case mentioned in SCC) In case enquiry specifically spells out PBG requirement, PBG is to be submitted by Bidder in requisite format as per Annexure VII. Further detailing on PBG as specified in SCC. The PBG shall be for the performance of the goods and shall remain binding not withstanding such variations, alterations or extensions of item as may be made, give, conceded or agreed to between the Bidder and BHEL under these Terms and conditions or otherwise.	Non Deviatab le

NOTE: Deviations (Commercial as well as Technical) from the tender specifications and conditions are generally not acceptable. However, deviation if any, shall be brought out clearly with proper justification in the offer. The deviation, if considered by BHEL, shall be loaded for comparison, while evaluating the offer. If a bidder unconditionally withdraws any deviation before price bid opening, the same shall not be loaded. Loading criteria in respect of major commercial conditions where deviations if any are accepted shall be as per clause No.18.

The Bidders may specifically note the following.

18 Evaluation and Loading Criteria:



- i) Evaluation Currency for this tender shall be "INR".
- ii) Evaluation of prices shall be done item-wise unless otherwise specified in the SCC.
- iii) Evaluation shall be on the basis of delivered cost, i.e. "Total Cost to BHEL" w.r.t the finalized technical scope and commercial conditions (after considering incidence of applicable taxes and duties and loading).
- iv) In the course of evaluation, if more than one Bidder happens to occupy L1 status, effective L1 will be decided by soliciting discounts from the respective L1 Bidders. In case more than one Bidder happens to occupy the L1 status even after soliciting discounts, the L1 Bidder shall be decided by a toss/draw of lots, in the presence of the respective L1 Bidders or their representatives. Ranking will be done accordingly. BHEL decision in such situations shall be final and binding.

INDIGENOUS

- a. Bidder shall ensure to indicate the applicable taxes against each line item, failing which the same will be considered as inclusive/NIL.
- b. Ex-works offers received (as against FOR Destination mentioned in enquiry) shall be loaded by 2% of Ex-works value.
- c. GST and any other charges quoted will be added to the base price. However, in case input credit is available for GST (SGST, CGST/IGST), the same shall be excluded for arriving at "Total Cost to BHEL"

IMPORTS

For evaluation of offers in foreign currency, exchange rate (TT selling rate of State Bank of India) as on the date of bid opening (Part-I, in case of two-part bids) shall be considered. If the relevant day happens to be a bank holiday, then the forex rate as on the previous bank (SBI) working day shall be taken.

In case of foreign Bidders, the quoted CIP price shall be loaded by the following factors to arrive at "Total Cost to BHEL":

- Import duty as applicable on the date of Part-I bid opening.

- Loading will be as per the table below

	Ex Works	FOB/FC A	CIF/CFR	CIP
Foreign Inland freight and insurance	2%			
Marine freight and marine insurance	3%	3%		
Destination Port handling charges	0.50%	0.50%	0.50%	
clearing charges & inland freight and insurance	2%	2%	2%	2%

COMMON LOADING FOR IMPORTS & INDIGENOUS that will be added for arriving the "Total Cost to BHEL"

- A. Loading on Deviated Penalty clause shall be 10% or to the extent to which the bidder has opted for deviation.
- B. Loading for payment terms as per clause 12 of ITB
- C. Loading for deviation in Warranty & PBG as per clause 16,17.
- Procurement directly from the manufacturers/ suppliers shall be preferred. However, no agent shall be allowed to represent more than one manufacturer/ supplier in the same tender. Moreover, either the agent could bid on behalf of the manufacturer/ supplier or the manufacturer / supplier could bid directly but not both. In case bids are received from both from the manufacturer/ supplier and the agent, bid received from the agent shall be ignored.
- 20 RIGHT OF REJECTION /NON- PLACEMENT OF PO: BHEL reserves the right to accept or reject any or all bid/s in full or part without assigning any reason whatsoever.

21 INTEGRITY PACT

Bidders shall have to enter into Integrity Pact with BHEL as per Annexure VI - for Tender value of rupees two crores and above and shall be signed by the authorized signatory along with the offer, failing which Bidder's offer will be rejected.

22 Public Procurement

A Make in India

For this Procurement, the local content to categorize a bidder as a Class I local bidder / Class II local bidder / Non-Local bidder and purchase preference to Class I local bidder, is as defined in Public Procurement (Preference to Make in India) order No P-45021/2/2017-PP(BE-II) dated 04-06-2020 issued by DPIIT as amended from time to time.

Proforma for self-certification for minimum local content and auditor's certification is given in Annexure III.

Any Bidder from a country which shares a land border with India will be eligible to bid in this tender only if the bidder is registered with competent authority. GOI website https://www.mea.gov.in/ to be referred for latest details of competent authority and exemptions. Proforma for self-certification for compliance is given in Annexure IV.

C Startups:

For Start-ups duly registered with DPIIT (Copy of certificate to be provided), condition of prior turnover and prior experience in Public Procurement may be relaxed subject to meeting of Quality and Technical Specifications. Startups are exempt from paying EMD.

23 Benefits earmarked for Purchase from Micro & Small Enterprises (MSEs) – Indigenous Purchase

All Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy are exempt from Paying EMD.

NSIC/UDYAM registered bidders shall submit NSIC/UDYAM Certificate along with bid documents. Date to be reckoned for determining the deemed validity will be the last date of Technical bid submission. Non- submission of such document will lead to consideration of their bid, at par with other bidders and MSE status of such bidders shall be shifted to Non- MSE Category till the bidder submits these documents.



- In tender, MSEs quoting price within price band of L1+15% shall also be allowed to supply a portion of requirement by bringing down their price to L1 price in a situation where L1 price is from someone other than a MSE and such MSE shall be allowed to supply at least 25% of total tendered value. In case of more than one such MSE, the supply shall be shared proportionately. Out of these 25% minimum 3% shall be earmarked for MSEs owned by women and 6.25% for MSEs owned by SC/STs who submit the relevant documents.
- If an enterprise falling under MSME category as defined in the Act, graduates to a higher category from its original category or beyond the purview of the Act, it shall continue to avail all non-tax benefits of its original category notified by the Ministry of Micro, Small and Medium Enterprise for a period of three years from the date of such graduation to the higher category.
- BHEL HPEP is registered with RXIL (TReDS) platform. MSME bidders are requested to get registered with RXIL (TReDS) platform to avail the facility as per the GOI guidelines.
- Inspection Measuring and Test Equipment (IMTE) used by the Bidder/ Contractor or sub-contractor shall be calibrated, maintained and controlled. Calibration shall be valid and IMTE maintained in sound condition during usage.
- 25 ISO-9001, ISO14001 & OHSMS 45001 shall be complied.
- If BHEL registered supplier is not quoting against this NIT, supplier shall send regret letter positively with valid reasons for not participating. Repeated lack of response on the part of supplier may lead to deletion of such registered supplier from BHEL's approved supplier's list as per BHEL SEARP Guidelines.
- BREACH OF CONTRACT, REMEDIES AND TERMINATION: In case of Breach of Contract, BHEL shall recover 10% amount of the contract value from the vendor in any of the following manners: (i) Forfeiture/ encashment of Security instruments (Performance security, EMD etc.) available against the said contract. (ii) Pending / Available bills of the vendor, any amount available with BHEL HPEP or any other units of BHEL. (iii) In case recovery is not possible from security instruments or from financial remedies mentioned above, legal remedies shall be pursued. Important Notes:
 - (1) Further, levy of liquidated damages, debarment, termination, de-scoping, short-closure, etc., shall be applied as per provisions of the contract.
 - (2) Non-performance of contract attracts penal provisions in line with BHEL guidelines for Suspension of Business Dealings (SBD).
- 28 Any other terms and conditions of the bidder attached / referred against the tender enquiry will not be considered.
- All drawings, patterns and tools supplied by BHEL or made at BHEL's expense are BHEL's property. These cannot be used or referred to any other party and must be used only in the execution of BHEL's orders.
- Any amount payable by the bidder under any of the conditions of this contract shall be liable to be adjusted against any amount payable to the bidder under any other work / contract awarded by BHEL HPEP or any other BHEL Units. This is without prejudice to any other action as may be deemed fit by BHEL.
- The bids of the bidders who are on the banned list and also the bids of the bidders, who engage the services of the banned firms, will be rejected. The list of firms banned by BHEL is available on BHEL web site: www.bhel.com

32 Ordering and confirmation of order

The bidder shall send the order acceptance within one week from the date of LOI/Purchase order or such other period as specified/agreed by the Buyer. Buyer reserves the right to revoke the order placed if the order confirmation differs from the original order placed. Buyer shall be legally bound, only if agreed for any deviation explicitly in writing. The acceptance of deliverables or supplies by Buyer as well as payments made in this regard shall not imply acceptance of any deviations. The Purchase order will be deemed to have been accepted if no communication to the contrary is received within one week (or the time limit as specified /agreed by the Buyer) from the date of P.O.

Buyer, is at liberty to send signed P.O. through electronic media such as e-mail and the receipt of which shall be treated as receipt of order.

33 Execution

The whole contract is to be executed in the most workman like manner, substantial and approved as per the contracted terms.

34 Progress Report

The bidder shall render such report as to the progress of work and in such form as may be called for by the Buyer from time to time. The submission and acceptance of such reports shall not prejudice the rights of the buyer in any manner. Bidder shall communicate to BHEL immediately, the change of address, ownership, contact person(s), the mobile numbers and e-mail of the dealing person concerned.

Milestones shall be periodically updated by bidder through PRADAN Portal (https://hpep.bhel.com/mm/). Non updation will adversely affect service rating of bidder performance.

35 Non-disclosure Obligations



Drawings, technical documents or other technical information received by one party shall not without the consent of the other party, be used for any other purpose than that for which they were provided. They may not, without the consent of the submitting party, otherwise be used or copied, reproduced, transmitted or communicated to third parties. All information and data contained in general product documentation, whether in electronic or any other form, are confidential and binding only to the extent that they are by reference expressly included in the contract.

The bidder shall, as per agreed date/s but not later than the date of delivery, provide free of charge any information and/or drawings which are necessary to permit the Buyer to erect, commission, operate and maintain the product. Such information and drawings shall be supplied as specified in technical specification.

All intellectual properties, including designs, drawings and product information etc. exchanged during the formation and execution of the contract shall continue to be the property of the submitting party.

The bidder shall provide Buyer with all information pertaining to the delivery in so far as it could be of importance to Buyer. The bidder shall not reveal confidential information to its own employees not involved with the tender/contract and its execution and delivery or to third parties, unless Buyer has agreed to this in writing beforehand. The bidder shall not be entitled to use the Buyer's name in advertisements and other commercial publications including website without prior written permission from Buyer.

In the event of violation of the confidentiality as agreed, BHEL will take legal action as deemed fit. Non-disclosure agreement to be entered as per **Annexure- II** wherever applicable.

36 Inspection and Testing

- A The goods and stores shall be manufactured by approved quality system and each part/component may be inspected and ested by the Buyer prior to shipment and shall comply with relevant requirements. Buyer has the right to inspect at any stage during manufacture/ delivery.
- Buyer or his authorized representative shall be entitled at all reasonable times during execution to inspect, examine and test at the bidder's premises the material and workmanship of all stores to be supplied under the contract, and if the part of the stores are being manufactured at other premises, the bidder shall obtain for buyer or his authorized representative permission o inspect, examine and test as if the said stores are being manufactured at the bidder's premises. Such inspection, examination and testing, if made shall not release the bidder from any obligation under the contract.

For indigenous bidders all costs related to first inspection request shall be borne by the buyer and the cost of subsequent nspections due to non-readiness of material/rework/ rejections shall be borne by the bidder. In case of imports all inspection charges including third party inspections if any shall be borne by the bidder. The cost of inspection staff/third party specified by he Buyer shall be borne by bidder unless otherwise specifically agreed. If the contract provides for tests on the premises of he bidder or any of his sub-contractor/s, bidder shall be responsible to provide such assistance, labor, materials, electricity, uels, stores, apparatus, instruments as may be required and as may be reasonably demanded to carry out such tests efficiently.

Cost of any type test or such other special tests shall be borne by the bidder unless otherwise specifically agreed in the contract.

The Bidder shall give the authorized representative of the buyer reasonable notice in writing of the date on and the place at which any stores will be ready for inspection/ testing as provided in the Contract. Annexure – I, may strictly be complied with or the time lines. Any delay in submission of the documents by the bidder will not alter the delivery date.

37 | Quality and Condition of the Deliverables

The bidder shall be responsible for compliance with applicable technical, safety, quality, environmental requirements and other regulations in relation to products, packaging and raw and ancillary materials.

38 Packaging and Dispatch

The bidder shall package the deliverables safely and carefully and pack them suitably in all respects considering the peculiarity of the material for normal safe transport by sea/air/rail/road to its destination suitably protected against loss, damage, corrosion in transit and the effect or tropical salt laden atmosphere. The packages shall be provided with fixtures/hooks and sling marks as may be required for easy and safe handling by mechanical means. Special packaging conditions/ environmental conditions as defined in the NIT shall be fully complied.

Each package must be marked with consignee name, address, P.O. number, Package Number, gross weight & net weight, dimensions (Lx B x H) and bidder's name. The packing shall allow for easy removal and checking of goods on receipt and comply with carrier's conditions of packing or established trade practices. Packing list for goods inside each package with P.O. item No. & quantity must also be fixed securely outside the box to indicate the contents. If any consignment needs special handling instruction, the same shall be clearly marked with standard symbols/instructions. Hazardous material should be notified as such and their packing, transportation and other protection must conform to relevant regulations.

39 Contract variations; Increase or decrease in the scope of supply

Buyer may vary the contracted scope during execution due to exigencies of project requirement.

If the bidder is of the opinion that the variation has an effect on the agreed price or delivery period, Buyer shall be informed of this immediately in writing along with technical details, and in the event of additional work, submit a quotation with regards to the price and period involved, as well as the effect this additional work will have on the other work to be performed by the bidder. Wherever unit rates are available in the contract, the same shall be applied to such additional work. The bidder shall not perform additional work before buyer has issued written instructions/amendment to the purchase order to that effect. The work which the bidder should have or could have anticipated in terms of delivering the service (s) and functionality (ies) as described in this agreement should be executed by the bidder without any price implication.

In case of no change in the scope / technical specifications, bidder shall endeavor to keep the material ready and intimate the same to BHEL within the contractual delivery date, failing which, the delay if any will be attributed to supplier, and any upward price variation thereof for delivery at a later date is not admissible.

40 Rejected/Short shipments/ warranty/guarantee replacements

In case of any short shipment during initial supply which is subsequently dispatched by the bidder or any guarantee / warranty replacements shall be dispatched on "DDP-Delivered duty paid BHEL stores" basis for imported items and "FOR-BHEL Stores/designated destination" basis for indigenous items.

41 Export Administration Regulations



If a delivery includes such technology and / or supply that is subjected to the export regulations the bidder shall obtain due permissions, approvals, license etc.

42 Force Majeure

The bidder shall not be considered in default if delay occurs due to causes beyond their control such as Acts of God, Natural calamities, Fire, Frost, Flood, Civil War, civil commotion, riot, Government Restrictions.

Only those causes that have duration of more than seven days shall be considered cause of force majeure. Notification to this effect duly certified by local chamber of commerce/statutory authorities with supporting documents shall be given by the bidder to BHEL by registered letter/courier service immediately without loss of time.

In the event of delay due to such causes the delivery schedule shall be extended for a length of time equal to the period of Force Majeure or at the option of BHEL the order may be cancelled. Such cancellation would be without any liability whatsoever on the part of BHEL.

In the event of such cancellation the bidder shall refund any amount advanced or paid to the bidder by BHEL and deliver back any material issued to him by BHEL and release facilities, if any provided by BHEL.

43 Non-waiver of Defaults

If any individual provision of the contract is invalid, the other provisions shall not be affected.

44 Settlement of Disputes

Except as otherwise specifically provided in the contract, all disputes concerning questions of the facts arising under the contract, shall be decided by the Buyer, subject to written appeal by the bidder to the buyer, whose decision shall be final. Any disputes of differences shall to the extent possible be settled amicably between the parties thereto, failing which the disputed issues shall be settled through arbitration

The bidder shall continue to perform the contract, pending settlement of disputes(s).

45 Conciliation clause

CONCILIATION CLAUSE FOR CONDUCTING CONCILIATION PROCEEDINGS UNDER THE BHEL CONCILIATION SCHEME, 2018: The Parties agree that if at any time (whether before, during or after the arbitral or judicial proceedings), any Disputes (which term shall mean and include any dispute, difference, question or disagreement arising in connection with construction, meaning, operation, effect, interpretation or breach of the agreement, contract or the Memorandum of Understanding, penalty deduction, time extension), which the Parties are unable to settle mutually, arise inter-se the Parties, the same may, be referred by either party to Conciliation to be conducted through Independent Experts Committee to be appointed by competent authority of BHEL from the BHEL Panel of Conciliators.

The proceedings of Conciliation shall broadly be governed by Part-III of the Arbitration and Conciliation Act 1996 or any statutory modification thereof and as provided in Procedure in http://www.bhel.com/index.php/story_details?story=2454. The Procedure together with its Formats will be treated as if the same is part and parcel hereof and shall be as effectual as if set out herein in this ITB

46 ARBITRATION (WITH SOLE ARBITRATOR)

46.1 Except as provided elsewhere in this Contract, in case Parties are unable to reach amicable settlement (whether by Conciliation to be conducted as provided in Clause 14.1 herein above or otherwise) in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the Contract; or, the respective rights and liabilities of the Parties; or, in relation to interpretation of any provision of the Contract; or. in any manner touching upon the Contract (hereinafter referred to as the 'Dispute'), then, either Party may, refer the disputes to IAMC (International Arbitration and Mediation Centre, Hyderabad) and such dispute to be adjudicated by Sole Arbitrator appointed in accordance with the IAMC Rules.

46.2 A party willing to commence arbitration proceeding shall invoke Arbitration Clause by giving notice to the other party in terms of section 21 of the Arbitration & Conciliation Act, 1996 (hereinafter referred to as the 'Notice') before referring the matter to IAMC. The Notice shall be addressed to the Head of the Unit, BHEL, executing the Contract and shall contain the particulars of all claims to be referred to arbitration with sufficient detail and shall also indicate the monetary amount of such claim including interest, if any.

46.3 After expiry of 30 days from the date of receipt of aforesaid notice, the party invoking the Arbitration shall submit that dispute to IAMC and that dispute shall be adjudicated in accordance with their respective Arbitration Rules. The matter shall be adjudicated by a Sole Arbitrator who shall necessarily be a Retd Judge having considerable experience in commercial matters to be appointed/nominated by the respective institution. The cost/expenses pertaining to the said Arbitration shall also be governed in accordance with the Rules of the respective Arbitral Institution. The decision of the party invoking the Arbitration for reference of dispute to a specific Arbitral institution for adjudication of that dispute shall be final and binding on both the parties and shall not be subject to any change thereafter. The institution once selected at the time of invocation of dispute shall remain unchanged.

46.4 The fee and expenses shall be borne by the parties as per the Arbitral Institutional rules.

46.5 The Arbitration proceedings shall be in English language and the seat and venue of Arbitration shall be Hyderabad.

46.6 Subject to the above, the provisions of Arbitration & Conciliation Act 1996 and any amendment thereof shall be applicable. All matters relating to this Contract and arising out of invocation of Arbitration clause are subject to the exclusive jurisdiction of the Court(s) situated at Hyderabad.

46.7 Notwithstanding any reference to the Designated Engineer or Conciliation or Arbitration herein, a. the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree. Settlement of Dispute clause cannot be invoked by the Contractor, if the Contract has been mutually closed or 'No Demand Certificate' has been furnished by the Contractor or any Settlement Agreement has been signed between the Employer and the Contractor.

46.8 It is agreed that Mechanism of resolution of disputes through arbitration shall be available only in the cases where the value of the dispute is less than Rs. 10 Crores.

46.9 In case the disputed amount Claim, Counter claim including interest is Rs. 10 crores and above, the parties shall be within



their rights to take recourse to remedies other than Arbitration, as may be available to them under the applicable laws after prior intimation to the other party. Subject to the aforesaid conditions, provisions of the Arbitration and Conciliation Act, 1996 and any statutory modifications or re-enactment thereof as amended from time to time, shall apply to the arbitration proceedings under this clause.

46.10 In case, multiple arbitrations are invoked (whether sub-judice or arbitral award passed) by any party to under this contract, then the cumulative value of claims (including interest claimed or awarded) in all such arbitrations shall be taken in account while arriving at the total claim in dispute for the subject contract for the purpose of clause 14.2.9. Disputes having cumulative value of less than 10 crores shall be resolved through arbitration and any additional dispute shall be adjudicated by the court of competent jurisdiction.

In the event of any dispute or difference relating to the interpretation and application of the provisions of commercial contract(s) between Central Public Sector Enterprises (CPSEs)/ Port Trusts inter se and also between CPSEs and Government Departments/Organizations (excluding disputes concerning Railways, Income Tax, Customs & Excise Departments), such dispute or difference shall be taken up by either party for resolution through AMRCD (Administrative Mechanism for Resolution of CPSEs Disputes) as mentioned in DPE OM No. 05/0003/2019-FTS-10937 dated 14-12-2022 as amended from time to time

47 Applicable Laws and jurisdiction of Courts

This contract shall be governed by the Law for the time being in force in the Republic of India. Subject to clause 14 of this contract, the Civil Court having original Civil Jurisdiction at Hyderabad, shall alone have exclusive jurisdiction in regard to all matters in respect of the Contract."

48 BHEL-Fraud prevention policy shall be adhered to.

The Bidder along with its associate/ Collaborators/ Sub-contractors/ sub-bidders/ consultants/ service providers shall strictly adhere to BHEL Fraud Prevention policy displayed on BHEL Website http://www.bhel.com and shall immediately bring to the notice of BHEL management about any fraud or suspected fraud as soon as it comes to their notice.

List of nodal officers is hosted on BHEL Hyderabad website https://hpep.bhel.com/.

49 Suspected Cartel Formation

The Bidder declares that they will not enter into any illegal or undisclosed agreement or understanding, whether formal or informal with other Bidder(s). This applies in particular to prices, specifications, certifications, subsidiary contracts, submission or non-submission of bids or any other actions to restrict competitiveness or to introduce cartelization in the bidding process. In case, the Bidder is found having indulged in above activities, suitable action shall be taken by BHEL as per extant policies / guidelines.

50 Conflict of Interest:

"A bidder shall not have conflict of interest with other bidders. Such conflict of interest can lead to anti-competitive practices to the detriment of Procuring Entity's interests. The bidder found to have a conflict of interest shall be disqualified. A bidder may be considered to have a conflict of interest with one or more parties in this bidding process, if:

- a) they have controlling partner (s) in common; or
- b) they receive or have received any direct or indirect subsidy/ financial stake from any of them; or
- c) they have the same legal representative/agent for purposes of this bid; or
- d) they have relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid of another Bidder; or
- e) Bidder participates in more than one bid in this bidding process. Participation by a Bidder in more than one Bid will result in the disqualification of all bids in which the parties are involved. However, this does not limit the inclusion of the components/ sub-assembly/ Assemblies from. one bidding manufacturer in more than one bid; or
- f) In cases of agents quoting in offshore procurements, on behalf of their principal manufacturers, one agent cannot represent two manufacturers or quote on their behalf in a particular tender enquiry. One manufacturer can also authorize only one agent/dealer. There can be only one bid from the following:
- 1. The principal manufacturer directly or through one Indian agent on his behalf; and
- 2. Indian/foreign agent on behalf of only one principal; or
- g) A Bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract that is the subject of the Bid; or
- h) In case of a holding company having more than one independently manufacturing units, or more than one unit having common business ownership/management, only one unit should quote. Similar restrictions would apply to closely related sister companies. Bidders must proactively declare such sister/ common business/ management units in same/ similar line of business. "

Note: Purchase officer has to fill Annexure-I while sending enquiry

Annexure-I

Major Activity timelines shall be considered for indigenous purchases

S No	Activity	Agency	Timeline	Acceptance / Remarks
1	PO acknowledgement	Vendor	04 days from the date of receipt of PO	
2	Engineering inputs from BHEL	BHEL/Customer	07 days from the date of issuance of PO	
3	First submission of Drawings and QP Rev-00	Vendor	15 days from Engineering Inputs.	
4	commented / approved drawings / data sheets and QP to vendor	BHEL/Customer	07 days from the receipt of Rev-00 submission.	
5	Subsequent submission of revised drawings / data sheets and QP	Vendor	07 days from the receipt of commented drawings / data sheets and QP	
6	Subsequent Approved /commented Drawings and QP to vendor	BHEL/Customer	07 days from the date of receipt of revised drawings / data sheets and QAP.	
7	Raising of Inspection Call	Vendor	07 days before the proposing inspection date. (BHEL will provide approved QP before raising inspection call)	
8	Inspection completion	BHEL Third party inspection agency / Customer	07 days from inspection call date.	
9	Despatch Instructions	BHEL	07 days from the date of receipt of final approved inspection report to BHEL.	
10	Receipt of Material at BHEL stores/ site	Vendor	15 days from Despatch instructions	

Absence of this annexure in NIT will entail non processing of delivery extension cases in case of delay in supplies of goods owing to reason attributable to BHEL.

Annexure - III

<u>Proforma for self-certification by Supplier for minimum local content on</u> <u>their letter head for order value less than Rs 10 Crore</u>

"We	(Name of Manufacturer)	undertake that we meet the mandatory
minimum Local Cor	ntent (LC) requirement i.e	(to be filled as notified in the policy) for
claiming Purchase I	Preference linked with Local C	contents under the Govt. policy against tender
no		

Note: As per GOI circular, the bidders offering Imported items falls under the category Non-Local Supplier. They can't claim as Class I Local Supplier/Class II Local Suppliers by claiming the services as transportation, Insurance, Installation, Commissioning & training and after sales service support like AMC/CMC etc as local value addition

<u>Auditor's certification with respect to minimum local content on the letter</u> <u>head of Statutory Auditor for order value above Rs.10 crore</u>

"We	_ the statutory auditor of M/s	(name	of the bidder) hereby certify that
M/s	_ (name of manufacturer) meet	the mandatory L	ocal Content requirements of the
Goods and/or S	ervices i.e (to be filled as	notified in the po	licy) quoted vide offer No
dated a	gainst BHEL's tender No	by M/s	_ (Name ofthe bidder)."

Note: As per GOI circular, the bidders offering Imported items falls under the category Non-Local Supplier. They can't claim as Class I Local Supplier/Class II Local Suppliers by claiming the services as transportation, Insurance, Installation, Commissioning & training and after sales service support like AMC/CMC etc as local value addition

ANNEXURE IV

Proforma for self-certification by Supplier for Compliance to Clause No 20 (B)

I have read the clause regarding restrictions on procurement from a bidder of a country
which shares a land border with India and I certify that M/s(Name of firm)
(Tick the Appropriate)
☐ Is not from such a country
Is from such a country and has been duly registered with the Competent
authority.
I hereby certify M/s (Name of firm) fulfills all
requirements in this regard and is eligible to be considered (where applicable, valid
registration by the competent authority shall be attached)
Sd/- Authorized Signatory with Stamp

(To be executed on Non- Judicial Stamp Paper for an appropriate value. <u>To be stamped as an agreement)</u>

(For Suppliers on Unit's / Division's PMD)

ANNEXURE-II

Framework Confidentiality Agreement Cum Undertaking

	y rigitations can conductation	í
This Agreement made on this the	day of (month)	20
("Effective Date") by and between M/s.		
registered office at "BHEL House", Siri For	•	-
Unit (hereinafter may be referred	d to as "BHEL" or "the company")).
And		
M/s	(address)	
represented by authorized representative	ve Sri	(herein
after referred to as the "Supplier").		
The supplier and the company may, unles collectively referred to as "Parties" or sing	-	hereinafter be
RECITALS		
Whereas, BHEL is engaged in the design, encommissioning and servicing of a wide ran sectors of the economy, viz. Power, Transenergy, Oil & Gas and Defence and proving relation to which BHEL / its affiliates own vinature.	ge of products, systems and servious and servious servious and servious and servious and servious to varies and secret an	ces for the core on, Renewable d customers in and confidential
Whereas the Company may, in connection or to be placed upon the supplier, or of Technical Information as is defined hereur	otherwise, from time to time, n	
And Mharaas DIIII is willing to provide su	sh Tashnisal Information to the C	upplior from

And Whereas BHEL is willing to provide such Technical Information to the Supplier from time to time and the Supplier understands and acknowledges that such Technical Information is valuable for the Company and as such is willing to protect confidentiality of such information, subject to the terms and conditions set out hereunder.

Now therefore, in view of the foregoing premises and in consideration of the mutual covenants and agreements hereinafter set forth, the parties agree as under:

1. Definitions:

Unless the context so requires, in this Agreement, the following terms will bear the meaning ascribed to the said term in this clause.

- A. "Contract" means the contract entered into with a supplier and includes a Purchase Order, or a Work Order for procurement of any goods or for provision of any services.
- B. **"Effective Date"** means the date of this Agreement as mentioned in the preamble of this Agreement.
- C. **"Supplier"** includes a Contractor or a Vendor of the Company whether for supplying of goods or for providing any services under a Contract or both.
- D. "Technical Information" includes Drawings, and / or Product Standards and / or Specifications and / or Corporate / Plant Specifications and / or Technological Process Sheets and / or Technical Data Sheets and / or Jigs & Fixtures and / or Pattern & Dies and / or Special Gauges and / or Tools etc. Belonging to or wherein the Company has acquired from a third party a right of user and includes any improvement thereto from time to time whether carried out by the Company or by the Suppliers.
- E. "Intended Purpose" means the purpose for which the Technical Information is provided to the supplier under or in connection with a contract.
- F. "Improvement" includes any modification made to, or adaptation of, the Technical Information which enhances or is calculated to enhance the performance (Whether in terms of effectiveness or in terms of efficiency or both) of the product and / or the service to be provided by the Supplier under a Contract.
- 2. This Agreement shall come into force / deemed to have come into force, as the case may be, on the Effective Date; or, on the first date when the Technical Information or any part thereof is provided by BHEL to the supplier; whichever is earlier.
- 3. Agreement deemed to be incorporated in each contract: Unless and to the extent otherwise stipulated in the Contract, the conditions of this Agreement are deemed to be incorporated in all Contracts which may be entered into between the Company and the Supplier. Further, unless otherwise stipulated, the obligations under this Agreement are and will be independent of the obligations under the Contracts and such obligations of the Supplier hereunder will remain of full effect and validity notwithstanding that the period of validity of the Contract has expired by efflux of time stipulated therein; or, the contract has been discharged by performance or breach; or, the termination of the Contracts for any reason whatsoever.

4. Ownership:

- 4.1 The Company may, from time to time, make available to the Supplier, Technical Information on a non-exclusive basis by way of loan.
- 4.2 The Supplier acknowledges and agrees that all Technical Information and copies thereof that are or may be provided by the Company to the Supplier, are and shall remain the property of BHEL or that of the concerned entity from whom BHEL has

obtained the Technical Information and such Technical Information are and shall constitute trade secrets of the BHEL. Nothing in this Agreement or in any disclosures made hereunder by or on behalf of the Company shall be construed as granting upon the Supplier any patent, copyright or design or any other intellectual property rights of whatsoever description that subsists or may hereinafter exist in the Technical Information. Furthermore, nothing in this Agreement or in any disclosures made hereunder by or on behalf of the Company shall be construed as granting upon the supplier any license or right of use of such patent, copyright or design or any other intellectual property rights of whatsoever description which may now or hereafter exist in the Technical Information except for use of the Technical Information strictly in accordance with this Agreement and the contract and / or as directed in writing by the Company, solely for the Intended Purpose under the Contract.

- 4.3 Neither party is obligated by or under this Agreement to purchase from or provide to the other party any service or product and that any such purchase / sale of any product and / or service by one party to the other party will be governed by the Contract if any, that may be entered into by and between the Company and the Supplier.
- 4.4 The Supplier is / has been made well aware and acknowledges that the Technical Information being / which may be shared with it by the Company has been either generated by the Company by incurring huge investment and cost or obtained from foreign collaborators under Technical Collaboration Agreement (TCA) with stringent confidentiality conditions.
- 4.5 The supplier agrees and undertakes to adhere to confidentiality requirements as applicable to BHEL under a TCA and also ensure that the confidentiality requirements are adhered to by all its concerned employees or sub-contractors /suppliers (where permitted to be engaged by BHEL). Any damages, losses, expenses of any description whatsoever, arising out of or in connection with a breach of the confidentiality requirements under a TCA owing to any act or omission on the part of the supplier or its employees or sub-contractors / suppliers that is claimed by a foreign collaborator from the Company shall be wholly borne by the Supplier and it shall keep BHEL fully indemnified in this behalf. The demand by the Company shall be conclusive upon the Supplier who shall thereupon forthwith pay to the Company without demur, dispute or delay the amount as demanded without demanding any further proof thereof.
- 4.6 The Supplier agrees and undertakes that unless so decided and advised by the Company in writing all rights / title to any Improvement to the Technical Information shall vest in the Company. The Supplier undertakes and agrees to inform forthwith to the Company of any such Improvement made to the Technical Information and transfer all drawings / documents or other materials connected with such Improvement to the Company and

also agrees to fully cooperate with the Company for protecting the Company's interests in such Improvements in the Technical Information including but not limited to obtaining necessary protection for the intellectual property rights in such improvement, if so desired by the Company. If a question arises whether a modification amounts to improvement to the Technical Information, the same shall be decided by the Company and such decision shall be final and binding upon the supplier.

5. Use and Non – Disclosure:

- 5.1 Unless otherwise stipulated by the Company, all Technical Information made available to the supplier, by the Company shall be treated as Confidential irrespective of whether the same is marked or otherwise denoted to be Confidential or not.
- 5.2 The Supplier undertakes and agrees that the Technical Information in its possession shall be held in strict confidence and will be used strictly in accordance with this Agreement and solely for the Intended Purpose under the Contract. Use of the Technical Information for any other purpose other than Intended Purpose is prohibited.
- 5.3 In particular, the Supplier shall not use Technical Information or any Improvement in its possession for the manufacture or procurement of the product(s) or components or parts thereof or use the Technical Information or any portion thereof or any modification or adaptation thereof in any form to provide any product and / or service to any third party, without the prior written consent of the Company.
- 5.4 The Supplier shall not disclose any of such Technical Information to any third party without the prior written consent of the Company. The Supplier agrees that without prior written consent of the Company, the supplier shall not disclose to a third party about the existence of this Agreement, or of the fact that it is / was in possession of or has experience in the use of any Technical Information nor shall the Supplier share in any manner whatsoever, with a third party, the name or details of any Contract(s) awarded by the Company to it or performed by the Supplier or the scope of work thereof or share any document or correspondence by and between the Company and the supplier in or in connection with this Agreement or such Contract(s). Notwithstanding what is stated elsewhere, the overall responsibility of any breach of the confidentiality provisions under this Agreement shall rest with the Supplier.
- 5.5 This Supplier undertakes and agrees not to make copies or extracts of and not to disclose to other any or all of the Technical Information in its possession, except as follows:

- (a) The Supplier may disclose the Technical Information to such of its officers and employees strictly to the extent as is necessary for such officer or employee for the Intended Purpose, provided that the Confidential Information (or copies thereof) disclosed shall be marked clearly as the confidential and proprietary information of Company and that such officers and employees shall similarly be bound by undertakings of confidence, restricted use and non-disclosure in respect of the Technical Information. The Supplier shall be responsible for any breach of such confidentiality provisions by such officers and employees.
- (b) With the prior written consent of Company, the supplier may disclose for the Intended Purpose such Technical Information as is provided for in such consent to such of its professional advisers: consultants, insurers and subcontractors who shall be similarly bound by undertakings of confidence, restricted use and non-disclosure in respect of such Technical Information.
- (c) The Supplier shall not be prevented to make any disclosure required by (i) order of a court of competent jurisdiction or (ii) any competent regulatory authority or agency where such disclosure is required by law, provided that where the supplier intends to make such disclosure, it shall first consult Company and take all reasonable steps requested by it to minimize the extent of the Technical Information disclosed and to make such disclosure in confidence and also shall cooperate with the Company in seeking any protective order or any other remedy from proper authority in this matter.

6. Exceptions:

The Obligations of the Supplier pursuant to the provisions of this agreement shall not apply to any Confidential Information that:

- a) was / is known to, or in the possession of the Supplier prior to disclosure thereof by the Company;
- b) is or becomes publicly known, otherwise than as a result of a breach of this agreement by the Supplier.
- c) is developed independently of the Disclosing party by the Supplier in circumstances that do not amount to a breach of the provisions of this Agreement or the Contract;
- d) is received from a third party in circumstances that do not result in a breach of the provisions of this Agreement.

7.	The Obligation of maintaining confidentiality of the Technical Information on each
	occasion, shall subsist for the entire duration during which the Technical Information /
	equipment is in possession of the Supplier and shall thereafter subsist for a further
	period of years from the date when the complete Technical Information has
	been returned in portions on different dates, the period of years will be reckoned
	from the date when the last portion of the Technical Information has been returned

Notwithstanding the expiry of the confidentiality obligation, the obligation of the Supplier under clause 5.4 shall continue to subsist for a further period of ______ years.

8. Warranties & Undertakings:

- a) The Supplier undertakes to ensure the due observance of the undertakings of confidence, restricted use and non-disclosure by its persons to whom it discloses or releases copies or extracts of the Technical Information.
- b) The Supplier shall keep the Technical Information or improvement made therein properly segregated and not mix up the same with any other material / documents belongings to him / it or to any other third party.
- c) The Supplier further undertakes that he / it shall not hypothecate or give on lease or otherwise alienate or do away with any of the Technical Information and / or equipment of the Company, made available to him / it, and undertakes that he / it shall hold the same as a trustee, in capacity of custodian thereof and use / utilise the same solely for the purpose of executing the contract awarded by the Company.
- d) The Supplier further undertakes that he / it shall return all the equipment and / or Technical Information as far as practicable in the same condition in which the same was made available to him / it by the Company together with any Improvement thereon and the documents connected with such Improvement, to the Company forthwith upon completion of the scope of work or contract for which such Technical Information was provided by the Company to it or as directed by the Company together with a confirmation by way of an affidavit or in such manner as directed by the Company that it has not retained any equipment and / or Technical Information / improvement thereof. In case any such equipment and / or Technical Information or thereof shall remain in his possession or is not capable of being returned, the retention and use of such Technical Information or improvement thereto shall continue to be governed by this Agreement.
- e) The Supplier undertakes to indemnify the Company for all the direct, indirect and / or consequential losses, damages, expenses whatsoever including any consequential loss of business, profits suffered by the Company owing to breach by the Supplier of its obligations under this Agreement and / or the confidentiality requirements, if any, contained in the Contract and that the Supplier hereby agrees that the decision of the Company in all such or any such matter/s shall be final and binding on the Supplier. On mere written demand of the Company, the Supplier shall forthwith and without demur or delay pay to the Company any such sum as determined by the Company as the amount of loss or damage or expense which has been suffered by the Company. The

Supplier agrees that the Company shall be entitled to withhold and appropriate any amount payable to the Supplier under any Contract then existing between the Company and the Supplier, in case the Supplier fails to make payment, in terms of the written demand, within 7 days thereof. Without prejudice to the forgoing actions, in respect to any breach of this Agreement, the Company shall be entitled to take any other action against the Supplier as per applicable laws, the Contract, Company's applicable policies, guidelines rules, procedures, etc.

9. Without prejudice to any other mode of recovery as may be available to the Company for recovery of the amount determined as due as per Clause 9 (f) hereinabove, the Company shall have a right to withhold, recovery and appropriate the amount due towards such losses, damages, expenses, from any amount due to the Supplier in respect of any other Contract (s) placed on him / it by any department / office / unit/ division of the said Company.

10. Arbitration & Conciliation:

1. Except as provided elsewhere in this contract, in case amicable settlement is not reached between the parties, in respect of any dispute or difference; arising out of the formation, breach, termination, validity or execution of the contract; or, the respective rights and liabilities of the parties; or, in relation to interpretation of any provision of the contract; or, in any manner touching upon the contract, then, either party may, by a notice in writing to the other party refer such dispute or difference to the sole arbitration of an arbitrator appointed by head of the BHEL unit issuing the contract. The Arbitrator shall pass a reasoned award and the award of the Arbitrator shall be final and binding upon the parties.

Subject as aforesaid, the provisions of Arbitration and Conciliation Act 1996 (India) or statutory modifications or re-enactments thereof and the rules made thereunder and for the time being in force shall apply to the arbitration proceedings under this clause, the seat of arbitration shall be at Hyderabad.

The cost of arbitration shall be borne as per the award of the Arbitrator.

Subject to the arbitration in terms of clause 55, the courts at Sangareddy, Telangana State shall have exclusive jurisdiction over any matter arising out of or in connection with this contract.

Notwithstanding the existence or any dispute or differences and / or reference for the arbitration, the contractor shall proceed with and continue without hindrance the performance of its obligations under this contract with due diligence and expedition in a professional manner except where the contract has been terminated by either party in terms of this contract.

In case of contract with Public Sector Enterprise (PSE) or a Government Department, the following shall be applicable:

In the event of any dispute or difference relating to the interpretation and application of the provisions of the contract, such dispute or difference shall be referred by either party for arbitration to the sole arbitrator in the Department of Public Enterprises to be

nominated by the secretary to the Government of India in—charge of the Department of Public Enterprises. The Arbitration and Conciliation Act, 1996 shall not be applicable to arbitration under this clause. The award of the arbitrator shall be binding upon the parties to the dispute, provided, however, any party aggrieved by such award may make further reference for setting aside or revision of the award to the Law Secretary, Department of Legal Affairs, Ministry of Law and justice, Government of India. Upon such reference the dispute shall be decided by the Law secretary or the special Secretary or Additional secretary when so authorized by the Law secretary, whose decision shall bind the parties hereto finally and conclusively. The parties to the dispute will share equally the cost of arbitration as intimated by the arbitrator.

2. INTEREST CLAUSE:

In order to bring uniformity in all the contracts / agreements entered between BHEL and its contractors / vendors / suppliers / service providers etc., it is hereby advised to incorporate the following clause in all tenders and agreements.

"No interest shall be payable by BHEL on earnest money or security deposit or any money due to the contractor by BHEL."

11. Governing Law & Jurisdiction:

This agreement shall be construed and interpreted in accordance with the laws of India and shall have exclusive jurisdiction of Sangareddy/Hyderabad courts, Telangana, India.

SIGNATURE
WITNESSES

1
Name:
Address:
2
Name:
Address:

Item: ALLOY STEEL CASTINGS Pre-Qualification requirements for Grade G -17 Cr Mo 910 Castings as per BHEL specification HY19578

SI No	BHEL Terms	Vendors acceptance
	Only Manufacturer's having past experience of supplying steel castings to OEMs of Steam turbines in last three years	
1	from the date of this enquiry will be considered for this Tender Enquiry.	
2	Vendor must have experience of manufacturing and supplying Castings of material grade G -17 Cr Mo 910 and must have	
2	successfully supplied at least two of castings of similar complexity and criticality within 10% weight range of castings	
	required as per this enquiry. Vendor to submit documentary evidences in support of their past experience such as	
	a. Unpriced purchase order copies that indicates name of Customer, quantity of order, etc.	
	b. The test certificates of the castings supplied that include the results/reports of all tests like Chemical, Mechanical	
	& NDT etc. duly accepted by the customer	
	c. Vendor shall also submit the detailed NDT scan plan followed for the steel castings which is submitted as their past	
	experience for this tender enquiry.	
	d. Copy of internal quality systems and checks followed during the various manufacturing stages like pattern making,	
	molding, steel melting and pouring, fettling, heat treatment, dimensional checking, internal NDT, repair welding,	
	final NDT, destructive testing etc., followed for the manufacture of steel castings for steam turbine applications	
3	Vendor shall inform details of in-house manufacturing facilities as indicated below along with their capabilities for	
	manufacturing castings.	
	a) Steel melting facilities:	
	b) Heat treatment facilities:	
	c) Welding facilities:	
	d) Pattern making facilities:	
	e) Casting facilities:	
	f) Machining facilities:	

	g) Destructives testing facilities:	
	h) Non-Destructive testing facilities:	
	Note: In case of outsourcing of any of the above activities, vendor shall inform their sources with details of their sub supplier facilities along with their tie up letter.	
5	Vendor to furnish Weld repair procedure for approval from BHEL. Also after placement of Purchase order from BHEL, before any weld repair, based on internal NDT, defectogram report shall be submitted as prior approval.	
6	Prior to dispatch of the material, Test Certificates (English language only) shall be send to BHEL for review and dispatch clearance by BHEL. The photographs of the material with their traceability/ marking and condition of the material before dispatch may be provided for dispatch clearance.	
7	Vendor to confirm that they will be able to manufacture and supply enquiry item as per BHEL enquiry specification HY19578.	
8	Since the present enquiry is for firm customer orders with tight delivery schedules and associated LD penalties on BHEL, the order will be placed on vendors who are technically qualified in all aspects mentioned above in this PQC will be considered for the supplies. Accordingly, the vendors who are in receipt of the trial/ development/ first order for steam turbine components and are yet to supply the material successfully will not be eligible to participate in this tender. However, BHEL may review and take suitable decision on case to case basis in the interest of BHEL customer project delivery schedules.	



TD-215 Rev.00

AMENDMENT-NOTIFICATION

HY 19578		REV.No.01		
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ALLOY STEEL CASTINGS FOR HIGH TEMPERATURE SERVICE

GRADE: G -17 Cr Mo 910

Clause 11.0 TEST SAMPLES:

"11.6 Integrally cast keel blocks or separately cast test coupons representative of the casting, duly identified and stamped by BHEL representative, shall be supplied alongwith the consignment for testing at BHEL works.

Integrally cast keel blocks or separately cast test coupons shall fulfil the requirements of clause 11.1 to clause 11.5 given above."

REF:	AMD.NO.	APPROVED	ISSUED	DATE	CUM. Sl.No.
	01	MANAGER, STDS. ENGG.	STDS. ENGG.	19.01.2002	A 0365



PLANT PURCHASING SPECIFICATION HYDERABAD

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ALLOY STEEL CASTINGS FOR HIGH TEMPERATURE SERVICE

GRADE: G-17 Cr Mo 910

$1.0 \quad \underline{GENERAL}$:

This specification governs the quality requirements of castings required to operate at high pressure and elevated temperature.

2.0 <u>APPLICATION</u>:

These castings are required for steam turbine casings, valve bodies, Gas Turbines Casings etc.

3.0 <u>CONDITION OF DELIVERY</u>:

The casting shall be supplied in heat treated, rough machined, stress relieved and shot blasted condition. Cleaning of internal surface shall be ensured. The surface condition of the casting shall be suitable for magnetic particle and ultrasonic testing. The castings shall not be painted.

4.0 <u>COMPLIANCE WITH NATIONAL STANDARDS</u>:

This specification complies, in general, with DIN EN 10213(Part I & II)-1995, Gr: G - 17 Cr Mo 910. Assistance is also taken from GE Specification B50 A178 H - S19.

5.0 <u>DIMENSIONS AND TOLERANCES</u>:

- **Dimensions:** The enclosed drawings are finish machined ones (unless otherwise specified). The castings shall be supplied in rough machined condition with an allowance of 3 to 5 mm on the surfaces where machining symbols have been shown on the drawing. Small grooves, steps etc., need not be rough machined. Other details shall conform to DIN EN 10213.
- **5.2 Tolerances:** the tolerances shall be as per DIN: 1683, Gr: GTB 19.

6.0 MANUFACTURE:

The steel shall be produced by an electric melting process or by any other process involving secondary refining.

Revisions: Revised in general with DIN EN 10213 (Part I & II)-1995.			Issued: STANDARDS ENGINEERING & IPR COORDINATION DEPARTMENT		
Rev. No. 0	1 Amd.No.	Reaffirmed	Prepared: MANAGER	Approved: SR.DGM	Dt.of 1st Issue
Dt. 31.8.2001	Dt.	Year : 2021	MATLS .ENGG	(P,T& I SERVICES)	09.10 98

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7.0 **HEAT TREATMENT:**

Recommended heat treatment process shall be as follows:

7.1 Pre-Treatment: For homogenisation, the castings shall be heated to 1020-1050°C followed by air cooling, prior to quality treatment.

7.2 **Quality Treatment:**

- **7.2.1 Hardening:** 930-970°C, followed by oil quenching or air cooling.
- **7.2.2** Temperisng: 680-740°C, followed by air cooling.
- **7.2.3** Stress relieving: Min 660°C, followed by furnace cooling.

The actual heat treatment cycle followed shall be reported in test certificate.

8.0 <u>FINISH</u>:

- **8.1** The surface finish of the machined surfaces shall be as per ordering drawing.
- 8.2 The outer and inner surfaces of the castings shall be well cleaned, degreased and dressed in such a way that during magnetic particle testing, clear evaluation of defects is enabled. The surface quality must also enable the proper coupling of the probes in the portions where ultrasonic testing is to be performed.
- **8.3** If the surface quality is insufficient for the intended inspection, the surface must be ground. Surface cleaning by chiselling or caulking is not permitted. All fillets must be also ground approximately 70mm on each side of the centre line of fillet.
- **8.4** Minor surface defects are only to be ground off. Welding for appearance need not be carried out. The surface ground should not impair the ultrasonic testability during testing in these portions.

9.0 FREEDOM FROM DEFECRTS:

- **9.1** Foundary defects like blowholes, shrinkage cavities, porosity, non-metallic inclusions etc., appearing on the surfaces to be machined shall be opened out and smoothly ground provided the depth of any of these defects when so ground does not exceed 2/3rd of the machining allowances.
- 9.2 In case where pressure tightness is called for (though the test may be required to be conducted at BHEL) the requisite quality shall be ensured to guarantee the same.
- **9.3** Where non-destructive tests are called for the criteria for acceptance shall be governed by the requirements of these non-destructive tests and shall over rule clause 9.1 above.

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- **9.4** All as cast surfaces shall be free from harmful foundry defects like slag inclusions, sand spots, cold shuts, shrinkage, scab etc.
- **9.5** Cracks are not permitted on any surface of the castings.

10.0 CHEMICAL COMPOSITION;

10.1 The melt analysis of the steel shall confirm to the following requirements:

Elements		С	Si	Mn	Cr	Мо	P	S
Melt Analysis	Min.	0.13	-	0.50	2.00	0.90	-	-
	Max.	0.20	0.60	0.90	2.50	1.20	0.020	0.020
Permissible Variation in Product Analysis		± 0.02	+0.10	- 0.06 + 0.10	- 0.10 + 0.20	- 0.07 + 0.10	+ 0.005	+ 0.005

10.2 Residual & Deoxidation elements shall be permitted as below. They shall be Aimed as Low as possible.

11.0 TEST SAMPLES:

11.1 When integral test piece is called for in the drawing/purchase order (for castings weighing less than 500 kgs), the test coupon shall be cast at a place of maximum section thickness or any position where casting quality is not affectd. However, integral keel blocks shall necessarily be provided for castings weighing 500 kgs or more.

Otherwise separate test coupons shall be cast from the same melt from which the castings are poured.

- 11.2 The number of keel blocks to be integrally cast with each casting shall be sufficient to test the various properties, both at the suppliers end and at BHEL and to carryout repeat tests if required.
- 11.3 The integrally cast test coupons shall not be removed prior to complete heat treatment and they shall be suitably stamped and identified by BHEL representative.

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- 11.4 Separate test coupons shall be heat treated along with the casting they represent and they shall be properly stamped and identified.
- 11.5 Testing shall be done per melt and per heat treatment batch in case of separate cast test coupons and individual casting shall be tested where integral test pieces are called for.

12.0 MECHANICAL PROPERTIES;

12.1 The mechanical properties shall be as follows:

Tensile strength N/mm ²	0.2% Proof stress N/mm ² min.	Elongation % l=5.65 √So min.	% Reduction of Area min.	Charpy Impact strength J min.	Hardness BHN Max.
590-740	400	18	35	40	241

- **NOTE:** 1) The tensile test shall conform to IS:1608 or any reputed national or international standard.
 - The impact test shall be conducted on specimen with dimensions 10mm x 10mm x 55mm with a 2mm ISO V-notch as per IS:1757 or any other reputed national standard.

The minimum impact value shown above is the average of three specimens from the same location. Only one value can be lower than the minimum value specified, but in no case less than $2/3^{rd}$ of the same. All the three values shall be reported in the test certificate.

High Temperature Tensile Test: High Temperature tensile test shall be conducted at 300°C. Min. yield strength shall be 345 N/mm². Ts, %E, & %RA shall be reported for information.

13.0 MICROSTRUCTURE:

Microexamination shall be carried out on the broken Tensile or impact specimen. Microstructure shall consist of tempered bainite with a max. of 20% of proeutectoid ferrite.

14.0 FIRST PIECE QUALIFICATION:

14.1 Chemical Analysis, Mechanical properties and Non-destructive examination shall performed and recorded in accordance with the requirements of the applicable General Requirements specification or the applicable part specification.



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14.2 Additional Tests required for First Piece Qualification (FPQ) i.e. prototype castings shall be as follows:

14.2.1 Fracture Appearance Transition Temperature (FATT):

FATT shall be 95°C (200°F) Max.

14.2.2 Stress Rupture Tests shall be conducted as follows:

Time to failure shall be min. 120 hrs. for each of the following test parameters.

- (i) 215 N/mm² at 504°C (31 Ksi at 940°F)
- (ii) 130 N/mm² at 571°C (18.5 Ksi at 1060°F)
- (iii) 60 N/mm² at 657°C (8.6 Ksi at 1215°F)

After each stress repture specimen has exceeded the min.120 hours, the temperature shall be increased by 56° C (100° F) and the test run until failure. The time at each temperature shall be recorded on the test report.

15.0 **HYDRAULIC TEST:**

The castings shall be subjected to hydraulic test at BHEL after finish machining, if mentioned in the drawing / purchase order. The test pressure shall be two times the operating pressure and shall be maintained for a minimum of 30 minutes, unless otherwise specified, with out leakage. In case the supplier is needed to carryout this test, the same shall be indicated in the drawing/purchase order.

16.0 MANUFACTURE WELDING:

Whenever indicated on the drawing, it is to be done in compliance with DIN EN 10213.

17.0 REPAIR WELDING;

The defects in the castings shall be reported to BHEL by sending defectograms. Weld repairs shall be carried out only after obtaining written permission from BHEL.

Repair welding shall be done as per DIN EN 10213.

18.0 NON DESTRUCTIVE EXAMINATION:

The following non destructive examinations shall be conducted if mentioned in the drawing or the applicable product specifications or General Requirements specification.

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Magnetic Particle Examination: 100% area of the castings (technically feasible) shall be tested by Magnetic particle examination. Acceptance norms shall be severity level S1 for weld ends and S2 for all other surfaces, as per DIN 1690 part 2.

18.2 <u>Ultrasonic Examination</u>: 100% area of the casting shall be tested by ultrasonic examination. Acceptance norms shall be severity level V1 for weld ends and V2 for all other areas as per DIN 1690 Part 2.

Wherver ultrasonic examination is not technically feasible, radiography examination Ishall be made. In case both are not possible, the same shall be referred to BHEL for clarification and approval.

Radiographic Examination: All areas marked on the drawings, high defect level areas as indicated in ultrasonic examination and also the areas which are not feasible to be examined by ultrasonic examination shall be examined by radiographic examination. Acceptance norms shall be severity level V1 for weld ends and V2 for all other areas, as per DIN 1690 part 2.

19.0 INSPECTION AT SUPPLIER'S WORKS:

- 19.1 If specified in the order, BHEL Inspector will identify and mark the test pieces. Tests and inspection are to be conducted in presence of BHEL inspector. Castings shall be despatched only after his approval.
- 19.2 The BHEL Representative shall have free access at all items while the work on the contract is being performed, to all parts of the manufacturer's works. The supplier shall offer him all reasonable facilities without charge to satisfy the latter that the material is being furnished in accordance with this specification.

20.0 TEST CERTIFICATE:

Three copies of test certificates (in English) shall be furnished to BHEL with the following details incorporated.

- a) HY 19578 / Rev.01
- b) Manufacturer's name
- c) BHEL Order No.
- d) Drawing No. and pattern No. (if any)
- e) Melt No. and Heat treatment Batch No., Sl. NO. of the casting.
- f) Heat treatment details.
- g) Chemical analysis and mechanical properties.
- h) Radiography and Ultrasonic test reports, if carried out.
- i) Magnetic particle inspection reports, if carried out.
- j) High temperature yield properties.
- k) Defectogram for weld repairs (if any).



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21.0 MARKING:

The castings shall bear the following details clearly punched and encircled by paint.

- a) HY 19578 / Rev.01
- b) Manufacturer's Name/mark
- c) Drawing No.
- d) Melt No.
- e) Serial No. of the casting
- f) Inspector's stamp

22.0 PRESERVATION & TRANSPORTATION:

The castings shall be properly protected from damage and corrosion during transport. The entire surface of the castings shall be applied with suitable non-greasy anti corrosive coating. Painting is not permitted on any surface.

23.0 REJECTION AND REPLACEMENT:

In the event of any casting proving defective in machining, testing, erection and operation such casting shall be rejected not withstanding any previous acceptance. The supplier shall replace the rejected castings at his own cost.



STANDARD QUALITY PLAN FOR VENDOR ITEMS

ITEM: ALLOY STEEL CASTINGS FOR HIGH

TEMPERATURE SERVICE

BHEL SPEC: HY19578 Rev No.01

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	BILL OF EG. III 13010 NO NO.01						TAGETOLO						
SI	Component &	Characteristics	Class	Type Of	Quantum	Ref	Acceptance				Agency		Remarks
No	Operations	3 1141141101101101	0.000	Check	Of Check	Document	Norms	Record	D	Р	W	V	
1.a	Pattern & Mould Assembly	Dimensions	Critical	Verification	100%	BHEL Drg.	BHEL Drg.	-	-	2	-	1	
1.b	Melting & Pouring	Physical Inspection, Pouring Temp.	Critical	Visual Inspection , Pouring Temp.	100%	BHEL Spec.	BHEL Spec.	Inspection Report	V	2	1	-	Pouring witness to ensure Stamping & Marking of Heat Nos for traceability. Stamping of Test Piece to be carried out by BHEL TPIA.
2.	Chemical composition	Chemical	Major	TC Review	Every Melt	BHEL Spec.	BHEL Spec.	TC / Ladle Analysis Report	V	2	-	1	
3.	Heat treatment	Time & Temp	Major	HT cycles review	Each casting	BHEL Spec.	BHEL Spec.	HT Chart		2	-	1	
4.	Keel block identification	Visual	Major	Visual	Each casting	BHEL Spec.	BHEL Spec.	Identificati on Report		2	1	-	
5a.	Repair welding, if any (Based on internal NDT)	Internal NDT, Defactogram	Major	Record review	100%	BHEL Spec.	BHEL Spec.	Inspection Report (NDT, Defactogram)	1	2	-	1	Defectogram shall be submitted to BHEL for review.
5b.	WPS & PQR, Welder qualification	WPS, PQR, WQR	Major	Record review	100%	BHEL Spec.	BHEL Spec.	Welding Records	1	2	-	1	
6.	Stress relieving followed by shot blasting	Stress relieving	Major	Record review	100%	BHEL Spec.	BHEL Spec.	HT Chart	V	2	-	1	
	FINAL INSPECTION & TESTING												
7.	Dimensional Inspection	Dimensions	Critical	Measure ment	Each casting	BHEL Spec. & Drg.	BHEL Spec. & Drg.	Dimension Report	V	2	1	-	Refer Note- 1

LEGEND:

P:-PERFORM, W:-WITNESS, V:-VERIFICATION,

INDICATING 1: - BHEL / BHEL NOMMNATED INSPECTION AGENCY, 2: - VENDOR / SUB VENDOR AS APPROPRIATE AGAINST EACH COMPONENT / CHARACTERISTICS UNDER THE COLUMNS P, W & V.

* D: RECORDS IDENTIFIED WITH TICK (\checkmark) SHALL BE ESSENTIALLY INCLUDED IN QA DOCUMENTATION.

PREPARED BY

Suchin Kalleyar

Sachin Katiyar Dy. Manager / QA REVIEWED BY

B. Ashok Kumar

B. Ashok Kumar AGM/QA APPROVED BY

B. Ashok Kumar AGM/QA

Format no.: HYQA/QP/VSQP Rev.02



STANDARD QUALITY PLAN FOR VENDOR ITEMS

ITEM: ALLOY STEEL CASTINGS FOR HIGH **TEMPERATURE SERVICE**

BHEL SPEC: HY19578 Rev No.01

Rev. No.: 01

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				DHEL SPEC. HT 19370 KEV NO.UT					PAGE 2 OF 3				
SI No	Component & Operations	Characteristics	Class	Type Of Check	Quantum Of Check	Ref Document	Acceptance Norms	Format Of Record	* D	A P	gency W	y V	Remarks
8a.	Mech. properties	Mechanical tests (Tensile Strength, 0.2% Proof Stress, Elongation, % RA, Impact Test)	Critical	Mechanic al tests	Each casting	BHEL Spec.	BHEL Spec.	TC	1	2	1	-	Test shall be conducted on samples identified by TPIA at NABL accredited Lab.
8b.	(in final delivery condition)	Hardness	Major	Hardness	Weld repaired areas & casting/ test coupon	BHEL Spec.	BHEL Spec.	TC	√	2	1	-	
8c.	High Temp Tensile Test	Test as per BHEL Spec.	Critical	Test as per BHEL Spec.	BHEL Spec.	BHEL Spec.	BHEL Spec.	TC	V	2	-	1	
8d.	Microstructure	Test as per BHEL Spec.	Critical	Test as per BHEL Spec.	BHEL Spec.	BHEL Spec.	BHEL Spec.	TC	√	2	-	1	
8e.	Fracture Appearance Transition Temperature (FATT)	Test as per BHEL Spec.	Critical	Test as per BHEL Spec.	BHEL Spec.	BHEL Spec.	BHEL Spec.	TC	1	2	1	-	Applicable for First Piece Qualification.
8f.	Stress Rupture Test	Test as per BHEL Spec.	Critical	Test as per BHEL Spec.	BHEL Spec.	BHEL Spec.	BHEL Spec.	TC	√	2	1	-	Refer Note-2
9a.	Visual Inspection	Visual check 1) surface finish 2) cleaning of internal surfaces 3) Cleaning of holes, opening etc.	Major	Visual	Each casting	BHEL Spec. & Drg.	BHEL Spec. & Drg.	Inspection Report	V	2	1	-	

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Format no.: HYQA/QP/VSQP Rev.02

PREPARED BY

Sachin Katiyar Dy. Manager / QA REVIEWED BY

B. Ashok Kumar

AGM/QA

APPROVED BY

B. Ashok Kumar AGM/QA



STANDARD QUALITY PLAN FOR VENDOR ITEMS

ITEM: ALLOY STEEL CASTINGS FOR HIGH

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SI	Component &	Characteristics	Class	Type Of	Quantum	Ref	Acceptance	Format Of	*		genc		Remarks
No	Operations			Check	Of Check	Document	Norms	Record	D	Р	W	V	/
9b.	Surface quality	MPI	Major	MPI	100% technicall	TC41006, BHEL Spec.	TC41006, BHEL Spec.	MPI Report	V	2	1	-	
9c.	Soundness of material	UT	Major	UT	y feasible areas	& Drg.	& Drg.	UT Report	√	2	1	-	
9d.	Soundness of material	RT (if applicable)	Major	RT	At areas marked in Drg and any other area where UT & MPI are not possible	TC41006, Customer approved RT shooting sketch, BHEL Spec. & Drg.	TC41006, Customer approved RT shooting sketch, BHEL Spec. & Drg.	RT Report & RT Films	V	2	-	1	RT to be done by ISNT/ASNT Level-II or III Qualified Technician as per Customer approved RT shooting sketch (RTSS) & TC41006. RT Film review by BHEL TPI & Customer.
9e.	Hydraulic Test (If applicable as per Drg. / PO)	Hydro Pressure Test	Critical	Hydro Pr. Test	BHEL Spec. & Drg.	BHEL Spec. & Drg.	BHEL Spec. & Drg.	Inspection Report	√	2	1	-	
10.	Matching of upper & lower half of casting	Visual	Major	Visual	100%	BHEL Drg.	BHEL Drg.	Inspection Report	V	2	1	-	Casting shall be allowed to dispatch as a set only (if ordered as a set).
11.	Marking and punching	Visual	Major	Visual	Each casting	BHEL Spec. & Drg.	BHEL Spec. & Drg.			2	1	-	
12.	Preservation & Dispatch	Visual	Major	Visual	Each casting	BHEL Spec. & Drg.	BHEL Spec. & Drg.	Inspection Report	√	2	-	1	Both U/P & L/P Castings shall be despatched as a set only after machining (if ordered as a set).
13.	Documentation & certification	Verification	Major	Verification	Each casting	BHEL Spec. & Drg.	BHEL Spec. & Drg.	TCs/IRs	1	2	-	1	TPIA shall certify all documents required as per specification & drawing.
1505	ND					PREPARED E	3Y	REVIEWED	BY			APP	ROVED BY

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* D: RECORDS IDENTIFIED WITH TICK (*) SHALL BE ESSENTIALLY INCLUDED IN QA DOCUMENTATION.

Format no.: HYQA/QP/VSQP Rev.02

Sachin Katiyar Dy. Manager / QA B. Ashok Kumar

AGM/QA

B. Ashok Kumar AGM/QA



Component &

Operations

BHARAT HEAVY ELECTRICALS LIMITED R.C.PURAM. HYDERABAD

STANDARD QUALITY PLAN FOR VENDOR ITEMS ITEM: ALLOY STEEL CASTINGS FOR HIGH

Quantum

Of Check

TEMPERATURE SERVICE

Type Of

Check

BHEL SPEC: HY19578 Rev No.01

QP. NO: HYQA/SQP/TC/MT&TAT/HY19578

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Format Of

Agency Record Ρ W D

Remarks

Notes:

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1. ALL THE REFERENCE PLANES, AXES AND DIMENSIONS OF MAJOR FEATURES (LIKE LENGTH, DIAMETERS, GROVES, STEPS, ETC.) SHALL BE HARD PUNCHED ON CASTING ITSELF. SAME SHALL BE HIGHLIGHTED BY PAINTING TWO PARALLEL LINES EITHER SIDE OF PUNCHES.

Ref

Document

Acceptance

Norms

- 2. THIS SQP IS NOT APPLICABLE FOR VENDORS SUPPLYING THE ITEM FOR THE FIRST TIME TO BHEL. IN CASE OF FIRST SUPPLY. VENDOR HAS TO PREPARE & SUBMIT QUALITY PLAN WITH ADDITIONAL REQUIRMENTS FOR BHEL APPROVAL.
- 3. QP APPROVAL DOESN'T ABSOLVE VENDOR OF ITS RESPONSIBILITY IN MEETING THE SPECN, APPROVED DRAWING AND DATA SHEET AND INSPECTOR IN CHECKING & ENSURING THE REQUIREMENTS AS PER THESE ENGINEERING DOCUMENTS.
- 4. PRE-DESPATCH INSPECTION PHOTOGRAPHS OF THE EQUIPMENT/ITEM SHALL BE INCLUDED IN QUALITY DOCUMENTATION.
- 5. LATEST VERSION OF STANDARDS/DRAWINGS /TOLERANCES ETC TO BE MENTIONED IN QUALITY PLAN/DRAWING. THIS QP SHOULD BE READ ALONG WITH BHEL SPEC, BHEL DRAWINGS / APPROVED DRAWINGS, DATA SHEET, BOM AND PO.
- 6. DRAWING / DATA SHEET/ SPECIFICATION SHALL PREVAIL OVER QUALITY PLAN IN CASE OF ANY CONTRADICTION.

Class

BHEL RESERVES THE RIGHT FOR CONDUCTING REPEAT TEST, IF REQUIRED.

Characteristics

- 8. BHEL APPROVED INSPECTION ENGINEERS TO BE DEPLOYED FOR INSPECTION.
- 9. ONLY LEVEL II & ABOVE QUALIFIED PERSON IN RESPECTIVE NDE TO VERIFY OR WITNESS THE NDT TEST REPORT/RESULTS.
- 10. INSPECTION TO BE OFFERED ONLY AFTER ENSURING THAT ALL DOCUMENTS (QUALITY PLAN, DRAWINGS, DATA SHEET, PURCHASE SPECIFICATIONS, ETC) ARE AVAILABLE AS PER PURCHASE ORDER.
- 11. VENDOR TO OFFER ORIGINAL TEST CERTIFICATES ISSUED BY THIRD PARTY LABORATORIES OR SUPPLIERS.
- 12. VENDOR TO ENSURE WITH TPIA THAT A NOTE 'COMPARED WITH ORIGINAL TEST CERTIFICATE. REVIEWED, VERIFIED AND FOUND IN ORDER' SHALL CONTAIN WITH EVERY INSPECTION REPORT.
- 13. ONLY VALID AND CALIBRATED MEASURING INSTRUMENTS AND EQUIPMENT SHALL BE USED TPIA TO VERIFY.
- 14. VENDOR TO ENSURE WITH TPIA THAT MATERIAL TEST CERTIFICTAE & TRACEABILITY RECORDS ARE AVAILABLE FOR USE OF CORRECT MATERIAL.
- 15. QUALIFICATION OF EQUIPMENT, PROCESS & PERSONNEL FOR SPECIAL PROCESSES LIKE WELDING, BRAZING, PAINTING & METAL COATING ETC. (AS APPLICABLE AS PER PO) SHALL BE ENSURED.
- 16. VENDOR TO ENSURE THAT ALL CERTIFICATES ARE ENDORSED BY TPIA WITH COMMENTS (WITNESSED OR VERIFIED) AS PER QUALITY PLAN.
- 17. VENDOR SHALL OFFER LOG SHEETS CONTAINING ACTUAL MEASURED VALUES INSTEAD OF SAYING OK/NOT OK TO TPIA.

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* D: RECORDS IDENTIFIED WITH TICK (V) SHALL BE ESSENTIALLY INCLUDED IN QA DOCUMENTATION.

PREPARED BY

Sachin Katiyar Dy. Manager / QA REVIEWED BY

B. Ashok Kumar AGM/QA

APPROVED BY

B. Ashok Kumar AGM/QA

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STANDARD QUALITY PLAN FOR VENDOR ITEMS ITEM: ALLOY STEEL CASTINGS FOR HIGH

TEMPERATURE SERVICE

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SI Type Of Agency Component & Quantum Ref Acceptance Format Of Characteristics Class Operations Check Of Check Norms No Document Record Ρ W D

18. VENDOR SHALL SUBMIT COMPLETE INSPECTION AND TEST DOCUMENTATION WHICHEVER IS IDENTIFIED WITH (v) UNDER COLUMN 'D' OF APPROVED QULAITY PLAN SHALL BE ENCLOSED WITH THE INSPECTION REPORT.

19. VENDOR SHALL SUBMIT ORIGINAL COPIES OF ALL INSPECTION AND TEST DOCUMENTS AUTHENTICATED BY TPIA.

ABBREVIATIONS:		
MTC – MILL TEST CERTIFICATE	MPI - MAGENTIC PARTICLE INSPECTION	TC – TEST CERTIFICATE
HT – HEAT TREATMENT	UT - ULTRASONIC TEST	TPIA - THIRD PARTY INSPECTION AGENCY APPOINTED BY BHEL.
IR - INSPECTION REPORT	RT – RADIOGRAPHY TEST	COC – CERTIFICATE OF CONFORMITY
MEASRT - MEASUREMENT	WPS – WELDING PROCEDURE SPECIFICATION	PQR – WELDING PROCESS QUALIFICATION RECORD
WQR – WELDER QUALIFICATION RECORDS	PO – PURCHASE ORDER	LPI - LIQUID PENETRANT INSPECTION
PMI – POSITIVE MATERIAL IDENTIFICATION	SS – STAINLESS STEEL	AS – ALLOY STEEL

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Remarks

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